

CORRIGENDUM

EXTENSION OF LAST DATE FOR EMPANELMENT OF CONSULTANTS FOR CIVIL ENGINEERING DESIGN WORKS.

With reference to PWD(B&R), Haryana, dated: 19.10.2020, all prospective consultants are hereby informed that the last date and time for submission of documents for empanelment of consultants for civil engineering design works is **extended to 01.12.2020 upto 5 PM.**

It is also clarified that the cost of bid document/ processing fee i.e. Rs. 5,000/- (non-refundable) is to be paid online only and the application alongwith all enclosures must be submitted online only at <http://haryanapwd.gov.in>

For any clarifications/technical issues while uploading the application online please contact at 0172-2618136.

PRESS NOTICE

Haryana PWD (B&R)

No. ____/PWD

Dated: 19.10.2020

Notice Inviting Tenders

The Governor of Haryana invites application for empanelment of consultants on the website: <http://haryanapwd.gov.in>

Pack age No.	Name of work	Cost of document (Rs.)	Date and time for Submission of application
1.	<p>APPLICATION FOR EMPANELMENT OF CONSULTANTS FOR CIVIL ENGINEERING DESIGN WORKS.</p> <p>CATEGORY - I Project preparation for all types of road projects including bridges upto 30m length and having RCC superstructure.</p> <p>CATEGORY-II Project preparation for all types of bridges / grade separators including approaches but excluding bridges with innovative design such as cable stayed, suspension bridge, etc.</p> <p>CATEGORY-III A For Multi-storeyed-more than 3 storey.</p> <p>CATEGORY-III B For Minor Buildings up to three storey including basement.</p>	5,000/-	23.11.2020 17:00 hrs

1. Cost of bid document/ processing fee (to be paid only online) is Rs. 5,000/- (non-refundable).
2. The applicants can apply for more than one category without paying any extra fee. For each category separate application shall be submitted in appropriate space on the portal and the firm shall be empanelled under a specific category / categories. The application should be properly indexed and page numbered and strictly in sequence given in the format at Annexure I. Intending consultants, should submit their application for empanelment only on-line through portal in the designated link.
3. For the format for submission of application, further details and submission schedule visit website <http://haryanapwd.gov.in>
4. The application alongwith all enclosures may be submitted online only.

For & on behalf of Governor of Haryana

Executive Engineer
Provl. Divn. PWD B&R Branch Panchkula

**Public Works Department
(Haryana) (Building & Road)
Sector-33, Chandigarh.**

NOTICE INVITING TENDER

E-mail: eegeneralbranch@gmail.com

No. _____ Dated. _____

To

Subject: APPLICATION FOR EMPANELMENT OF CONSULTANTS.

Sir,

PWD B&R Branch, Chandigarh intends to invite applications from the interested firms for empanelment of Consultants for Haryana P.W.D B&R Branch, Chandigarh for a period till **3 years from the date of empanelment for** the categories mentioned below. The consulting firms interested in empanelment can have the application form from the office of Executive Engineer (General), PWD B&R Branch, Sector-33, Chandigarh on payment of Rs.5,000/- (non-refundable) in the form of DD/Banker Cheque of scheduled Bank in favour Executive Engineer PWD B&R Branch, Panchkula payable at Panchkula/Chandigarh. The Consultants, who wish to get empanelled for the categories mentioned below, may apply latest by **23.11.2020.**

CATEGORY – I Project preparation for all types of road projects including bridges upto 30m length and having RCC superstructure.

CATEGORY-II Project preparation for all types of bridges/grade separators including approaches but excluding bridges with innovative design such as cable stayed, suspension bridge, etc.

CATEGORY-III A For Multi-storeyed-more than 3 storey.

CATEGORY-III B For Minor Buildings up to three storey including basement.

2. Technical expertise and experience desired from the consultants for various categories are as under.

2.1 Category – I

The empanelled consultants is expected to possess necessary expertise and experience in carrying out feasibility studies, detailed project preparation for new road projects and highway structures as well as strengthening of existing roads. In addition, the consultants are expected to possess expertise and infrastructure for carrying out studies related to traffic and transportation engineering, highway planning and design.

2.2 Category - II

Consultants are expected to possess necessary expertise and experience in carrying out feasibility studies, detailed project preparation & design of all types of bridge projects/grade separators, experience in conceptualizing schemes and in traffic and transportation studies.

Category - III A

- (i) Should have carried out structural design of at least five Govt./Semi Govt. buildings, including three multistoried (at least five storied) buildings, during last five years.
- (ii) Should have knowledge of schedule of rates, analysis of rates and National Building Code / PWD / CPWD Specifications.
- (iii) The applicant himself or one of his technical staff must have Post-Graduate degree in Structural Engineering from a recognized university / institute, with minimum experience of 10 years in Structural designing of buildings.
- (iv) The consultant should supply a list of consultancy works executed during last five years in the Annexure-V.

Category - III B

- (i) Should have carried out Structural design of at least five Govt./Semi Govt. buildings of three storey including basement during the last five years.
- (ii) Should have knowledge of schedule of rates, analysis of rates and National Building Code / PWD / CPWD Specifications.
- (iii) The applicant himself or one of his technical staff must have Post Graduate degree in Structural Engineering from a recognized university / institute, with minimum experience of 5 years in Structural designing of buildings. A person with Bachelor degree in Civil Engineering from a recognized university / institute, with 8 years' experience would also be eligible.
- (iv) The consultant should supply a list of consultancy works executed during last five years in the Annexure-V.

Note: *Unless and otherwise mentioned to the contrary, the Applicants, who are empanelled under Category – IIIA, would be deemed to have been empanelled under Category –IIIB also.*

3 Foreign firms & Joint Venture/Association of Firms:

- 3.1 Foreign firms shall be considered for empanelment only when the firm has a representative office in India.
- 3.2 In case there is a joint venture of two consultant firms (domestic/ foreign), the required information as per Annexure I, II, III & IV shall be furnished by each party separately along with joint venture agreement.
- 3.3 In case of **JV**, the proposal of consultants would be evaluated jointly and the empanelment will be in the joint name. However, in case there is only a proposal of association (domestic/ foreign consultant); **the particulars of the lead firm shall only be evaluated.**
- 3.4 In case of a joint venture/association, the firm, which has more relevant experience, would be the **lead partner** and the lead partner would be responsible for the project and would provide the team leader.
- 3.5 In case of a joint venture the minor partner must have done at least one project conforming to the relevant category for which the empanelment is intended else the JV would be disqualified.

4. The applications will be evaluated on the basis of the following broad criteria

Item	Max. Marks		
	Cat.I	Cat.II	Cat.III
Structure & Organisation of the Firm	100	100	100
Financial Status	100	100	100
Firm's relevant experience	250	250	250
Qualification & Experience of Technical Personnel	450	450	450
Office/Field/Lab equipment facility	100	100	100
Total	1000	1000	1000
Qualifying marks	600	600	600

In addition to this, the firms should also score minimum 50% marks in each of the above mentioned categories, otherwise the firm shall not be considered for empanelment.

