## Ministry of Road Transport & Highways (S&R Zone) Transport Bhawan, 1, Parliament Street, New Delhi - 110001

Dated 19 October 2023

## OFFICE MEMORANDUM

Sub: Suggestion/comments on the draft amendment in the standard RFP document for DPR consultancy work.

Please find enclosed herewith draft amendment in the standard RFP document for DPR consultancy work for comments/suggestion of all the stake holders. It is requested that clause wise specific comments, if any, may be furnished to the Ministry on email id <u>srdivisionmorth@gmail.com</u> within 10 days.

(O.P. Shrivastava) Chief Engineer(S&R)

То

## All Stakeholders

Copy to:

NIC - It is requested to upload this note along with the copy of draft amendment in the standard RFP document on web page of the Ministry.

## Proposed amendments to RFP (15.02.2019) for DPR consultants

RFP Clause Reference	Existing Provision of RFP for DPR	Proposed Modification
sentence of	eligible Consultants for preparation of Detailed Project Report of <project Description&gt;.</project 	Proposals are hereby invited from eligible consultants who meet the guidelines contained in Public Procurement (Preference to Make in India) Order, 2017 (amended on 16.09.2020) for preparation of Detailed Project Report of >Project Description<. Consultant submitting Proposal in sole capacity or as a member of joint venture or as an associate shall meet the guidelines contained in Public Procurement (Preference to Make in India) Order, 2017 (amended on 16.09.2020).
sentence of Para 2 of NIT	Demand Draft favouring <agency> and</agency>	Cost of the Document in the form of a Non-refundable document fee of Rs.5,000 (Rupees Five Thousand only) must be submitted in <agency> account online at the time of Submission of Bid proposal, specifying the tender id and bid due date.</agency>

	sentence of clause 1.3 of LOI	The <agency>invites Proposals (the "Proposals") through e-tender (on-line bid submission) for selection of Technical Consultant (the "Consultant") who shall prepare detailed project report (DPR).</agency>	The >Agency< invites Proposals (the "Proposals") from eligible consultants who meet the guidelines contained in Public Procurement (Preference to Make in India) Order, 2017 (amended on 16.09.2020) through e-tender (online bid submission) for selection of Technical Consultant (the "Consultant") who shall prepare detailed project report (DPR).
4.		form of Demand Draft favouring <agency> payable at <location>must be</location></agency>	<b>Document fee:</b> The non-refundable fee for the document amounting to Rs. 5000/- (Five thousand only) is to be submitted online in <agency> account. The proof/ transaction receipt of depositing online fee must be furnished while submitting the proposal.</agency>
5.	Para 3.1.1(viii) of LOI	New Clause	Consultants shall comply with the provisions of Integrity Pact (IP) as given in Form T-12 and the Integrity Pact (IP) duly signed by Authorised signatory shall be submitted by the Consultant with technical Proposal & shall be part of the Contract Agreement;
6	Para 3.1.1 (ix) of LOI	New Clause	A Consultant is required to submit along with its Technical Proposal, a self-certification that the services offered meets the local content requirement for 'Class-I Local supplier'/'Class-II Local Supplier' as the case may be. In case the Consultant has not submitted the aforesaid certification, the Consultant will be treated as 'Non-Local supplier'. The definition of Class-I Local Supplier, Class-II Local Supplier, Non-Local Supplier and Local Content shall be as given in Public Procurement (Preference to Make in India) Order, 2017 (amended on 16.09.2020). In case of procurement of a value in excess of Rs. 10 crores, the 'Class-I Local supplier'/'Class-II Local Supplier' shall provide a certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect suppliers other than companies) giving the percentage of local content.
7	Clause 3.1.3 of LOI (New)	New Clause	As given in A-1
8	of LOI	may be submitted only through Infracon in Form-T-10 [Team Leader cum Senior Highways Engineers, Senior Bridge Engineer, Highway cum Pavement Engineer & Traffic / Road Signage / Marking and	CVs of following 4 (four) key Personnel may be submitted only through Infracon in Form-T-10 [Team Leader cum Highways Engineer, Bridge Engineer, Highway Engineer & Traffic / Road Signage / Marking and Safety Expert in case of Normal Highway Project] [Team Leader cum Bridge Engineer, Highway Engineer, Bridge/Structural Engineer & Material cum Geo-Technical Engineer in

		Highway Project]	case of Standalone Bridge Project]
		Engineer, Bridge/Structural Engineer & Material cum Geo-Technical Engineer- Geologist in case of Standalone Bridge Project]	Physicist/Geologist & Geotechnical Engineer in case Standalone Tunnel Project]. For remaining key personnel, the CVs need to be submitted for approval
		[Team Leader cum Senior Tunnel Expert, Tunnel Design Expert, Senior Geo-Physicist & Senior Geotechnical Engineer in case Standalone Tunnel Project].	prior to signing of contract.
		For remaining key personnels, the CVs need to be submitted for approval prior to signing of contract.	
9	Para 3.2.3 (xi) of LOI (New)	New Clause	The bidders shall submit the additional details in Form-T-11 for technical proposal.
10	Clause 3.2.3 (xii) of LOI (New)	New Clause	Incase consultant firms experience or document such as Form E2/T3, Form E3, References (client certificate) is found to be false at any stage i.e. from bidding to completion of services, the consultancy contract shall be terminated and consultant firm shall be debarred for a period of 2 years.
11	of LOI	termination and debarment from future <agency> projects for a</agency>	The CVs of the four key personnel as mentioned in para 3.2.3(x) above in the format as per Form T-10 is to be furnished on Infracon portal. It may please be ensured that the format is strictly followed and the information furnished therein is true and correct. The CV must indicate
		minimum period of 2 years may be taken by <agency> on the personnel and the Firm</agency>	the work in hand and the duration till which the person will be required to be engaged in that assignment. The Firm shall ensure that details

		furnished in the CV by the personnel are correct.
		<ul> <li>a. If an information is found incorrect/fake/inflated in the CV, at any stage, debarment of the key personnel from future MoRTH or its Executing Agencies projects upto 2 years may be taken by MoRTH or its Executing Agencies.</li> <li>b. In case, the information contained in the CV for the duration in which the key personnel was employed by the firm, proposing his candidature is found incorrect/fake/inflated at any stage, action including termination of the consultancy agreement and debarment of the firm upto 2 years from future MoRTH or its Executing Agencies projects shall be taken by MoRTH or its Executing Agencies.</li> <li>c. In case, the information contained in the CV is found incorrect/fake/inflated at any stage, the consultancy firms shall have to refund the salary and perks drawn in respect of the person apart from other consequences.</li> </ul>
12	i) The proposal is accompanied by Document fee	(i)The proposal is accompanied by proof /transaction receipt of depositing online document fee.
	ii) The Proposal is accompanied by Bid Security of required value and of validity equal or	<ul><li>(ii) The firms(s) have required experience</li><li>iii) The firms(s) have required turnover</li></ul>
	iii) The firms(s) have required	iv) The documents are properly signed by authorized signatories and whether the proposal contains proper POA as mentioned at para 1.8.1 above.
	experience iv) The firms(s) have required turnover	v) The proposals have been received on/ or before the deadline of submission.
	v) The documents are	vi) In case a Joint Venture/Association of firms, the proposal shall be accompanied by a certified copy of legally binding Memorandum of
	vi) The proposals have	Understanding (MoU) on a stamp paper of Rs. 100/- signed by all firms to the Joint Venture/Association as detailed at para 1.8.2 above.
	vii) In case a Joint Venture	(vii) The determination of technical capacity of the bidding consultant shall be evaluated as per Form-T11 in Appendix-III Formats for technical proposals.

sentence of Clause 5.1 of LOI	Eligibility Criteria as mentioned in the Data sheet and who had submitted the above mentioned documents shall be declared "pass" on proof of Eligibility and the Technical Proposals of only those consultants shall be opened and evaluated further.	A consultant satisfying the minimum eligibility criteria as mentioned hereinabove and more specifically in Data Sheet shall be construed as shortlisted for further evaluation of Technical Proposals.
LOI	proposal shall be evaluated as per the detailed evaluation criteria given in Data Sheet. A proposal securing 75 points shall be declared pass in the evaluation Technical Proposal .The technical proposal should score at least 75 points	In the second stage the Technical proposal shall be evaluated as per the detailed evaluation criteria given in Data Sheet. A proposal securing 80 points shall be declared pass in the evaluation Technical Proposal: The technical proposal should score at least 80 points out of 100 to be considered for financial evaluation. The CV of the proposed Team Leader should score at least 80 % marks otherwise the entire proposal shall be considered to have failed in the evaluation of Technical Proposals and shall not be considered for opening of Financial Proposals.
of LOI	mentioned at Clauses 5.3.4, 5.4 and, 5.5 as mentioned below shall be followed for determining the "most preferred bidder (H-1 bidder)" for this package.	Financial Proposal (excluding GST) of a Consultant quoting 25% below average bid price will not be considered for further evaluation and award of consultancy services except that Financial Proposal of Consultant, if any, who has scored highest marks in Technical Proposal evaluation and quoted 25% below average bid price shall be considered for further evaluation and award of consultancy services. 5.3.3.1 For a particular package, the Financial Proposals shall be evaluated as follows for determining the most preferred bidder (H-1)

		bidder.
		5.3.3.2 For a package in which 2 firms are eligible for opening of Financial Proposal, the Financial Proposals will be evaluated in accordance with Clauses 5.3.4, 5.4 and, 5.5 as mentioned below for determining the "most preferred bidder (H-1 bidder)" for this package.
		5.3.3.3 For a package in which 3 or more firms are eligible for opening of Financial Proposals, average of all the opened Financial Proposals shall be determined. A Financial Proposal for a particular package shall be considered "reasonable" if it is not less than the average by 25%. However, Financial Proposal of the Consultant who has scored highest marks in Technical Evaluation but quoted 25% below average bid price shall be considered reasonable. Only reasonable Financial Proposals shall be considered for determining the "most preferred bidder (H- 1 bidder)" using the procedure as given at Clauses 5.3.4, 5.4 and 5.5 as mentioned be low.
		5.3.3.4 While determining reasonable Financial Proposals for a particular package in accordance with Clause 5.3.3.3, if the Financial Proposal of only one Consultant comes out as a reasonable Financial Proposal and all other Financial Proposals do not turn out to be reasonable Financial Proposals, the Consultant quoting the reasonable Financial Proposal shall be declared as the most preferred bidder (H-1) for that particular package."
16	Following may be added at the end of Clause 6.1 of LOI	Alternatively, the Consultant may submit a single Bank Guarantee as Performance Security to cover the performance of all the consultancy assignments being undertaken by the Consultant for the Client for the amount indicated below. If any part of the Omnibus Bank Guarantee has been encashed by the Client, whether before submission of Proposal, during pendency of the Proposal evaluation or during pendency of the Contract, the Consultant shall re-equip the Omnibus Bank Guarantee within a period of 3 working days. The Consultant may initially provide the

		Omnibus Bank	Guarantee towards Per	formance Security for a period of
		two years pro	vided that it shall procu	e the extension of the validity of
		the Performar	ce Security at least one	month prior to the date of expiry
		thereof. Once	the appropriate single	Bank Guarantee for Performance
		Security has be	en submitted by the Cor	sultant, the existing BGs shall be
		returned. The B	ank Guarantee be submit	ted in prescribed Proforma.
		Performance Se	curity	
			ue of Consultancy Fee	BG Value (Rs. In Crores)
		as per Ungoi Crores)	ng Contracts (Rs. In	
		,		0.20
		0-10		0.20
		10-20		0.40
		20-30		0.50
		30-40		0.60
		40-60		0.8
		60-80		1.00
		80-100		1.20
		100-150		1.50
		150 - 200		1.75
		>200 - 250		2
	Details of the stretch proposed for DPR	Details of the st	retch proposed for DPR	preparation.
LUI	preparation.	<description o<="" td=""><td>fnackages&gt;</td><td></td></description>	fnackages>	
	<description of="" packages=""></description>		r puchuges.	
			State	Pack
				age
	State Pa	S NH	Tentative	

	S No.	NH No	Section	Tentativ e length (in KM)	ckag e No	No	No.		Section	length KM)	(in	No.	Estimated Cost
Para-3 of Data Sheet	Dura	tion c	of the Projo	ect: 300 day	'S				project od for DPR p	-	n may	be fixed a	as follows:
						SI. No.		-	Гуре of Proj	ect	S	Size (km)	Duration (months)
						Widening & upgradation			Upto 50	10			
						1		to	2 lanes with shoulders			50-100	12
											>100	15	
								Wide	ening & upgr	adation		Upto 50	12
						2			/6 lanes with lders from 2	-		50-100	15
												>100	18
						3	v	Vider	ning & upgra	dation to		Upto 50	10
								6	lanes with p	aved		50-100	12

						shoulders from 4L+PS	>100	15	
							2100	15	
							Upto 50	18	
					4	Green Field Expressways	50-100	21	
							>100	24	
					5	Stand alone bypass	Upto 20	10	
							>20	12	
						Duration to be decided for			
					6	Stand alone bridge/tunnel	individual cases depending on		
							size and co		
						L			
						ha musicat in langtad in hills a			
						he project is located in hilly re iod as mentioned above shall be			
					enne per			•	
						riod may also be suitably ir	creased in case	the project has	
19	Para 4	of	Date, Time and	Venue of Pre-Proposal		ong span bridge. Time of Pre-Proposal Confere	ance Date: «Date»		
	Data She		Conference	venue of rie-rioposat	Date and	Thine of Fre-Froposat conference			
					Time: <t< td=""><td>ïme&gt;</td><td></td><td></td></t<>	ïme>			
			Date: <date></date>		Dro-prop	osal conference shall be held t	brough bybrid ma	do i o physical	
			Time: <time></time>			conferencing.		de i.e. physical	
			Venue: <venue></venue>		•				

	Table in Para 12.2 of Data	Sl.	Description	Points	Sl. No.	Description	Points
	Sheet	No.	<b>Finale</b> and event		1	Firm's relevant experience in last 7 years	50
		1	Firm's relevant experience in last 7 years	40		last / years	
			Matorial tosting		2	Material testing, survey & investigation, equipment and software proposed to be used	10
		2	Material testing, survey & investigation, equipment and software proposed to be used	20		software proposed to be used	
					3	Qualification and Relevant experience of key personnel	40
						Total	100
		3	Qualification and Relevant experience of key personnel	40			
			Total	100			
	Para 12.2 A & B of Data Sheet	of Data		·	As given in A-	2	
		 may	be accepted.				

	22 Table under Para 12.2 C-1 of Data sheet						
		S. No	Key personnel	Points	S. N o.	Key personnel	Points
		1	Team Leader cum Senior	12	1	Team Leader cum Highway Engineer	12
		2	Highway Engineer		2	Bridge Engineer	10
			Senior Bridge Engineer	10	3	Highway Engineer	10
		3	Highway cum Pavement Engineer	10	4	Traffic / Road Signage / Marking and Safety Expert	8
		4	Traffic / Road Signage / Marking and Safety	8		Total	40
		Safety Expert					

			Total 4	40					
23	Table under Para 12.2 C-2								
	of Data sheet	S. No	Key personnel		Points	S • N •	Key personnel	Points	
			Team Leader Senior B Engineer	cum ridge	12	1	Team Leader Bridge Engineer	12	
		2	Highway Pavement Enginee	cum er		2	Highway Engineer	10	
		3	Bridge Structura	ıl	10				

			Engineer				Bridge Structural	Engineer	10	
			Material cum Geotechnical Engineer -Geologist	8	-		Material cum Engineer	Geotechnical	8	
			Total	40	_		Total		40	
24	Table under Para 12.2 C-3									
	of Data sheet	S. No	Key personnel	Point s		4	Key personnel		Points	
			Team Leader cum Senior Tunnel Expert	12	-					
							Team Leader cum	n Tunnel		