5. The firm shall furnish its relevant experience strictly as per format given at Annexure III. The firm must supplement the experience claimed by furnishing the copies of certificates from client, clearly indicating the actual service provided by the firm for that project.
6. The firm shall furnish the Curriculum Vitae of the Technical personnel as per format given at Annexure II. The CVs must be signed by Technical personnel and counter-signed by authorized representative in ink on each and every page and should not be older than three months from the date of submission of application. Photograph of the Technical personnel shall be affixed on their respective CV. The contact address with telephone / mobile number, e-mail ID of the Technical personnel should also be furnished. The CVs must indicate the actual service provided by the Technical personnel in detail. The retainer Technical personnel if any shall specifically mention the names of other firms also in which he is associated as a retainer. It may be noted that such Technical personnel may be associated as a retainer for a maximum number of 3 firms including the instant firm. A retainer will get only 60 % credit of that of a full time expert.
7. It is suggested that the firm should fill up Annexure -I, vis-à-vis the supporting details vide Annexure II, III & IV and any other information with due care so as to avoid any ambiguity.
8. In case spaces available in the Annexure- I, II & III & IV are limited to accommodate all the information, separate sheets may be used for the purpose so that relevant information submitted are sufficient, neat and legible.
9. The applications not complying with the above mentioned stipulations and found to be deficient in any respect shall be summarily rejected.
10. Consulting firms should note that only authenticated information should be provided in the prescribed format. Information provided by the consulting firms would be verified and if any of the information provided by the consultant is found incorrect / false, then it may lead to rejection of a firm's proposal summarily at any stage even after empanelment.
11. **The applicants can apply for more than one category without paying any extra fee.** For each category separate application shall be submitted in appropriate space on the portal and the firm shall be empanelled under a specific category / categories.

The application should be properly indexed and page numbered and strictly in sequence given in the format at Annexure I. Intending consultants, should submit their application for empanelment only on-line through portal in the designated link.

12. The firm / applicant debarred / black listed by any organization / Institution / Board / Corporation / PSU of Central Govt. or any State Govt. would not be eligible for participation in the bidding process.
13. In case the firm / applicant is already working in Haryana PWD B&R a performance certificate from concerned SE / EE should be produced. Intimation of poor performance if received from any SE/ EE against any firm / applicant would make him liable for rejection in empanelment.
14. The PWD B&R Branch, Sector-33, Chandigarh reserves the right to reject any or all applications without assigning any reason. After evaluation, a panel of consultants under the categories mentioned above will be formed depending on the capacity and experience of the consultants and the same will be communicated to all Chief Engineers of State PWD to draw upon, as and when necessary, for purpose of obtaining offers for particular projects.
15. Notwithstanding the formation of these panels, the PWD B&R Branch, Sector-33, Chandigarh may go in for separate empanelment for specific assignments, if it so decides.
16. Whenever any shortcomings come to light, such as (i) errors in bid data (misrepresentation, false bio-data, frequent change of personnel, etc); (ii) unreliable DPRs containing errors in project data and design (wrong levels, inadequate surveys, false bearing capacity, etc.); (iii) unprofessional supervision (delays, collusions, not justifying decisions, improper records, poor track of quality control, infrequent or cursory site inspections and checks by the team leader, etc), deterrent action shall be taken against the erring consultant. The action may be in the shape of warning, suspension of registration, reduction of fee, removal from the panel on permanent basis or for a specified period, and blacklisting, etc.
17. **Conflict of Interest:-**
 - (i) The consultant shall not receive any remuneration in connection with the assignment, except as provided in the contract. The consultant and its affiliates shall not engage directly or indirectly in activities that conflict with the interest of all Public Works Department under the contract.
 - (ii) The consultants and its affiliates shall be excluded from downstream supply of goods or construction of works or purchase of any asset or provision of any other services related to the assignment other than continuation of the services under the ongoing contract not connected with the job concerned.

Yours faithfully,

Encl: Annexure I, II, III & IV.

**Executive Engineer/Gen,
for Engineer-in-Chief, Haryana,
PWD B&R, Branch, Chandigarh.**

APPLICATION PROFORMA FOR EMPANELMENT OF CONSULTANTS

General Information			
(i) Name and address of the consultant/consulting firm			
(ii) Whether Pvt. Ltd. Company/JV/Public Co./Others (in case of J.V., indicate name of lead partner and furnish copy of agreement).			
(iii) Name of the authorised contact person /representative duly certified by the head of the consulting firm.			
(iv) Profile of the firm (Please elaborate field of activities)			
(v) In case of Foreign firm, address of representative office in India with documentary proof from the head office abroad)			
(vi) In case of foreign firm, certificate for accepting payment in Indian currency for domestic funded projects.			
(vii) In case of association, indicate the name of lead firm and furnish letter of association.			

1. STRUCTURE & ORGANISATION OF FIRM			
A. Date, month and year of incorporation of Firm			
NOTE: (i) Furnish a copy of incorporation/registration from appropriate authority. (ii) Firm incorporated/registered after 31.03.2015 shall not be considered.			
B. No. of full time technical personnel who are in the payroll of the firm for at least one year as on 23.11.2020 with following qualifications and experience:			
(i) Masters degree (structure) with minimum 10 years of experience.			
(ii) Masters degree (Traffic & Transportation) with minimum 10 years of experience.			
(iii) Masters degree in any discipline of Civil Engineering with minimum 10 years of experience			
(iv) Degree(Civil) with minimum 15 years of experience			
(v) Degree (Civil) with minimum 5 years of experience			
NOTE: The detailed information regarding technical personnel mentioned above may be furnished as per Annexure-IV.			

2.FINANCIAL STATUS:			
Average Annual Turnover of last three years (Rs. In lakhs)			
Note : Enclose audited accounts for the last three years in support.			

3.FIRM'S RELEVANT EXPERIENCE:			
Note: Please mention number of projects done by the firm against each of sub-item with documentary proof from client. Only those works be included where works have been satisfactory completed. For this, necessary certificate from the client is also necessary. For each project one sheet of Annexure-III should be filled up properly giving as much as details as possible. (Refer Para 6 of the HSRDC's forwarding letter regarding instructions).			

Category I : Road Projects			
A(i) Experience in Feasibility Study for widening to two lane for a length > 20 km.			
A(ii) Experience in preparation of DPR of widening to two lane for a length >20 km.			
B(i) Experience in FS of two lane/four lane new alignment or widening to 4 lane/Expressway in a length more than 20 kms.			
B(ii) Experience in preparation of DPR of two lane/four lane new alignment or widening to 4 lane/Expressway in a length more than 20 kms.			
C. Experience in Survey & Investigation and detailed design of bridge projects.			
D. Traffic surveys, Origin-Destination (OD) Survey, Design of Road Junctions/Traffic Circulation Studies etc.			
Note: In Annexure-III, narrative description of project must include No. of lane, length of project, whether widening or new alignment etc. Under the head actual Service provided by the firm, the firm must clearly mention whether the firm has done only topography survey, traffic survey, feasibility study or complete project preparation.			

Category-II : Bridge Projects			
(i) Experience in feasibility study of			

(a) bridges with overall length greater than 60m with at least one span length greater than 40m			
(b) bridges with overall length greater than 60m with any span length (other than bridges mentioned under sub item (a) above).			
(ii) Experience in preparation of DPR of			
(a) bridges with overall length greater than 60m and with at least one span greater than 40m			
(b) bridges with overall length greater than 150m with any span length (other than bridges mentioned under sub item (a) above).			
(iii) Experience in Design review/Proof checking of			
(a) bridges with overall length greater than 60m and with at least one span greater than 40m			
(b) bridges with overall length greater than 150m with any span length (other than bridges mentioned under sub item (a) above).			
Note: In Annexure-III, narrative description of project must include total length of bridge, individual span length, no. of lane (2 lane, 4 lane etc.), whether widening or new alignment etc. Under the head service provided by the firm, the firm must clearly mention whether the firm has done only feasibility study, design review/proof checking or complete project preparation.			

Category-III A. Experience in preparation of detail project reports/detailed estimates and structural design of multi-storeyed-more than 3 storey & Major buildings preparation of detail project reports/detailed estimates on the basis of HSR with applicable premium and structural design of Government/ Semi Government Buildings.			
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Category-III B. Experience in preparation of detail project reports/detailed estimates on the basis of HSR with applicable premium and structural design of Govt./ Semi Govt. Minor-Buildings up to three storey including basement.			
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4.1	List of technical personnel			
KP1	Highway Engineer			
KP2	Pavement Specialist			
KP3	Bridge/Structural Engineer			

KP4	Sr. Traffic Engineer			
KP5	Sr. Survey Engineer			
KP6	Environmental-cum-Resettlement Specialist			
KP7	Foundation Engineer/Geotechnical Engineer			
KP8	Transport Planner			
KP9	CAD Specialist			
4.2	Essential Technical Personnel required for various categories are as follows:			
	(i) Category I: KP1 to KP9 - One No. each			
	(ii) Category II: KP3 - 2 Nos. & KP2, KP5, KP7, KP9 - One No. each.			
4.3	Experience and qualifications required for Technical Personnel.			
KP1	Highway Engineer			
A.	Academic Qualification			
	Degree in Civil Engineering			
	Masters degree in Highway/Transportation Engineering			
B.	Profession Related Experience			
B1	No. of years of Professional Experience in Highway Engineering	Years		
B2	Experience in FS and project preparation of widening to 4-lane/ expressway or 4-lane new alignment of length >20 kms	Projects		
B3	Experience in FS/DPR of widening to 2-lane new alignment of length > 20 kms.	Projects		
B4	Experience in proof checking / Peer review of DPR	Projects		
B5	Experience in construction supervision of widening to 4 lane/expressways or new alignment of length > 20 kms.	Projects		
B6	Experience in construction supervision of widening to 2 lane or 2 lane new alignment of length >20 kms.	Projects		
B7	Experience as Independent Engineer / Authority Engineer for BOT/ PPP / Annuity / HAM Projects	Projects		
KP-2	Pavement Specialist			
A	Academic Qualifications			
	Degree in Civil Engineering			
	Masters degree in other Civil Engg. Disciplines			
	Masters degree in Highway/Geotechnical/Foundation Engineering			
B	Profession Related Experience			
B1	No. of years of Professional Experience in Highway Engineering	Years		
B2	Experience in pavement design or construction supervision of widening to 4	Projects		

	lane/expressways or 4 lane new alignment of length. 20 Kms.			
B3	Experience in proof checking for widening to 4 lane/expressways or 4 lane new alignment of length. 20 Kms. As well as in widening to 2 lane or 2 lane new alignment of length > 20 kms.	Projects		
B4	Experience in pavement design or construction supervision of widening to 2 lanes or 2 lane new alignment of length > 20 kms.	Projects		
B5	Experience in sub-soil investigation (sampling, testing, analysis) & quality control for road & bridge projects.	Projects		
B6	Experience as Independent Engineer / Authority Engineer for BOT / Annuity / HAM Projects	Projects		

KP-3	Bridge Engineer/Structural Engineer			
A	Academic Qualification			
	Degree in Civil Engg.			
	Masters degree in Structural/Bridge Engineering			
B.	Profession Related Experience			
B1	No. of years of Professional Experience in Highway & Bridge Engineering	Years		
B2	Experience in design of major bridges	Projects		
B3	Experience in design of minor bridges	Projects		
B4	Experience in construction supervision of bridges with individual span length >25m	Projects		
B5	Experience in construction supervision of bridges with individual span length <25m	Projects		
B6	Experience in Proof Checking for major bridges	Projects		
B7	Experience in Proof checking for minor bridges	Projects		
B8	Experience as Independent Engineer / Authority Engineer for BOT / Annuity / HAM Projects	Projects		
KP-4	Sr. Traffic Engineer			
A	Academic Qualification			
	Degree in Civil Engineering			
	Masters degree in other Civil Engg. Disciplines			
	Masters degree in Traffic & Transportation Engg.			
B.	Profession Related Experience			
B1	No. of years of Professional Experience in Highway/Traffic & Transportation Engineering.	Years		
B2	Experience in similar capacity in Traffic Engineering/Traffic Studies for projects of	Projects		

	widening to 4 lane/expressway or a 4 lane new alignment of length > 20 kms.			
B3	Experience in carrying out traffic & transportation planning studies such as economic studies, cost benefit analysis, road users cost studies, economic feasibility studies etc.	Projects		
B4	Any other study on Traffic & Transportation Engineering not cover above (pl. elaborate).	Projects		
KP-5	Senior Survey Engineer			
A	Academic Qualifications			
	Degree in Civil Engineering			
	Masters degree in Civil Engg./Advanced Surveying			
B	Profession Related Experience			
B1	No. of years of Professional Experience in Highway Engineering	Years		
B2	Experience of conducting survey for road projects for widening to 4-lane/expressways or a 4-lane new alignment of length > 20 kms. Or bridge projects with individual span > 40 m	Projects		
B3	Experience of conducting survey for road projects for 2 lane widening or a new alignment of length > 20 kms. Or minor bridge projects	Projects		

KP-6	Environmental-cum-Resettlement Specialist			
A	Academic Qualification			
	Post Graduation in Social Sciences/related Sciences			
	Degree in Civil/Environmental Engg.			
	Masters degree in Environmental Engg.			
B.	Profession Related Experience			
B1	No. of years of Professional Experience in Environmental appraisal of Civil Engg. Projects	Years		
B2	Experience in any environmental appraisal of Highway/Bridge Projects	Projects		
B3	Experience in conducting Environmental Impact Studies for projects of road/bridge projects for widening to 4-lane/expressways or a 4-lane new alignment of length >20 kms.	Projects		
KP-7	Foundation Engineer/Geo-technical Engineer			
A	Academic Qualification			
	Degree in Civil Engg.			
	Masters degree in Foundation/Soil			

	Engineering/Geo-technical Engineering			
B.	Profession Related Experience			
B1	No. of years of Professional Experience in Highway Engineering.	Years		
B2	Experience in geo-technical investigation of high embankments/design of deep foundation for major bridges	Projects		
B3	Experience in geo-technical survey/sub-soil investigation (sampling, field testing, lab testing etc.) for deep foundation for any Civil Engg. Projects.	Projects		
B4	Experience in construction/construction supervision of deep foundation for major bridges	Projects		
B5	Experience in construction/construction supervision of foundations for bridges with innovative design.	Projects		
KP-8	Transport Planner			
A	Academic Qualification			
	Post Graduation in Operation Research/Transportation/Management without specialization in Transport Planning/Transport Economics.			
	Degree in Civil Engg/Architecture.			
	Masters degree in Traffic/Transportation Engg. Or Master in Transport Planning or Degree in Civil Engg. With PG in Traffic & Transport Planning/Transport Economics , Post Graduation in Operation Research/Transportation/Management with specialization in Transport Planning/Transport Economics.			
B	Profession Related experience			
B1	No. of years of professional related experience in Transport Engineering/Planning	Years		
B2	Comprehensive Traffic & Transportation Studies & Transport/Highway Planning including Route Location & Evaluation of various alternatives in Metropolitan/Urban areas, Multi-Model Transport Planning Studies/Corridor Analysis & Rout4 Selection Impact Analysis Study/Parking Analysis & Policy Formation Study etc.	Projects		
B3	Any other Study on Traffic & Transportation Engineering & Highways Planning/Engineering (Pl. elaborate)	Projects		
KP-9	CAD Specialist			
A	Academic Qualification			