2	Tunnel Design Expert	10	1	Expert	12	
3	Senior Geotechnical Engineer	10		Tunnel Design Expert	10	
4	Senior Geophysicist	8	2			
	Total	40	3	Geotechnical Engineer	10	
				Geophysicist/Geologist	8	
			4	Geophysicist/Geologist	0	
				Total	40	

25	Data Sheet (last sub-	The Factors are: The weight given to Technical Proposal (T) = 0.70. The weight given to Financial	The Factors are: The weight given to Technical Proposal (T) = 0.80. The weight given to Financial Proposal (F) = 0.20
		Proposal (f) = 0.30	
26		Entire ROW (60m -70m) may be	RoW width to be acquired shall be intimated to the Consultant by the client on completion of feasibility study. No positive or negative variation to the price shall be made on this account.
27	Para 3.1.4 (ii) of ToR	structures shall be developed with additional	The lane status of the highway should be decided depending on the anticipated traffic and ROW available. However, carriageway shall be placed in such a manner that additional land is left adjacent to the median for future expansion.
		land left in the median for future expansion.	
	Para 3.1.5 of ToR	All efforts shall be made to avoid any road alignment through National Parks and Wildlife Sanctuaries, even if it requires taking a longer route / bypass. However, where it becomes absolutely unavoidable and necessary to keep the alignment through such reserve forest / restricted areas, land would be acquired with RoW of not more than 30 mtrs.	All efforts shall be made to avoid any road alignment through National Parks and Wild life Sanctuaries, even if it requires taking a long route/bypass. However, where it becomes absolutely unavoidable and necessary to keep the alignment through such reserve forest / restricted areas, minimum land would be acquired such that highway can be provided except the service road so as to meet all design requirements.
	Para 4.11.2 3(c) of ToR	Topographic map of scale 1:1000 of	Topographic map of scale as per IRC SP 19 of the entire highway length and adjoining areas of interest.

	6 of ToR	through the Geotechnical Consultants empanelled by MORT&H. The soil testing reports Relevant IRC Codes	The sub-soil exploration and testing should be carried out as per IS 1892. The soil testing reports shall be in the format prescribed in relevant IRC Codes.
31	Para 4.11.4.4 7 of ToR	For the approach road New pavement structure	For the approach road pavement, bore holes at each major change in pavement condition or in deflection readings or at 2 km intervals whichever is less shall be carried out to a depth of at least 2 m below embankment base or to rock level and are to be fully logged. Appropriate tests to be carried out on samples collected from these bore holes in NABL accredited laboratory to determine the suitability of various materials for use in widening of embankments or in parts of new pavement structure.
	iv of ToR	Ensure an accuracy of 1mm or higher in a 1:1000 scale, as this translates into an accuracy of 1 m or higher on ground	Ensure an accuracy of 1mm or higher in a scale as per IRC SP 19
	of ToR (last sentence)		An accuracy of 1mm or higher in a map of scale as per IRC SP 19 shall be ensured.
	paragraph of Para 10.9 (3) ix of ToR	forming part of this volume shall be 'good for construction' drawings. All plan and profile drawings will be	Volume-IX, Drawing Volume: All drawings forming part of this volume shall be drawings with details sufficient enough to be used as reference drawings for bidding purposes. All plan and profile drawings will be prepared in scale 1:250V and 1:2500H scale to cover one km in one sheet. This volume will contain drawings for the following:

		New Clause	Volume X, Drainage Plan:
(X	() of ToR		
			DPRs should be submitted in two volumes (Main and Drainage Plan separately). The DPR should have proper drainage plan prepared on basis of contours of the area, outlet availability and discharge requirements including discharge at the outfall from drains of local bodies.
			Preferably underground drains with well sized and well-spaced manholes may be provided to take care of cleaning. Wherever possible self- cleaning cross-section of drains may be adopted.
			Drainage Plan in DPR will be checked through a joint inspection with the engineers of local body/ Development Authority etc. so that Drainage Plan is totally integrated with the local body Drainage Plan.
			The drain covers should be strong enough to withstand the weight of Light commercial vehicles, wherever required.
			Stretch of the NH passing through a town can have multiple drainage plans/ sub plans due to different contours or due to having different outlets.
			The cross-sections of drains being shown presently in Schedule-B (Typical Cross Sections) & details of drains being mentioned in Schedule-C (length

			Et type of drains) shall not be mentioned in future as it will vary from location to location based on drainage plan. The scope of drains in the project shall be on the basis of Drainage Plan drawn at each location and such Drainage Plan shall be made part of Scope of Project.
36		Qualification and Experience Requirement of Key Personnel	Modified "Qualification and Experience Requirement of Key Personnel" at A-3
37	Enclosure -III 'Schedule for approval of Reports and Documents by PD after submission by Consultant.' Footnote	New Clause	Note 1: Approval/comments shall be communicated by the Client to the Consultant within the time period shown in the schedule above. If no approval/comments are furnished within the indicated time period by the Client, it will be considered as deemed approval. Notwithstanding the deemed approval of submission(s), the Consultant will remain responsible for correctness of the submissions.
38		1:1000 scale map 50 cm contours with roadway marked on maps	Scale of map in accordance with IRC SP 19, 50 cm contours with roadway marked on maps
39	2 Data Products, 4,		Digitized revenue map overlaid with key land marks, land size, survey number and owner ship data, with >1mm accuracy on a scale in accordance with IRC SP 19

40	Appendix-II Form - E3 (2 <sup>nd</sup> column of the table)	Financial Year	Financial Year
		2016-17	Year preceding the year in which the proposal is invited
			Year preceding the year in which the proposal is invited by 2 years
		2015-16	Year preceding the year in which the proposal is invited by 3 years
			Year preceding the year in which the proposal is invited by 4 years
		2014-15	Year preceding the year in which the proposal is invited by 5 years
		2013-14	
		2012-13	
41	Appendix-III Form T-11	New Clause	Form T-11 at <b>A-4</b>
42	Appendix-III Form T-12	New Clause	Form T-12 at A-5
43	Appendix-IV Form III I 'Normal Highway Project' Footnote	New Clause	Note - For proper assessment of utility estimates and proper drainage system provisions, DPR consultant shall also engage an utility expert and drainage expert at sub-professional level, with relevant technical expertise in respective fields.
44	Appendix-IV Form III, VIII 'Reports and Document	New Clause	Note - In case of splitting of the project in packages after alignment is finalized, the additional payment in respect of reports and document printing shall be made on prorate basis of accepted financial proposal according to additional number of documents submitted, as mentioned

	Printing'		above.
	Footnote		
45	2. Second	A Firm's Relevant	As given in A-6
	Stage Evaluation - Technical Evaluation (Para 12.2 of	Assumptions to be made regarding Similar Capacity for various positions.	
	Data Sheet)		
46	Clause 2.4 of CA	Unless terminated specified in the SC	Unless terminated earlier pursuant to Clause GC 2.9 hereof, this Contract shall expire when services have been completed and all payments have been made at the end of such time period after the Effective Date as shall be specified in the SC. The Contract shall be treated as closed under following circumstances except for projects spanning across 2 or more states or passing with wildlife sanctuary or protected areas:
			is taken by the Client, the DPR shall be considered as completed after 3 year or submission of both final DPR and 3D notification, whichever is earlier.
			One year after scheduled completion period when delay is not attributable to the Consultant.
47	New Clause 2.4.1 of GC	New Clause	In case the contract has expired in pursuance to Clause 2.4 of GC and later the Client desires to get the DPR completed with/without modification of original scope and the Consultant agrees to the same, the Client and the Consultant will sign a supplementary agreement to get the DPR completed. The original financial proposal of the consultant shall form the basis for payment of balance/additional services duly enhanced by indexing to WPI (all commodities). The key personnel deployment will also be firmed up in supplementary agreement keeping in view the key personnel proposed by the Consultant in its original proposal.