	Any relevant qualification in Science			
	Degree in Civil Engineering			
	MCA/Degree in Civil Engg. With post graduation in Computer Aided Design/Degree in Computer Engg.			
	Masters in Computer Engg.			
B	Profession related experience			
B1	No. of years of Professional Experience in Engineering	Years		
B2	Experience in Highway/Transport related software development, its design & drafting.	Projects		
B3	Experience in Highway projects (2/4 lane) of length more than 20 kms or bridge projects having individual span length > 25m	Projects		
5	FIELD / LABORATORY EQUIPMENT (Please state availability of the equipments mentioned below:			
(a)	In-house Computer Hardware/Software facility (applicable for all the categories.			
	i) Having at least one Pentium and printer/plotter facility			
	ii) CAD/ Mx, INROADS, STAAD III or equivalent software for Highways & Bridge Designs (mention name & application of the software available with the firm).			
(b)	Survey Equipments (applicable for all the categories)			
	i) Total Station or Distomat, Theodilite and Auto Level			
	ii) Plain Table Assembly			
	iii) Other Survey Equipments			
(c)	Soil/Material Testing Equipments : (applicable for all the categories)			
	Expertise/facilities/infrastructure for carrying out :			
	(i) Auger/shell/percussion/wash/rotary boring			
	(ii) Drilling through rocks for a depth upto 3 meters for establishing the continuity of rock strata			
	(iii) Field/Lab. C.B.R. Test assembly			
	(iv) Static cone penetration, dynamic cone penetration			
	(v) Vane shear test, standard penetration test			
	(vi) Classification test and density test of			

	soil sample			
	(vii) Triaxial (UU, CU) test, box shear test			
	(viii) Consolidation test			
	(ix) Standard and modified proctor test as per IS: 2720			
	(x) Permeability Test			
	(xi) Geo-textile testing facilities			

ANNEXURE-II
BIODATA FORMAT TO BE SUBMITTED WITH PROPOSAL

Photograph

1. Proposed position
2. Name
3. Contact address with
Tel. No. & e-mail ID
4. Date of birth
5. Nationality
6. Educational qualification:
7. Other training :
8. Language & degree or proficiency
9. Membership of professional societies:
10. Countries of work experience
11. Name of the firm where working
(indicate whether full time/ part time employee or retainer)
12. Years with the firm
13. Employment record : from to Name of the employer
Position held Description of duties :
14. Overall Professional Experience in Engineering or in related field. :
15. Related Work Experience (in years) :
16. Details of the Related Work Highway /Traffic & Transportation/ Bridge
Experience
(During last 5 years only)

Item	Sr. No	Brief Description of the Project/ Study	Name of the Client	Cost of Consultancy Work (Rs. in lakhs)	Period of completion		Description of the actual services provided by the key person
					Date of Start	Date of completion	
I PROJECTS/ STUDIES COMPLETED	1 2						
II PROJECTS/ STUDIES IN HAND	1 2						

NOTE: The CVs must be signed by key personnel and counter-signed by authorised representative in ink on each and every page and should not be older than three months from the date of submission of application. Photograph of the key personnel shall be affixed on their respective CV. The contact address with telephone & mobile number, e-mail ID of the key personnel must be furnished. Unsigned CVs or CVs with incomplete information shall not be evaluated.

ANNEXURE-III

RELEVANT SERVICES CARRIED OUT BY THE FIRM WHICH ILLUSTRATES THEIR
BEST QUALIFICATIONS DURING LAST 5 YEARS**

Project Name		Country
Project location within country		Professional staff provided: (a) No. of staff (b) No. of man-months
Name and address of client:		
Start date (month/year)	Completion date (month/year)	Approx. value of CONSULTANCY services:(in Rs lakhs)
Whether project was done alone or as a JV or in association with other firm/ firms.		
Name of Lead partner in case of JV/association:		No. of man-months of professional staff provided by associated firm (s)
Name of Senior staff involved and functions performed : (Functions performed by the associated firm (s) to be given separately)		
Narrative Description of Project:		
Detail description of Actual Services Provided by the firm under different categories: (Please select from the following)		
(i) For category 1 Feasibility Study <ul style="list-style-type: none"> • Road/Bridge Inventory • Surveys: Traffic Surveys, road condition surveys, topographic surveys, soil surveys, hydrological surveys etc. • Pavement Evaluation • Condition assessment of existing bridges • Preliminary Design Road • Preliminary Design of Bridges & Bridge components ('x' no. of major/minor bridges) • Rough Cost Estimate • Economic Evaluation • Feasibility Report • Add any other relevant item, if any 		Project Preparation <ul style="list-style-type: none"> • Ground Surveys & Investigation • Material Surveys • Geo-tech Investigation for Bridges & High Embankments • Environmental Analysis, Impact assessment formulates policies, mitigation measure, R & R. • Preparation of Designs for Roads (pavement/geometric design) • Preparation of Designs for Bridges for (old & new, 'x' no. of Major/Minor Bridges) and bridge components. • Final Project Report & Final Drawings • Tender Documents: Pre-qualification documents & Tender Evaluation • Add any other relevant item, if any
(ii) For category II Feasibility study: <ul style="list-style-type: none"> • Bridge Inventory • Surveys: Traffic survey, topographic survey, soil survey, hydrological survey etc. • Condition assessment of existing 		Project preparation: <ul style="list-style-type: none"> • Material survey • Environmental impact studies • Geo-technical investigation for bridge and high embankment • Detailed structural design of

bridges, flyover and grade separator <ul style="list-style-type: none"> • Preliminary design of bridges, flyovers and grade separators. • Preparation of rough cost estimate • Economic evaluation • Feasibility report. • Add any other relevant item, if any 	bridges (old and new) <ul style="list-style-type: none"> • Preparation of project report and drawing • Preparation of tender documents, construction specification etc. • Design review / proof checking of bridges • Add any other relevant item, if any
<p>Note: - Consultants entrusted with the job of repair and rehabilitation of bridges will also be responsible for supervision of the work of repair and rehabilitation and he will also suggest a suitable team of experts for the purpose.</p>	
<p>(iii) For category III A</p>	<p>Project preparation:</p> <ul style="list-style-type: none"> • Material survey • Geo-technical investigation for bridge and high embankment • Detailed structural design of buildings (old and new) • Preparation of project report and drawing • Preparation of tender documents, construction specification etc. • Design review / proof checking of buildings • Add any other relevant item, if any
<p>(iv) For category III B</p>	<p>Project preparation:</p> <ul style="list-style-type: none"> • Material survey • Geo-technical investigation for bridge and high embankment • Detailed structural design of buildings (old and new) • Preparation of project report and drawing • Preparation of tender documents, construction specification etc. • Design review / proof checking of buildings • Add any other relevant item, if any

** For each project done by the firm, separate sheet of Annexure – III shall be filled up and accompanied by documentary proof from client.

Annexure - IV

**DETAILED INFORMATION IN RESPECT OF TECHNICAL PERSONNEL
AVAILABLE WITH THE FIRM**

Sl.No.	Name	Academic Qualification Degree(Civil) / Masters1	Year of passing	No. of years of experience in the field of Highway / Bridge Engineering	Signature of respective technical personnel
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Signature of the authorised signatory of the firm

1 In case of Masters, please mention the discipline like Masters (Structure), Masters (Traffic & Transport) etc.

Annexure - V
Details of Consulting Assignments executed during last Five Years

Sr.No.	Year of Design	Client & his Address with Telephone No	Name of work & No. of Storeys	Total cost of work	Consultancy Fee received	Remarks
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						

Please attach additional sheets, if necessary.

Dated: Place

Signature of the Applicant Name (in capitals)

1. The tentative distribution of marks for **structure and organization** is as under:-

1. STRUCTURE & ORGANISATION OF FIRM	Total Marks = 100 Marks
A. Date, month and year of incorporation of Firm	
NOTE: (i) Furnish a copy of incorporation/registration from appropriate authority. (ii) Firm incorporated/registered after 31.03.2011 shall not be considered.	If agency older than 20 Yrs = 20 Marks b) 15 Yrs to 20 Yrs = 15 Marks c) 10 Yrs to 15 Yrs = 10 Marks d) 5 Yrs to 10 Yrs = 8 Marks e) 0 Yr to 5 Yrs = 5 Marks
B. No. of full time technical personnel who are in the payroll of the firm for at least one year as on 29.02.2012 with following qualifications and experience:	
(i) Masters degree (structure) with minimum 10 years of experience	10 Marks for one person and 3 marks for additional person and maximum of 16 marks in this category.
(ii) Masters degree (Traffic & Transportation) with minimum 10 years of experience	10 Marks for one person and 3 marks for additional person and maximum of 16 marks in this category.
(iii) Masters degree in any discipline of Civil Engineering with minimum 10 years of experience	10 Marks for one person and 3 marks for additional person and maximum of 16 marks in this category.
(iv) Degree (Civil) with minimum 15 years of experience	10 Marks for one person and 3 marks for additional person and maximum of 16 marks in this category.
(v) Degree (Civil) with minimum 5 years of experience	10 Marks for one person and 3 marks for additional person and maximum of 16 marks in this category.
NOTE: The detailed information regarding technical personnel mentioned above may be furnished as per Annexure-IV.	

2. For **Financial Status**, 100 marks are to be given and proposed marking is as under for all categories:-

2.FINANCIAL STATUS:	Total Marks = 100 Marks
Average Annual Turnover of last three years (Rs. In lakhs)	Turnover > 500 Lacs = 100 Marks Turover 100 to 500 Lacs = 90 Marks Turover 50 to 100 Lacs = 80 Marks Turover 30 to 50 Lacs = 75 Marks Turnover 20 to 30 Lacs = 70 Mrks Turover 10 to 20 Lacs = 60 Marks Turvover 5 to 10 Lacs = 55 Marks Turover 0 to 5 Lacs = 45 Marks

3. For **Firms Relevant Experience**, total of 250 marks are to be given for each category and proposed marking for each category is as under:-

3.FIRM'S RELEVANT EXPERIENCE:	Total Marks = 250 Marks
Note: Please mention number of projects done by the firm against each of sub-item with documentary proof from client. For each project one sheet of Annexure-III should be filled up properly giving as much as details as possible. (Refer Para 6 of the Ministry's forwarding letter regarding instructions).	
Category I : Road Projects	
A(i) Experience in Feasibility Study for widening to two lane for a length > 20 km.	25 marks for two projects and 8 marks for additional project and maximum of 41 marks for each category.
A(ii) Experience in preparation of DPR of widening to two lane for a length >20 km.	25 marks for two projects and 8 marks for additional project and maximum of 41 marks for each category.
B(i) Experience in FS of two lane/four lane new alignment or widening to 4 lane/Expressway in a length more than 20 kms.	25 marks for two projects and 8 marks for additional project and maximum of 41 marks for each category.
B(ii) Experience in preparation of DPR of two lane/four lane new alignment or widening to 4 lane/Expressway in a length more than 20 kms.	25 marks for two projects and 8 marks for additional project and maximum of 41 marks for each category.
C. Experience in Survey & Investigation and detailed design of bridge projects.	25 marks for two projects and 9 marks for additional project and maximum of 43 marks for each category.

D. Traffic surveys, Origin-Destination (OD) Survey, Design of Road Junctions/Traffic Circulation Studies etc.	25 marks for two projects and 9 marks for additional project and maximum of 43 marks for each category.
Note: In Annexure-III, narrative description of project must include No. of lane, length of project, whether widening or new alignment etc. Under the head actual Service provided by the firm, the firm must clearly mention whether the firm has done only topography survey, traffic survey, feasibility study or complete project preparation.	

Category-II : Bridge Projects	Total Marks = 250 Marks
(i) Experience in feasibility study of	
(a) bridges with overall length greater than 60m with at least one span length greater than 40m	25 marks for two projects and 8 marks for additional project and maximum of 41 marks for each category.
(b) bridges with overall length greater than 60m with any span length (other than bridges mentioned under sub item (a) above).	25 marks for two projects and 8 marks for additional project and maximum of 41 marks for each category.
(ii) Experience in preparation of DPR of	
(a) bridges with overall length greater than 60m and with at least one span greater than 40m	25 marks for two projects and 8 marks for additional project and maximum of 41 marks for each category.
(b) bridges with overall length greater than 150m with any span length (other than bridges mentioned under sub item (a) above).	25 marks for two projects and 8 marks for additional project and maximum of 41 marks for each category.
(iii) Experience in Design review/Proof checking of	
(a) bridges with overall length greater than 60m and with at least one span greater than 40m	25 marks for two projects and 9 marks for additional project and maximum of 43 marks for each category.
(b) bridges with overall length greater than 150m with any span length (other than bridges mentioned under sub item (a) above).	25 marks for two projects and 9 marks for additional project and maximum of 43 marks for each category.

<p>Note: In Annexure-III, narrative description of project must include total length of bridge, individual span length, no. of lane (2 lane, 4 lane etc.), whether widening or new alignment etc. Under the head service provided by the firm, the firm must clearly mention whether the firm has done only feasibility study, design review/proof checking or complete project preparation.</p>	
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<p>Category-III A. Experience in preparation of detail project reports/detailed estimates and structural design of multi-storeyed-more than 3 storey & Major buildings preparation of detail project reports/detailed estimates on the basis of HSR with applicable premium and structural design of Govt./ Semi Govt. Buildings</p>	<p>For Category-III A, total marks 250 Marks .</p> <p>Experience in design of 5 storey buildings:-</p> <p>(a) 3 buildings more than 5 storey (b) 2 buildings more than 3 storey</p> <p>1. Structure design of three to five storey and above:- Total 50 marks for 3 projects and 12.5 marks for additional one project and maximum of 75 marks in this category.</p> <p>2. Structure design of at least two three storey buildings:- Total 40 marks for 2 buildings of three storey and 12.5 marks for additional building and maximum of 65 marks in this category.</p> <p>3. DPR/ Detail Estimate at least three storey buildings and above:- Total of 40 marks for 3 buildings and 12.5 marks for additional and maximum of 65 marks.</p> <p>4. DPR / Detail Estimate of at least 2 three storey buildings:- Total of 20 marks for two buildings and 12.5 marks for additional one building and maximum of 45 marks in this category.</p>
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	<p>Category-III B. Experience in preparation of detail project reports/detailed estimates on the basis of HSR with applicable premium and structural design of Govt./ Semi Govt. Minor-Buildings up to three storey including basement</p>	<p style="text-align: center;">Total Marks = 250 Marks</p> <p>1. Structural design of at least 5 three storey buildings :- 90 marks and 15 marks for additional project and maximum of 150 marks.</p> <p>2. DPR / Detail estimate of at least 5 storey buildings :- 60 marks for 5 projects and 20 marks for additional project and maximum of 100 marks in this category.</p>
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4. Essential Technical Personnel required for various categories are as follows:

- (i) Category I: KP1 to KP9 - One No. each
- (ii) Category II: KP3 - 2 Nos. & KP2, KP5, KP7, KP9 - One No. each.

4(a) Experience and qualifications required for Technical Personnel for Category-I.

Total of 450 marks are allocated for qualification and experience of technical expert. The detailing is as under:-

One person of each category i.e. KP-1 to KP-9 and total of 450 marks are for this category and maximum marks for each person is 50 marks which is detailed above.