	Clause 2.9.7 of CA	New Clause	<ul> <li>2.9.7.1 Without prejudice to any provision of this Agreement, the Client and Consultant may foreclose this Agreement by mutual consent in circumstances which does not constitute either party's default without any liability or consequential future liability for either party except as mentioned in this Clause.</li> <li>2.9.7.2 Should a Party intend to foreclose this Agreement by mutual consent, the intending Party shall issue a notice to the other Party and upon issuance of such notice, the other Party may within 15 days from receipt of such notice either agree to such foreclosure or raise objection(s) to the same by intimating either of the two possible positions to the intending Party in writing. In case the contract is foreclosed on mutual consent, payment upto the completed stage will be paid as per CI 6.3 (b) of GC and remuneration &amp; logistics beyond completed stage will be paid as per actual using the rates quoted in Consultants' financial proposal.</li> <li>2.9.7.3 If at inception stage or feasibility stage, Client desires to foreclose the contract, the consultant's consent is implied without exception.</li> <li>2.9.7.4 Any attempt or endeavour for foreclosure by mutual agreement shall be without prejudice to the rights and obligations of the Parties form discharging their contractual obligations under this Agreement.</li> <li>2.9.7.5 For the avoidance of doubt, it is clarified that such foreclosure will be without prejudice to the Consultant and shall not affect the Consultant in any way if it wishes to bid in future projects of the Client.</li> </ul>
49	Clause 4.4 (c) of CA	New Clause	All key personnel and sub professional staff of the DPR consultants shall use the Aadhar based biometric attendance /geo-tagged selfie-based attendance system for marking their daily attendance for the duration in site office. Aadhar based biometric attendance /geo-tagged selfie-based attendance system shall be marked at least once a day and any time during the day. Aadhar based biometric attendance /geo-tagged selfie-

			based attendance system shall be installed by the DPR Consultants at its own cost at the site office in order to facilitate the attendance marking. A copy of Aadhar based biometric attendance /geo-tagged selfie-based attendance records shall be attached at the time of submission of their bills to the <agency> Proper justification shall be provided for cases of absence of key personal /sub-professional staff which do not have prior approval from project director of concerned stretch. If <agency> so desires, it shall facilitate electronic linking of the Aadhar based biometric attendance /geo-tagged selfie-based attendance system with the central monitoring system of <agency></agency></agency></agency>
50	Clause 4.4 (d) of CA	New Clause	Consultant will intimate concerned project Director/Project In charge immediately after establishing its site office regarding installation Aadhar based Biometric attendance /Geo-tagged selfie-based attendance system and complete address of its site office.
	To be added at the end of Clause 4.5.2		The Consultant shall make all endevours to ensure that replacement of a Key Personnel is approved before the concerned Key Personnel leaves the consultancy assignment, in any case the Consultant shall submit replacement acceptable to Client not more than 3 weeks after the Key Personnel leaves the consultancy assignment, failing which Client may terminate the Contract in pursuance to Clause 2.9.1 (a) of GC.
52	Clause 4.5.7 of CA	New Clause	<b>4.5.7</b> In case, person permanently employed with the firm is to be replaced, technical score of both the CVs shall be compared excluding the marks given for employment with firm. Replacement would be allowed when the Technical Score (excluding the marks given for employment with firm) of the new key person is equal or better than the existing key person's Technical Score excluding marks assigned for permanent employment with the firm. However, the remuneration of such replacement shall be reduced on proportionate basis in case the overall score of the replacement person is less than the overall score of original person.

53	Clause 6.3 (b) Sr. no. 7 Payment % of CA	10%	10% (Refer Note-2)
			Note-2: Payment for geotechnical investigations shall be made on submission of geotechnical investigation report by the Consultant for the amount quoted by the Consultant in its financial proposal but limited to 2.5% of ceiling amount of contract. Payment on approval of final DPR, documents and drawings will be the amount determined by subtracting the amount paid for geotechnical investigations from 10% of the contract value.
	(b) of CA	New Clause	Note:3 Approval of any submission or stage will include deemed approval in accordance with Note:1 below Enclosure III to ToR "Schedule for approval of Reports and Documents by PD after submission by Consultant"
	(h) of CA	New Clause	Consultants will make payment of salary to all key personnel in their respective bank accounts through electronic mode only. No cash transaction w.r.t salary will be made. Proof of salary transfer through electronic mode shall be submitted by the Authority Engineer with is bill.
56	G.C	contract value shall be retained at the end of the contract for accuracy of	An amount equivalent to 5% of the contract value shall be retained at the end of the contract for accuracy of design and quantities submitted and the same will be released at earlier of project COD or 3 years from start of civil work.
57	Clause 7.3.2.1 of	New Clause	7.3.2.1 Penalty for wrong information in technical proposal
	СА		(a)If an information is found incorrect/fake/inflated in the CV, at any

			<ul> <li>stage, debarment of the key personnel from future MoRTH or its Executing Agencies projects upto 2 years may be taken by MoRTH or its Executing Agencies.</li> <li>(b) In case, the information contained in the CV for the duration in which the key personnel was employed by the firm, proposing his candidature is found incorrect/fake/inflated at any stage, action including termination of the consultancy agreement and debarment of the firm upto 2 years from future MoRTH or its Executing Agencies projects shall be taken by MoRTH or its Executing Agencies.</li> <li>(c) In case, the information contained in the CV is found incorrect/fake/inflated at any stage, the consultancy firms shall have to refund the salary and perks drawn in respect of the person apart from other consequences.</li> <li>(d) Incase consultant firms experience or document such as Form E2/T3, Form E3, References (client certificate) is found to be false at any stage i.e. from bidding to completion of services, the consultancy contract shall be terminated and consultant firm shall be debarred for a period of 2 years</li> <li>(e)In case ownership document of equipment of Consultancy/Associate Firm is found to be false, the consultancy/ Associate firm, as the case may be, shall be put on holiday listing (temporary debarment) for a period upto 12 months.</li> </ul>
58	of G.C	Total amount of recovery from all penalties shall be limited to 15% of the Consultancy Fee.	Total amount of recovery from all penalties shall be limited to 8% of the Consultancy Fee.
59	of CA	Detailed Project Report involving time and cost overrun and adverse effect on reputation of <agency>, the firm shall be declared as non-performing and the firm will not be eligible for participating in</agency>	In case of major deficiencies in the Detailed Project Report involving time and cost overrun and adverse effect on reputation of <agency>, the firm shall be declared as non-performing and the firm will not be eligible for participating in future projects of the Ministry (including NHAI, NHIDCL, BRO, etc.) for a period of 5 years. Decision as to major deficiencies by Client shall be final and binding. However, the Consultant will be given an opportunity to present its case before it is declared non-performer by the</agency>

		NHAI, NHIDCL, BRO, etc.) for a period of 5 years.	Client.				
Clause GC	9 of	9. SETTLEMENT OF DISPUTES	9. SETTLEMENT OF DISPUTES				
		9.1 Amicable Settlement	9.1 Amicable Settlement				
			The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or the interpretation thereof.				
		9.2 Dispute Resolution	9.2 Dispute Resolution				
		9.2.1Any dispute, difference or controversy of whatever nature howsoever arising under or out of or in relation to this Agreement (including its interpretation) between the Parties, and so notified in writing by either Party to the other Party (the "Dispute") shall, in the first instance, be attempted to be resolved amicably in accordance with the conciliation procedure set forth in	<ul> <li>9.2.1 Any dispute, difference or controversy of whatever nature howsoever arising under or out of or in relation to this Agreement (including its interpretation) between the Parties, and so notified in writing by either Party to the other Party (the "Dispute") shall, in the first instance, be attempted to be resolved amicably in accordance with the conciliation procedure set forth in Clause 9.3.</li> <li>9.2.2 The Parties agree to use their best efforts for resolving all Disputes arising under or in respect of this Agreement promptly, equitably and in good faith, and further agree to provide each other with reasonable access during normal business hours to all non - privileged records,</li> </ul>				
		Clause 9.3. 9.2.2The Parties agree to use their best efforts for resolving all Disputes arising under or in respect of this Agreement promptly, equitably and in good faith, and further agree to provide each other with reasonable access during normal business hours to all non - privileged records, information and data pertaining to any dispute. 9.3 Conciliation In the event of any Dispute between the	<ul> <li>information and data pertaining to any dispute.</li> <li>9.3 Conciliation</li> <li>In the event of any Dispute between the Parties, either Party may call upon [Chairman of &lt;<u>Agency</u>&gt;] and the Chairman of the Board of Directors of the Consultant or a substitute thereof for amicable settlement, and upon such reference, the said persons shall meet no later than 10(ten) days from the date of reference to discuss and attempt to amicably resolve the Dispute. If such meeting does not take place within the 10(ten) day period or the Dispute is not resolved as evidenced by the signing of written terms of settlement within 30 (thirty) days of the notice in writing referred to in Clause 9.2.1 or such longer period as may be mutually agreed by the Parties, either Party may refer the Dispute to</li> </ul>				