KP1	Highway Engineer	Total marks = 50
A.	Academic Qualification	
	Degree in Civil Engineering	5 Marks
	Masters degree in Highway/Transportation Engineering	5 Marks
B.	Profession Related Experience	
B1	No. of years of Professional Experience in Highway Engineering	Experience of 20 Yrs and above = 10 marks b) 15 Yrs to 20 Yrs = 8 Marks c) 10 Yrs to 15 Yrs = 6 Marks d) 5 Yrs to 10 Yrs = 4 Marks e) upto 5 Yrs = 3 Marks
B2	Experience in FS and project preparation of widening to 4-lane/expressway or 4-lane new alignment of length >20 kms	3 marks for one project and one additional mark for additional project and maximum of 5 marks.
B3	Experience in FS/DPR of widening to 2-lane new alignment of length > 20 kms.	3 marks for one project and one additional mark for additional project and maximum of 5 marks.
B4	Experience in proof checking / Peer review of DPR	3 marks for one project and one additional mark for additional project and maximum of 5 marks.
B5	Experience in construction supervision of widening to 4 lane/expressways or new alignment of length > 20 kms.	3 marks for one project and one additional mark for additional project and maximum of 5 marks.
B6	Experience in construction supervision of widening to 2 lane or 2 lane new alignment of length >20 kms.	3 marks for one project and one additional mark for additional project and maximum of 5 marks.
B7	Experience as Independent Engineer / Authority Engineer for BOT / Annuity / HAM Projects	3 marks for one project and one additional mark for additional project and maximum of 5 marks.

KP-2	Pavement Specialist	Total marks = 50
A	Academic Qualifications	
	Degree in Civil Engineering	5 Marks
	Masters degree in other Civil Engg. Disciplines Or Masters degree in Highway/Geo-technical/Foundation Engineering	5 Marks
B	Profession Related Experience	
B1	No. of years of Professional Experience in Highway Engineering	Experience of 20 Yrs and above = 10 marks b) 15 Yrs to 20 Yrs = 8 Marks c) 10 Yrs to 15 Yrs = 6 Marks d) 5 Yrs to 10 Yrs = 4 Marks e) upto 5 Yrs = 3 Marks
B2	Experience in pavement design or construction supervision of widening to 4 lane/expressways or 4 lane new alignment of length. 20 Kms.	4 marks for one project and one additional mark for additional project and maximum of 6 marks.
B3	Experience in proof checking for widening to 4 lane/expressways or 4 lane new alignment of length. 20 Kms. As well as in widening to 2 lane or 2 lane new alignment of length > 20 kms.	4 marks for one project and one additional mark for additional project and maximum of 6 marks.
B4	Experience in pavement design or construction supervision of widening to 2 lanes or 2 lane new alignment of length > 20 kms.	4 marks for one project and one additional mark for additional project and maximum of 6 marks.
B5	Experience in sub-soil investigation (sampling, testing, analysis) & quality control for road & bridge projects.	4 marks for one project and one additional mark for additional project and maximum of 6 marks.
B6	Experience as Independent Engineer / Authority Engineer for BOT / Annuity / HAM Projects	4 marks for one project and one additional mark for additional project and maximum of 6 marks.

KP-3	Bridge Engineer/Structural Engineer	Total marks = 50
A	Academic Qualification	
	Degree in Civil Engg.	5 Marks
	Masters degree in Structural/Bridge Engineering	5 Marks
B.	Profession Related Experience	
B1	No. of years of Professional Experience in Highway & Bridge Engineering	Experience of 20 Yrs and above = 10 marks b) 15 Yrs to 20 Yrs = 8 Marks c) 10 Yrs to 15 Yrs = 6 Marks d) 5 Yrs to 10 Yrs = 4 Marks e) upto 5 Yrs = 3 Marks
B2	Experience in design of major bridges	4 marks for one project and one additional mark for additional project and maximum of 5 marks.
B3	Experience in design of minor bridges	4 marks for one project and one additional mark for additional project and maximum of 5 marks.
B4	Experience in construction supervision of bridges with individual span length >25m	2 marks for one project and one additional mark for additional project and maximum of 4 marks.
B5	Experience in construction supervision of bridges with individual span length <25m	2 marks for one project and one additional mark for additional project and maximum of 4 marks.
B6	Experience in Proof Checking for major bridges	2 marks for one project and one additional mark for additional project and maximum of 4 marks.
B7	Experience in Proof checking for minor bridges	2 marks for one project and one additional mark for additional project and maximum of 4 marks.
B8	Experience as Independent Engineer / Authority Engineer for BOT / Annuity / HAM Projects	2 marks for one project and one additional mark for additional project and maximum of 4 marks.

KP-4	Sr. Traffic Engineer	Total marks = 50
A	Academic Qualification	
	Degree in Civil Engineering	5 Marks
	Masters degree in other Civil Engg. Disciplines Or Masters degree in Traffic & Transportation Engg.	5 Marks
B.	Profession Related Experience	
B1	No. of years of Professional Experience in Highway/Traffic & Transportation Engineering.	Experience of 20 Yrs and above = 10 marks b) 15 Yrs to 20 Yrs = 8 Marks c) 10 Yrs to 15 Yrs = 6 Marks d) 5 Yrs to 10 Yrs = 4 Marks e) upto 5 Yrs = 3 Marks
B2	Experience in similar capacity in Traffic Engineering/Traffic Studies for projects of widening to 4 lane/expressway or a 4 lane new alignment of length > 20 kms.	6 marks for one project and 2 additional mark for additional project and maximum of 10 marks.
B3	Experience in carrying out traffic & transportation planning studies such as economic studies, cost benefit analysis, road users cost studies, economic feasibility studies etc.	6 marks for one project and 2 additional mark for additional project and maximum of 10 marks.
B4	Any other study on Traffic & Transportation Engineering not cover above (pl. elaborate).	6 marks for one project and 2 additional mark for additional project and maximum of 10 marks.

KP-5	Senior Survey Engineer	Total marks = 50
A	Academic Qualifications	
	Degree in Civil Engineering	5 Marks
	Masters degree in Civil Engg./Advanced Surveying	5 Marks
B	Profession Related Experience	
B1	No. of years of Professional Experience in Highway Engineering	Experience of 20 Yrs and above = 10 marks b) 15 Yrs to 20 Yrs = 8 Marks c) 10 Yrs to 15 Yrs = 6 Marks d) 5 Yrs to 10 Yrs = 4 Marks e) upto 5 Yrs = 3 Marks
B2	Experience of conducting survey for road projects for widening to 4-lane/expressways or a 4-lane new alignment of length > 20 kms. Or bridge projects with individual span > 40 m	For 4 lane widening works :- 4 marks for one project and one additional mark for additional project and maximum of 7 marks. . For 4-lane new project 5 marks for one project and one mark for additional project and maximum of 8 marks.
B3	Experience of conducting survey for road projects for 2 lane widening or a new alignment of length > 20 kms. Or minor bridge projects	For 2-lane widening works :- 4 marks for one project and one additional mark for additional project and maximum of 7 marks. . For 2-lane new project 5 marks for one project and one mark for additional project and maximum of 8 marks.

KP-6	Environmental-cum-Resettlement Specialist	Total marks = 50
A	Academic Qualification	
	Post Graduation in Social Sciences/related Sciences	5 Marks
	Degree in Civil/Environmental Engg. Or Masters degree in Environmental Engg.	5 Marks
B.	Profession Related Experience	
B1	No. of years of Professional Experience in Environmental appraisal of Civil Engg. Projects	Experience of 20 Yrs and above = 10 marks b) 15 Yrs to 20 Yrs = 8 Marks c) 10 Yrs to 15 Yrs = 6 Marks d) 5 Yrs to 10 Yrs = 4 Marks e) upto 5 Yrs = 3 Marks
B2	Experience in any environmental appraisal of Highway/Bridge Projects	6 marks for one project and 2 additional mark for additional project and maximum of 10 marks.
B3	Experience in conducting Environmental Impact Studies for projects of road/bridge projects for widening to 4-lane/expressways or a 4-lane new alignment of length >20 kms.	For 4 lane widening works :- 6 marks for one project and 2 additional mark for additional project and maximum of 10 marks. For 4-lane new project 6 marks for one project and 2 additional mark for additional project and maximum of 10 marks.