	arbitration in accordance with the Provisions of Clause 9.4.
[Chairman of < <mark>Agency</mark> >] and the	
	9.4 Arbitration
the Consultant or a substitute thereof for	
amicable settlement, and upon such	9.4.1 Any Dispute which is not resolved amicably by conciliation, as
reference, the said persons shall meet	provided in Clause 9.3, shall be finally decided by reference to arbitration
no later than 10(ten) days from the date	by a Sole Arbitrator appointed in accordance with Clause 9.4.2. Such
of reference to discuss and attempt to	arbitration shall be held in accordance with the provisions of the
amicably resolve the Dispute. If such	Arbitration and Conciliation Act, 1996 as amended. The venue of such
meeting does not take place within the	arbitration shall be ***** and the language of arbitration proceedings shall
10(ten) day period or the Dispute is not	be English.
amicably settled within 15(fifteen) days	
of the meeting or the Dispute is not	
resolved as evidenced by the signing of	
written terms of settlement within 30	9.4.2 Each dispute submitted by a Party to arbitration shall be heard by a
(thirty) days of the notice in writing	sole arbitrator to be appointed as per the procedure below
referred to in Clause 9.2.1 or such longer	sole di biti atori to be appointed as per the procedure betow
period as may be mutually agreed by the	a) Dartias may agree to appoint a cale arbitrator or failing agreement on
Parties, either Party may refer the	a) Parties may agree to appoint a sole arbitrator or, failing agreement on the identity of such sole arbitrator within thirty(30) days after receipt by
Dispute to arbitration in accordance with	
the Provisions of Clause 9.4.	the other Party of the proposal of a name for such an appointment by the
	Party who initiated the proceedings, either Party may apply to the
9.4 Arbitration	President, Indian Roads Congress, New Delhi for a list of not fewer than
	five nominees and, on receipt of such list, the Parties shall alternately
9.4.1 Any Dispute which is not resolved	strike names therefrom, and the last remaining nominee on the list shall
amicably by conciliation, as provided in	be sole arbitrator for the matter in dispute. If the last remaining nominee
Clause 9.3, shall be finally decided by	has not been determined in this manner within sixty (60) days of the date
reference to arbitration by an Arbitral	of the list, the president, Indian Roads Congress, New Delhi, shall appoint,
Tribunal appointed in accordance with	upon the request of either Party and from such list or otherwise, a sole
Clause 9.4.2. Such arbitration shall be	arbitrator for the matter in dispute.
held in accordance with the Rules of	
Arbitration of the International Centre	9.4.3 Substitute Arbitrator
for Alternative Dispute Resolution, New	If for any reason an arbitrator is unable to perform his function, a
Delhi (the "Rules"), or such other rules	substitute shall be appointed in the same manner as the original
as may be mutually agreed by the	arbitrator.
Parties, and shall be subject to the	
provisions of the Arbitration and	9.4.4 The Arbitrators shall make a reasoned award (the "Award"). Any
Conciliation Act, 1996 as amended. The	Award made in any arbitration held pursuant to this Clause 9 shall be final
venue of such arbitration shall be *****	and biding on the Parties as from the date it is made, and the Consultant
	and the Authority agree and undertake to carry out such Award without

and the language of arbitration proceedings shall be English.	delay.				
<ul> <li>9.4.2 Each dispute submitted by a Party to arbitration shall be heard by a sole arbitrator to be appointed as per the procedure below</li> <li>a) Parties may agree to appoint a sole arbitrator or, failing agreement on the identity of such sole arbitrator within</li> </ul>	9.4.8 The schedule of Expenses and Fee payable to the Arbitrator shall as under:				
thirty(30) days after receipt by the other	Sum in dispute	Model fee			
Party of the proposal of a name for such an appointment by the Party who initiated the proceedings, either Party may apply to the President, Indian Roads	Up to Rs.5,00,000(Five Lakh)	Rs. 45,000			
Congress, New Delhi for a list of not fewer than five nominees and, on receipt of such list, the Parties shall alternately	Above Rs 5,00,000(Five Lakh) and upto Rs 20,00,000(Twenty Lakh)	Rs 45,000 plus 3.5 per cent of the claim amount over and above Rs 5,00,000 (Five Lakh)			
remaining nominee on the list shall be sole arbitrator for the matter in dispute.	Above Rs 20,00,000(twenty Lakh) and upto Rs 1,00,00,000 (One Crore)	Rs 97,500 plus 3 percent of the claim amount over and above Rs 20,00,000 (Twenty Lakh)			
been determined in this manner within sixty (60) days of the date of the list, the	Above Rs 1,00,00,000 (One Crore) and up to Rs 10,00,00,000(Ten Crore)	Rs 3,37,500 plus 1 percent of the claim amount over and above Rs 1,00,00,000(One Crore)			
president, Indian Roads Congress, New Delhi, shall appoint, upon the request of either Party and from such list or	Above 10,00,00,000 (Ten Crore) and up to Rs 20,00,00,000 (Twenty Crore)	Rs 12,37,500 plus 0.75 per cent of the claim amount over and above Rs 10,00,00,000 (Ten Crore)			
otherwise, a sole arbitrator for the matter in dispute. 9.4.3 Substitute Arbitrator	Above Rs 20,00,00,000 (Twenty Crore)	Rs 19,87,500 plus 0.5 per cent of the claim amount over and above Rs 20,00,00,000(Twenty Crore) with a ceiling of Rs 30,00,000 (Thirty Lakh)			
If for any reason an arbitrator is unable to perform his function, a substitute	Note:				
shall be appointed in the same manner as the original arbitrator.	Being sole arbitrator, an additional fee set out above shall be paid.	amount of twenty five per cent on the equally by both the parties to the			

9.4.4 Qualifications of Arbitr	rator arbitration i.e. claimant and respondent, which is inclusive of fee of arbitrator for claim and counter claims i.e. total "Sum in Dispute",
The sole arbitrator selected Clause 8.2.1 hereof shall be	pursuant to reading charges, declaration/publishing of award.
extensive experience in rela matter in dispute.	
9.4.5 The Arbitrators sha reasoned award (the "Aw Award made in any arbit pursuant to this Clause 9 sl and biding on the Parties date it is made, and the Co the Authority agree and u carry out such Award without	ward"). Any tration held hall be final as from the onsultant and undertake to
9.4.6 The Consultant and the agree that an Award may against the Consultant Authority, as the case may be respective assets wherever sites assets where asset	be enforced and/or the be, and their
9.4.7. This Agreement and the obligations of the Parties shat full force and effect, pending in any arbitration proceeding	all remain in ng the Award
9.4.8 N In any arbitration proceeding	Aiscellaneous g hereunder:
(a) Proceedings shall, unles agreed by the parties be held	
(b) The English language so official language for all purpe	
(c) The decision of sole arb be final and binding an enforceable in any court of	id shall be

		jurisdiction, and the Parties hereby waive any objections to or claims of immunity in respect of such enforcement; and (d) The schedule of Expenses and Fee payable to the Arbitrator shall be as under : 	
61	Clause 10 of GC	The change of Scope on account of variation of total length as well as 4 laned length of project Highway from the indicative length as given at Annex-1 of Letter of Invitation of the RFP shall be dealt as follows	<ul> <li>10. Change of Scope on account of variation in length of project highway, change from brown field to green field, change in lane configuration etc. shall be dealt as follows:</li> <li>10.1 During the course of consultancy services in case it is considered necessary to increase/decrease the scope of services (of total length as compared to indicative length as given in the Annex-1 of Letter of Invitation of the RFP) or change from brown field to green field by the Client the same shall be notified by Change of Scope notice. Similarly, if the Consultant determines that change of scope is needed, it will inform the same to the Client. The Client will examine and shall either reject the proposal or issue change of scope notice.</li> <li>10.1.1 The Consultancy fee shall be revised on account of change of length as below:</li> <li>i) In case there is increase/ decrease in total length of project compared</li> </ul>

			<ul> <li>to the indicative length as given in the Annex-1 to Letter of Invitation of the RFP, the consultancy fee shall be increased/ decreased in the same proportion in which the length of the project road is increased/ decreased, if the increase/decrease in length is upto 25% of original length. Beyond 25% of the original length, revised consultancy fee shall be mutually decided by the Consultant and the Client.</li> <li>ii) Increase/decrease in length on account of realignment/bypasses shall not be considered as change of scope. However, the total length of the project highway (including bypasses and realignment) along the finally approved alignment shall be compared with the indicative length in the Annex-1 to Letter of Invitation of the RFP for the purpose of calculation of enhancement of consultancy fee.</li> <li>10.1.2 In case the project highway or part of it is proposed to be designed as green field project whereas it is not so specifically mentioned in the Annex-1 to Letter of Invitation of the RFP, the consultancy fee applicable for the affected part of the project highway shall be enhanced by 5%.</li> <li>10.2 In case of increase in configuration of lanes in the project after the submission of Final Project Report, the original consultancy fee shall be enhanced by 10%.</li> <li>10.3 In case there is change of mode of delivery i. e. EPC/HAM/BOT (Toll) etc. is done after submission of Final Project Report, the original consultancy fee shall be enhanced by 2.5%.</li> <li>10.4 In case of revision of DPR is done after submission of Final Project Report due to revision in standards/guidelines of Indian Roads Congress/MoRTH, the original consultancy fee shall be enhanced by 2.5%."</li> </ul>
62	New Clause 11 of Draft CA	New Clause	The Consultant shall be evaluated based on its performance in this consultancy services as per rating system given in Appendix IX and the said rating of the Consultant will be utilised in subsequent proposal evaluation.

63	Clause 2.1	The consultant will furnish within 15	The consultant will furnish within 15 days of the issue of letter of
05			•
	• •		acceptance, an unconditional Bank Guarantee an amount equivalent to 3%
		•	of the total contract value to be received by him from a Nationalized
	Contract		Bank, IDBI or ICICI/ICICI Bank/Foreign Bank/EXIM Bank / Any Scheduled
			Commercial Bank approved by RBI having a net worth of not less than 500
			crore as per latest Annual Report of the Bank. In the case of a Foreign
		Bank, IDBI or ICICI/ICICI Bank/Foreign	Bank (issued by a Branch in India) the net worth in respect of Indian
		Bank/EXIM Bank / Any Scheduled	operations shall only be taken into account. In case of Foreign Bank, the
		Commercial Bank approved by RBI having	BG issued by Foreign Bank should be counter guaranteed by any
		a net worth of not less than 500 crore as	Nationalized Bank in India. In case of JV, the BG shall be furnished on
			behalf of the JV or lead partner of JV for an amount equivalent to 3 $\%$ of
			the total contract value to be received by him towards Performance
			Security valid for a period of three years beyond the date of completion of
		of Indian operations shall only be taken	
		into account. In case of Foreign Bank,	
		the BG issued by Foreign Bank should be	
		counter guaranteed by any Nationalized	
		Bank in India. In case of JV, the BG shall	
		be furnished on behalf of the JV or lead	
		partner of JV for an amount equivalent	
		to 10 % of the total contract value to be	
		received by him towards Performance	
		Security valid for a period of <i>three</i>	
		years beyond the date of completion of	
		services.	

						Appendix-IX
		Criteria for	rating of DPR Consultants performance in in	dividual NH P	rojects	
ROUE	ECT NAME:		Name of Consultant:			
TATE	:		Names of JV partners/associates with % of Sh	areholding:		
SI.	KPI	DE	SCRIPTION	Total Marks	Marks	Supporting Documents to be submitted b
No.	KF1	DE	SCRIPTION	TOLAT MATKS	Obtained	the consultant
atego	ory I: Quality	of DPR				
C	Change of	Cumulative sum of change of scope	(net of positive and negative) and descoping	20		
		(Positive value of each CoS order and descor				
d	lescoping	Percentage of contract price	Marks			
		0	20			
		>0%?5%	15	1		
		>5%?10%	10	]		
		>10%?15%	5			
		>15%	0			
		IHMCL data, data from adjacent toll plaza or a	e year of commencement of construction with actual any other source choosen by the client.	5		
		IHMCL data, data from adjacent toll plaza or a	any other source choosen by the client.	5		
		IHMCL data, data from adjacent toll plaza or a Percentage variation	my other source choosen by the client. Marks	5		
		IHMCL data, data from adjacent toll plaza or a Percentage variation >0%?3%	Marks 5	5		
		IHMCL data, data from adjacent toll plaza or a Percentage variation >0%?3% >3%?5%	my other source choosen by the client. Marks	5		
		IHMCL data, data from adjacent toll plaza or a Percentage variation >0%?3%	Marks 5 3.75	5		
a	accuracy	IHMCL data, data from adjacent toll plaza or a Percentage variation >0%?3% >3%?5% >5%?10%	Marks 5 3.75 2.5 0	5		
a	accuracy	IHMCL data, data from adjacent toll plaza or a Percentage variation >0%?3% >3%?5% >5%?10% >10%	Marks 5 3.75 2.5 0			
a	accuracy	IHMCL data, data from adjacent toll plaza or a Percentage variation >0%?3% >3%?5% >3%?5% >5%?10% >10% Percentage area variation of acquired land (P Percentage variation 0%	Marks  Marks			
a	accuracy	IHMCL data, data from adjacent toll plaza or a Percentage variation >0%?3% >3%?5% >5%?10% >10% Percentage area variation of acquired land (P Percentage variation 0% >0%	Marks   Marks			
a	accuracy	IHMCL data, data from adjacent toll plaza or a Percentage variation >0%?3% >3%?5% >5%?10% >10% Percentage area variation of acquired land (P Percentage variation 0% >0%?5% >5%?10%	Marks   Marks			
a	RoW variation	IHMCL data, data from adjacent toll plaza or a Percentage variation >0%?3% >3%?5% >5%?10% >10% Percentage area variation of acquired land (P Percentage variation 0% >0%?5% >0%?5% >5%?10% >10%	Marks   Marks			
F	RoW variation	IHMCL data, data from adjacent toll plaza or a Percentage variation >0%?3% >3%?5% >5%?10% >10% Percentage area variation of acquired land (P Percentage variation 0% >0%?5% >5%?10%	Marks   Marks			
F	RoW variation	IHMCL data, data from adjacent toll plaza or a Percentage variation >0%?3% >3%?5% >5%?10% >10% Percentage area variation of acquired land (P Percentage variation 0% >0%?5% >0%?5% >5%?10% >10% Percentage variation in utility shifting cost dur Percentage variation	Marks   Marks	4		
F	RoW variation	IHMCL data, data from adjacent toll plaza or a Percentage variation >0%?3% >3%?5% >5%?10% >10% Percentage area variation of acquired land (P Percentage variation 0% >0%?5% >5%?10% >5%?10% Percentage variation in utility shifting cost dur Percentage variation 0%	Marks   Marks	4		
A F	RoW variation	IHMCL data, data from adjacent toll plaza or a Percentage variation >0%?3% >3%?5% >5%?10% >10% Percentage area variation of acquired land (P Percentage variation 0% >0%?5% >5%?10% >5%?10% Percentage variation in utility shifting cost dur Percentage variation 0% >0% >0%?5%	Marks         5         3.75         2.5         0         rivate land) during construction.         Marks         4         3         2         0         ing execution.         Marks         4         3         4         3         4         3         4         3         4         3         4         3         4         3	4		
A F	RoW variation	IHMCL data, data from adjacent toll plaza or a Percentage variation >0%?3% >3%?5% >5%?10% >10% Percentage area variation of acquired land (P Percentage variation 0% >0%?5% >5%?10% >5%?10% Percentage variation in utility shifting cost dur Percentage variation 0%	Marks         5         3.75         2.5         0         rivate land) during construction.         Marks         4         3         2         0         ing execution.         Marks         4         3         4         3         4         3         4         4         4         4         4         4         4         4         4         4	4		