KP-7	Foundation Engineer/Geo-technical Engineer	Total marks = 50
A	Academic Qualification	
	Degree in Civil Engg.	5 Marks
	Masters degree in Foundation/Soil Engineering/Geo-technical Engineering	5 Marks
B.	Profession Related Experience	
B1	No. of years of Professional Experience in Highway Engineering.	Experience of 20 Yrs and above = 10 marks b) 15 Yrs to 20 Yrs = 8 Marks c) 10 Yrs to 15 Yrs = 6 Marks d) 5 Yrs to 10 Yrs = 4 Marks e) upto 5 Yrs = 3 Marks
B2	Experience in geo-technical investigation of high embankments/design of deep foundation for major bridges	5 marks for one project and 1.5 additional mark for additional project and maximum of 8 marks.
B3	Experience in geo-technical survey/sub-soil investigation (sampling, field testing, lab testing etc.) for deep foundation for any Civil Engg. Projects.	5 marks for one project and 1.5 additional mark for additional project and maximum of 8 marks.
B4	Experience in construction/construction supervision of deep foundation for major bridges	5 marks for one project and 1.5 additional mark for additional project and maximum of 8 marks.
B5	Experience in construction/construction supervision of foundations for bridges with innovative design.	3 marks for one project and 1.5 additional mark for additional project and maximum of 6 marks.

KP-8	Transport Planner	Total marks = 50
A	Academic Qualification	
	Post Graduation in Operation Research/Transportation/Management without specialization in Transport Planning/Transport Economics.	5 Marks
	Degree in Civil Engg/Architecture. Or Masters degree in Traffic/Transportation Engg. Or Master in Transport Planning or Degree in Civil Engg. With PG in Traffic & Transport Planning/Transport Economics , Post Graduation in Operation Research/Transportation/Management with specialization in Transport Planning/Transport Economics.	5 Marks
B	Profession Related experience	
B1	No. of years of professional related experience in Transport Engineering/Planning	Experience of 20 Yrs and above = 10 marks b) 15 Yrs to 20 Yrs = 8 Marks c) 10 Yrs to 15 Yrs = 6 Marks d) 5 Yrs to 10 Yrs = 4 Marks e) upto 5 Yrs = 3 Marks
B2	Comprehensive Traffic & Transportation Studies & Transport/Highway Planning including Route Location & Evaluation of various alternatives in Metropolitan/Urban areas, Multi-Model Transport Planning Studies/Corridor Analysis & Route Selection Impact Analysis Study/Parking Analysis & Policy Formation Study etc.	Comprehensive Traffic & Transportation Studies :- 3 marks for one project and one for additional project and maximum of 5 marks Transport/Highway Planning including Route Location:- 3 marks for one project and one for additional project and maximum of 5 marks Evaluation of various alternatives in Metropolitan/Urban areas, Multi-Model Transport Planning Studies/Corridor Analysis 3 marks for one project and one for additional project and maximum of 5 marks Route Selection Impact Analysis Study

		<p>3 marks for one project and one for additional project and maximum of 5 marks</p> <p>Parking Analysis</p> <p>3 marks for one project and one for additional project and maximum of 5 marks</p> <p>Policy Formation Study</p> <p>3 marks for one project and one for additional project and maximum of 5 marks.</p>
B3	Any other Study on Traffic & Transportation Engineering & Highways Planning/Engineering (Pl. elaborate)	3 marks for one project and one for additional project and maximum of 5 marks.

KP-9	CAD Specialist	
A	Academic Qualification	
	Any relevant qualification in Science Or Degree in Civil Engineering	5 Marks
	MCA/Degree in Civil Engg. With post graduation in Computer Aided Design/Degree in Computer Engg. Or Masters in Computer Engg.	5 Marks
B	Profession related experience	
B1	No. of years of Professional Experience in Engineering	Experience of 20 Yrs and above = 10 marks b) 15 Yrs to 20 Yrs = 8 Marks c) 10 Yrs to 15 Yrs = 6 Marks d) 5 Yrs to 10 Yrs = 4 Marks e) upto 5 Yrs = 3 Marks
B2	Experience in Highway/Transport related software development, its design & drafting.	6 marks for one project and 2 additional mark for additional project and maximum of 10 marks.
B3	Experience in Highway projects (2/4 lane) of length more than 20 kms or bridge projects having individual span length > 25m	For length more than 20 Kms:- 6 marks for one project and 2 additional mark for additional project and maximum of 10 marks. For bridge more than 25 mtr:- 6 marks for one project and 2 additional mark for additional project and maximum of 10 marks.

Category II: KP3 - 2 Nos. & - KP-2, KP-5, KP-7 and KP-9 - One No. each.

4(b) Experience and qualifications required for Technical Personnel for **Category-II** .

Total of 450 marks are allocated for qualification and experience of technical expert. The detailing is as under:-

Two person of category KP-3 and one of category KP2, KP5, KP7, KP9 total of 450 marks are for this category and maximum marks for each person is 75 marks which is detailed above.

KP-2	Pavement Specialist	Total marks = 75
A	Academic Qualifications	
	Degree in Civil Engineering	5 Marks
	Masters degree in other Civil Engg. Disciplines Or Masters degree in Highway/Geo-technical/Foundation Engineering	5 Marks
B	Profession Related Experience	
B1	No. of years of Professional Experience in Highway Engineering	Experience of 20 Yrs and above = 15 marks b) 15 Yrs to 20 Yrs = 10 Marks c) 10 Yrs to 15 Yrs = 8 Marks d) 5 Yrs to 10 Yrs = 6 Marks e) upto 5 Yrs = 4 Marks
B2	Experience in pavement design or construction supervision of widening to 4 lane/expressways or 4 lane new alignment of length. 20 Kms.	6 marks for one project and 2 additional mark for additional project and maximum of 10 marks.
B3	Experience in proof checking for widening to 4 lane/expressways or 4 lane new alignment of length. 20 Kms. As well as in widening to 2 lane or 2 lane new alignment of length > 20 kms.	6 marks for one project and 2 additional mark for additional project and maximum of 10 marks.
B4	Experience in pavement design or construction supervision of widening to 2 lanes or 2 lane new alignment of length > 20 kms.	6 marks for one project and 2 additional mark for additional project and maximum of 10 marks.
B5	Experience in sub-soil investigation (sampling, testing, analysis) & quality control for road & bridge projects.	6 marks for one project and 2 additional mark for additional project and maximum of 10 marks.
B6	Experience as Independent Engineer / Authority Engineer for BOT / Annuity / HAM Projects	6 marks for one project and 2 additional mark for additional project and maximum of 10 marks.

KP-3	Bridge Engineer/Structural Engineer	Total marks : 75 x 2 = 150
A	Academic Qualification	
	Degree in Civil Engg.	5 Marks
	Masters degree in Structural/Bridge Engineering	5 Marks
B.	Profession Related Experience	
B1	No. of years of Professional Experience in Highway & Bridge Engineering	Experience of 20 Yrs and above =

		15 marks b) 15 Yrs to 20 Yrs = 10 Marks c) 10 Yrs to 15 Yrs = 8 Marks d) 5 Yrs to 10 Yrs = 6 Marks e) upto 5 Yrs = 4 Marks
B2	Experience in design of major bridges	5 marks for one project and 1.5 additional mark for additional project and maximum of 8 marks.
B3	Experience in design of minor bridges	5 marks for one project and 1.5 additional mark for additional project and maximum of 8 marks.
B4	Experience in construction supervision of bridges with individual span length >25m	4 marks for one project and 2 additional mark for additional project and maximum of 8 marks.
B5	Experience in construction supervision of bridges with individual span length <25m	4 marks for one project and 2 additional mark for additional project and maximum of 8 marks.
B6	Experience in Proof Checking for major bridges	4 marks for one project and 2 additional mark for additional project and maximum of 8 marks.
B7	Experience in Proof checking for minor bridges	4 marks for one project and 1 additional mark for additional project and maximum of 5 marks.
B8	Experience as Independent Engineer / Authority Engineer for BOT / Annuity / HAM Projects	4 marks for one project and 1 additional mark for additional project and maximum of 5 marks.