SI. No.	KPI	DESCRIF	PTION	Total Marks	Marks Obtained	Supporting Documents to be submitted by the consultant
	Use of new material	Use of new material/waste material/new technology as a percentage of total cost.		4		i) Self certified calculations for % use of new material/waste material/new technology as a
	material	Percentage variation	Marks			percentage of total cost.
		≥5%	4			ii) Extract of relevant pages of DPR.
		≥3%<5%	3			
		≥1%<3%	2	-		
		<1%	0			
	Safety	Attention to raod safety in basic design such as pla etc.	an & profile, typical cross sections, intersections	4		i) Self certified statement showing roadsafety considerations in basic design such as plan &
		Grading	Marks			profile, typical cross sections, intersections etc.
		Excellent	4			ii) Extract of relevant pages of DPR.
		Very good	3			
		Good	2			
		Poor	0			
	Functional utility of	Appreciation of functional utility of provisions like se bus-bay, truck lay-bye etc.	rvice road, footpath, underpass, median opening,	4		
	provisions	Grading	Marks			
		Excellent	4			
		Very good	3			
		Good	2			
		Poor	0			
	Cost optimization	Variation of project cost with respect to normative cost	st.	5		<ul> <li>i) Self certified calculation of cost based on normative cost.</li> </ul>
		Percentage Excess	Marks			
		≤0%	5			
		>0%≤5%	3.75			
		>5%≤10%	2			
		>10%	0			
Cate	gory II: Adher	ence to timelines				
	Land Acquisition	% delay period in land acquisition [(Actual Date (Stipulated Submission Date in Agreement - Date of				
		i) 3A		4		
		Delay Percentage	Marks	1		
		0%	4	1		
		>0%≤5%	3	1		
		>5%≤10%	2	1		
		>10%	0	4		

SI. No.	KPI	DESCR	IPTION	Total Marks	Marks Obtained	Supporting Documents to be submitted by the consultant
		ii) 3D		4		
		Delay Percentage	Marks			
		0%	4			
		>0%≤5%	3			
		>5%≤10%	2			
		>10%	0			
		iii) 3G		4		
		Delay Percentage	Marks			
		0%	4			
		>0%≤5%	3			
		>5%≤10%	2			
		>10%	0			
	Forest Clearance	% delay period [(Actual Date of Clearance - Stipu Date in Agreement - Date of Commencement)] *100		6		
		Delay Percentage	Marks			
		0%	6			
		>0%≤10%	4			
		>10%≤20%	3			
		>20%	0			
	Submission of DPR	% delay period [(Actual Date of Submission - Sti Date in Agreement - Date of Commencement)] *100		3		
		Delay Percentage	Marks			
		0%	3			
		>0%≤10%	2.25			
		>10%≤20%	1.5	1		
		>20%	0			
		% delay period [(Actual Date of Submission - Sti Date in Agreement - Date of Commencement)] *100	pulate Submission Date) / (Stipulated Submission ) in submisssion of final feasibility report.	3		
		Delay Percentage	Marks			
		0%	3	]		
		>0%≤10%	2.25	1		
		>10%≤20%	1.5	1		
		>20%	0	1		

SI. KPI No.	DESC	RIPTION	Total Marks	Marks Obtained	Supporting Documents to be submitted by the consultant
	% delay period [(Actual Date of Submission - Stipulate Submission Date) / (Stipulated Submission Date in Agreement - Date of Commencement)] *100 in submission of final DPR				
	Delay Percentage	Marks			
	0%	5			
	>0%≤10%	3.75			
	>10%≤20%	2.5			
	>20%	0			
GAD Approv	al % delay period [(Actual Date of approval - Stipula Agreement - Date of Commencement)] *100	ated Date of approval) / (Stipulated approval Date in	6		
	Delay Percentage	Marks			
	0%	6			
	>0%≤10%	4			
	>10%≤20%	3			
	>20%	0			
Category III: Ove	rall Project Management				
Adverse Notices	No of adverse notices issued to the consultant		5		
	No	Marks			
	0	5			
	01-05	3.75			
	06-10	2.5			
	>10 nel No of times key personnel deployed in the pro		10		Self certified statement with position, dates of
Key Personi		some other assignment by competent authority,	10		replacements done.
	health problem developed after signing of contrac				replacements done.
	No	Marks			
	0	10			
	01-02	7.5			
	03-04	5			
	>4	0			
			100		
		(Signature)			
		Name of Consultant's Authorized Representativ	×0		

3.1.3 Requirements with respect to Technical Capacity Provision for maximum number of consultancy services to be awarded to one consultant:

A-1
(i) The maximum number of consultancy services to be awarded to one consultant will be governed by the following provisions:

SI. No.	Average Annual Turnover of Firm in last 3 Financial Years (from Consultancy Services)	Upto Rs. 10 Crores	More than Rs. 10 crores but less than/equal to Rs. 30 Crores	less than/equal to	More than Rs. 60 Crores
1	No. of key professionals on full time employment with the consultant (minimum for last one year)	4	25	40	60
2	Max. no. of DPR/AE/IE/CSC consultancy assignments to be awarded to one particular consultant including ongoing consultancy services at a time on National Highways or centrally sponsored road works of MoRTH including its executing agencies	8	16	30	50
3	Max. no. of DPR consultancy assignments to be awarded to one particular consultant including ongoing consultancy services at a time on National Highways or centrally sponsored road works of MoRTH including its executing agencies out of the total number in	6	13	24	40

	Sl. No. 2				
4	Maximum no. of DPR consultancy assignments to be awarded in one financial year to one particular consultant including ongoing consultancy services at a time on National Highways or centrally sponsored road works of MoRTH including its executing agencies out of the total number in Sl. No. 3.	3	7	12	20

Note: (1) Both the conditions of turn over and number of key professionals on full time employment with the consultant have to be satisfied to be eligible for award of maximum no. of consultancy assignments mentioned in Sr. No. 2, 3 & 4 of the above table. In case one condition is fulfilled for higher slab but the other condition is fulfilled for lower slab, consultant will be eligible for award of maximum number of consultancy assignments corresponding to the condition meeting lower slab.

(2) (i) In case of JV bidding for the current assignment, the weighted average of turnover and key professionals of the JV will be determined considering the ratio of participation of the JV members in the current assignment. The total consultancy assignments, DPR consultancy assignments and cap on the DPR consultancy assignments that can be awarded to the JV during CFY shall be determined in accordance with the note 1 above with respect to the weighted turnover and number of key professionals. The ongoing consultancy assignments (total & DPR) shall be determined by simple summation of the respective figures of individual members.

Further, in case technical capacity of both the JV members make them ineligible for award of a single DPR consultancy assignment individually, JV will not be eligible for award of any consultancy assignment based on the weighted average of turnover and key professionals of the JV members.

(ii) The consulting firms should be encouraged to carry out a mix of DPR and Supervision Assignments like IE/AE/Construction Supervision Consultants (CSC).

(iii) The following assignments would not be counted as ongoing consultancy services for the purpose of determination of technical capacity as above.

(a) IE/AE/CSC assignments where original assignment period + one year is lapsed or provisional completion of civil work is issued, whichever is earlier;

(b) DPR assignments where either (i) the bids for civil works have been received; or (ii) original assignment period + one year has lapsed;

(c) Special Projects like tunnel, stand-alone bridge, emergency landing facility, etc.; and

(d) Assignments having less than 6 months contract period.

(iv) For the purpose of calculation of maximum no. of consultancy assignments, the assignments awarded on the date of opening of financial proposal and in progress will be taken into consideration as utilized capacity. Projects of MoRTH and its executing agencies (awarded/ in progress) only shall be considered for the purpose. The Consultant shall provide these details and they shall be solely responsible for accuracy of such details provided.

(v) The applicants shall submit copies of Form-26 AS in the proposal in order to certify their permanent key personnel (as given in Sr. No. 1 of above table).