KP-5	Senior Survey Engineer	Total marks = 75
A	Academic Qualifications	
	Degree in Civil Engineering	5 Marks
	Masters degree in Civil Engg./Advanced Surveying	5 Marks
B	Profession Related Experience	
B1	No. of years of Professional Experience in Highway Engineering	Experience of 20 Yrs and above = 15 marks b) 15 Yrs to 20 Yrs = 10 Marks c) 10 Yrs to 15 Yrs = 8 Marks

		<p>d) 5 Yrs to 10 Yrs = 6 Marks</p> <p>e) upto 5 Yrs = 4 Marks</p>
B2	<p>Experience of conducting survey for road projects for widening to 4-lane/expressways or a 4-lane new alignment of length > 20 kms. Or bridge projects with individual span > 40 m</p>	<p>For 4 lane widening works :-</p> <p>6 marks for one project and 3 additional mark for additional project and maximum of 15 marks. .</p> <p>For 4-lane new project:-</p> <p>5 marks for one project and 2.5 mark for additional project and maximum of 10 marks.</p>
B3	<p>Experience of conducting survey for road projects for 2 lane widening or a new alignment of length > 20 kms. Or minor bridge projects</p>	<p>For 2-lane widening works :-</p> <p>6 marks for one project and 3 additional mark for additional project and maximum of 15 marks. .</p> <p>For 2-lane new project:-</p> <p>5 marks for one project and 2.5 mark for additional project and maximum of 10 marks.</p>

KP-7	Foundation Engineer/Geo-technical Engineer	Total marks = 75
A	Academic Qualification	
	Degree in Civil Engg.	5 Marks
	Masters degree in Foundation/Soil Engineering/Geo-technical Engineering	5 Marks
B.	Profession Related Experience	
B1	No. of years of Professional Experience in Highway Engineering.	Experience of 20 Yrs and above = 15 marks b) 15 Yrs to 20 Yrs = 10 Marks c) 10 Yrs to 15 Yrs = 8 Marks d) 5 Yrs to 10 Yrs = 6 Marks e) upto 5 Yrs = 4 Marks
B2	Experience in geo-technical investigation of high embankments/design of deep foundation for major bridges	6 marks for one project and 3 additional mark for additional project and maximum of 15 marks.
B3	Experience in geo-technical survey/sub-soil investigation (sampling, field testing, lab testing etc.) for deep foundation for any Civil Engg. Projects.	6 marks for one project and 3 additional mark for additional project and maximum of 15 marks.
B4	Experience in construction/construction supervision of deep foundation for major bridges	5 marks for one project and 2.5 additional mark for additional project and maximum of 10 marks.
B5	Experience in construction/construction supervision of foundations for bridges with innovative design.	5 marks for one project and 2.5 additional mark for additional project and maximum of 10 marks.

KP-9	CAD Specialist	Total marks = 75
A	Academic Qualification	
	Any relevant qualification in Science	5 Marks
	Degree in Civil Engineering	5 Marks
	MCA/Degree in Civil Engg. With post graduation in Computer Aided Design/Degree in Computer Engg.	5 Marks
	Masters in Computer Engg.	5 Marks

B	Profession related experience	
B1	No. of years of Professional Experience in Engineering	Experience of 20 Yrs and above = 15 marks b) 15 Yrs to 20 Yrs = 10 Marks c) 10 Yrs to 15 Yrs = 8 Marks d) 5 Yrs to 10 Yrs = 6 Marks e) upto 5 Yrs = 4 Marks
B2	Experience in Highway/Transport related software development, its design & drafting.	6 marks for one project and 2 additional mark for additional project and maximum of 10 marks.
B3	Experience in Highway projects (2/4 lane) of length more than 20 kms or bridge projects having individual span length > 25m	<p>For Highway length more than 20 Kms:-</p> <p>5 marks for one project and 2.5 additional mark for additional project and maximum of 15 marks.</p> <p>For bridge more than 25 mtr:-</p> <p>5 marks for one project and 2.5 additional mark for additional project and maximum of 15 marks.</p>

Category IIIA:**Maximum Marks 450.**

The applicant or his employee should possess Masters in Civil Structure with 10 years experience and the distribution of marks is as under:-

- (a) ME (Structures) with 10 years experience 60% of 450 i.e. = 270 marks
- (b) ME (Structures) with experience more than 15 years = 50 marks
- (c) ME (Structures) with experience more than 10 years = 30 marks
- (d) One additional or himself having knowledge of CADD/ STADD = 50 marks
- (e) More than one ME(Structure) with experience at least 10 years = 50 marks

Category IIIB:**Maximum Marks 450.**

The distribution of marks is as under:-

- (a) ME (Structures) with 5 years experience,
additional BE(Civil) with 8 years experience 60% of 450 i.e. = 270 marks
- (b) Additional BE(Civil) with experience more than 10 years = 50 marks
- (c) Additional ME(Structures) with experience more than 5 years = 30 marks
- (d) One additional or himself having knowledge of CADD/ STADD = 50 marks
- (e) More than one or himself ME(Structure) with experience
greater than 10 years = 50 marks

5. **FIELD / LABORATORY EQUIPMENT** **Maximum 100 marks**

5	FIELD / LABORATORY EQUIPMENT (Please state availability of the equipments mentioned below:	
(a)	In-house Computer Hardware / Software facility (applicable for all the categories.	
	i) Having at least one Pentium and printer/plotter facility	6 Marks for each unit and one mark additional. Maximum of 10 marks.
	ii) CAD / Mx, INROADS, STAAD III or equivalent software for Highways & Bridge Designs (mention name & application of the software available with the firm).	6 Marks for each unit and one mark additional. Maximum of 10 marks.
(b)	Survey Equipments (applicable for all the categories)	
	i) Total Station or Distomat, Theodilite and Auto Level	6 Marks for each unit and one mark additional. Maximum of 8 marks.
	ii) Plain Table Assembly	6 Marks for each unit and one mark additional. Maximum of 8 marks.
	iii) Other Survey Equipments	6 Marks for each unit and one mark additional. Maximum of 8 marks.
(c)	Soil/Material Testing Equipments : (applicable for all the categories)	
	Expertise / facilities / infrastructure for carrying out :	
	(i) Auger/shell/percussion/wash/rotary boring	2 Marks for each unit and one mark additional. Maximum of 4 marks.
	(ii) Drilling through rocks for a depth upto 3 meters for establishing the continuity of rock strata	2 Marks.
	(iii) Field/Lab. C.B.R. Test assembly	4 Marks for each unit and one mark additional. Maximum of 6 marks.
	(iv) Static cone penetration, dynamic cone penetration	6 Marks for each unit and one mark additional. Maximum of 8 marks.
	(v) Vane shear test, standard penetration test	6 Marks for each unit and one mark additional. Maximum of 8 marks.
	(vi) Classification test and density test of soil sample	6 Marks for each unit and one mark additional. Maximum of 8 marks.
	(vii) Triaxial (UU, CU) test, box shear test	6 Marks for each unit and one

		mark additional. Maximum of 8 marks.
	(viii) Consolidation test	2 Marks for each unit and one mark additional. Maximum of 3 marks.
	(ix) Standard and modified proctor test as per IS: 2720	2 Marks for each unit and one mark additional. Maximum of 3 marks.
	(x) Permeability Test	2 Marks for each unit and one mark additional. Maximum of 3 marks.
	(xi) Geo-textile testing facilities	2 Marks for each unit and one mark additional. Maximum of 3 marks.