(vi) The applicants shall submit the requisite details for determination of technical capacity in the prescribed format Technical Capacity (Form T-11) enclosed.

Sample Illustration for determination of Technical Capacity is given below.

#### 1. <u>Illustration for Determination of Technical</u> Capacity (Sole Applicant)

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Average Annual Turnover of firm in last 3 FY (from consultancy services) of the consultant	No. of Key Professionals on full time rolls (minimum for last one year) with the consultancy firm	111u/1 1101 01	Maximum no. of DPR consultancy assignments to be awarded to the consultant (sole applicant) including	Total ongoing/ awarded consultancy assignments (nos.)	DPR consultancy assignments awarded in CFY (nos.)	Remaining DPR consultancy assignments that can be awarded to the consultant (nos.) in CFY

		time Nationa Highwa central sponsor road w MoRTH	ancy s at a on al ys or ly red orks of ng its ing	ongoing consultancy services at a time on National Highways or centrally sponsored road works of MoRTH including its executing agencies in one financial year					
		Total	DPR		Total	DPR	IE/AE/SC		
1	2	3A	3B	4	5A	5B	5C	6	7
10	26	8	6	3	6	1	5	1	2 *

\* Compare 3B - 5B with 3A - 5A and take lower of the two and in this case, it is 2 (X). Compare 4-6 with X and take lower of the two and in this case, it is 2 (Y). Hence, Y is the remaining DPR consultancy assignments that can be awarded to the consultant during the CFY.

# A-2

## A. Firm's relevant experience in last 7 years (50)

For standard highways, the following is the break-up:

S. No.	Description	Maximum Points	Sub-Points
1	Specific experience of the DPR consultancy related to the assignment for eligibility	20	
1.1	Aggregate Length of DPR / Feasibility study of 2/4/ 6 lane projects	10	
1.1.1	> 1 but $\leq$ 2 the indicative Length of the package applied for		6
1.1.2	>2 but $\leq$ 3 times the indicative length of the package applied for		7
1.1.3	> 3 but $\leq$ 4 times the indicative length of the package applied for		8
1.1.4	> 4 but $\leq$ 5 times the indicative length of the package applied for		9
1.1.5	> 5 times the indicative length of the package applied for		10
1.2	DPR for 2/4/6 laning projects each equal to or more than 40 % of indicative length of a package applied for (or Feasibility Study for 2/4/6 laning projects each equal to or more than 60 % of indicative length of a package applied for)	10	
1.2.1	1 project		6
1.2.2	2 projects		7
1.2.3	3 projects		8
1.2.4	4 projects		9
1.2.5	≥ 5 projects		10

2	DPR of Bridge having length more than 200 m	5	
2.1	1 bridge		1
2.2	2 bridges		2
2.3	3 bridges		3
2.4	4 bridges		4
2.5	≥ 5 bridges		5
3	Specific experience of firms in terms of turnover	5	
3.1	Firm's Average Turnover of last 5 years > 50 crore		5
3.2	Firm Average Turnover of last 5 years 20 - 50 crore		4
3.3	Firm Average Turnover of last 5 years > 5 but < 20 crore		3
4	Highway Professionals * working with the firm	10	
4.1	<10 nos.		0
4.2	10-19 nos.		7
4.3	20-29 nos.		8
4.4	> 30 nos.		9
4.5	Additional one mark will be given if minimum 20% of the above key personne have M.Tech in any field of civil engineering	el	1
Manag emplo	professionals who possess degree in Civil Engineering/Tr gement/Geology/Environment Science or Engineering and 8 ye byment in the firm for more than one year. The current Employmer FRACON.	ars Experience i	in highway/bridge/tunnel with
5	Quality of Past Performance (based on self certification)		
5.1	Average CoS (net of positive and 2.5 negative) as percentage of contract price in last 5 DPRs prepared by the firm		

5.1.1	0		2.5
5.1.2	> 0 but ≤2.5		2
5.1.3	>2.5 but ≤5		1.5
5.1.4	>5 but ≤7.5		1
5.1.5	>7.5 but ≤10		0.5
5.1.6	>10		0
5.2	Average area variation as percentage of acquired private land as per 1 <sup>st</sup> 3D notification in last 5 DPRs prepared by the firm	2.5	
5.2.1	0		2.5
5.2.2	> 0 but ≤4		2
5.2.3	>4 but ≤8		1.5
5.2.4	>8 but ≤12		1
5.2.5	>12 but ≤16		0.5
5.2.6	>16		0
5.3	Average delay in land acquisition in last 5 DPRs prepared by the firm (delay in 90% site possession wrt contract period)	2.5	
5.3.1	≤3 months		2.5
5.3.2	>3 but ≤6 months		2
5.3.3	>6 but ≤9 months		1.5
5.3.4	>9 but ≤12 months		1
5.3.5	>12 months		0
5.4	Average use of new materials/waste materials/new technology used in last 5 DPRs prepared by the firm as percentage of total cost of civil works	2.5	

5.4.1	≤2.5	0
5.4.2	>2.5 but ≤5	1
5.4.3	>5 but ≤7.5	1.5
5.4.4	>7.5 but ≤10	2
5.4.5	>10	2.5

For special projects such as special bridges, tunnels and expressways that require specialized capabilities and skill sets, the following is the break-up:

S. No.	Description	Maximum Points	Sub- Points
1	Specific experience of the DPR consultancy related to the assignment for eligibility	15	
1.1	Aggregate Length of DPR / Feasibility study of 2/4/ 6 lane projects	8	
1.1.1	> 1 but $\leq$ 2 the indicative Length of the package applied for		4
1.1.2	>2 but $\leq$ 3 times the indicative length of the package applied for		5
1.1.3	> 3 but $\leq$ 4 times the indicative length of the package applied for		6

S. No.	Description	Maximum Points	Sub- Points
1.1.4	> 4 but $\leq$ 5 times the indicative length of the package applied for		7
1.1.5	> 5 times the indicative length of the package applied for		8
1.2	DPR for 2/4/6 laning projects each equal to or more than 40 % of indicative length of a package applied for (or Feasibility Study for 2/4/6 laning projects each equal to or more than 60 % of indicative length of a package applied for)	7	
1.2.1	1 project		3
1.2.2	2 projects		4
1.2.3	3 projects		5
1.2.4	4 projects		6
1.2.5	≥ 5 projects		7
2	DPR of Bridge having length more than 200 m	5	
2.1	1 bridge		1
2.2	2 bridges		2
2.3	3 bridges		3
2.4	4 bridges		4
2.5	≥ 5 bridges		5
3	Specific experience of firms in terms of turnover	5	
3.1	Firm's Average Turnover of last 5 years > 50 crore		5
3.2	Firm Average Turnover of last 5 years 20-50 crore		4
3.3	Firm Average Turnover of last 5 years >5 but <20 crore		3
4	Highway Professionals * working with the firm	10	
4.1	<10 nos.		0
4.2	10-19 nos.		7

S. No.	Description	Maximum Points	Sub- Points
4.3	20-29 nos.		8
4.4	≥30 nos.		9
4.5	Additional one mark will be given if minimum 20% of the above key personnel have M.Tech in any field of civil engineering		1
4	DPR for special category projects (Special bridges/ tunnels or expressways, whichever applicable). It is to be noted that either 4.1 or 4.2 shall be applicable, and not both.		
4.1	DPR of number of special bridges/ tunnels (if applicable)	5	
4.1.1	1 project		1
4.1.2	2 projects		2
4.1.3	3 projects		3
4.1.4	4 projects		4
4.1.5	≥ 5 projects		5
4.2	Aggregate length of DPR/ Feasibility study for expressways	5	
4.2.1	Upto 50 km		2
4.2.2	50km to 100 km		3
4.2.3	100km to 150 km		4
4.2.4	> 150 Km		5
5	Highway Professionals * working with the firm	10	
5.1	<10 nos.		0
5.2	10-19 nos.		7
5.3	20-29 nos.		8
5.4	> 30 nos.		9
5.5	Additional one mark will be given if minimum 20% of the above key personnel have M.Tech in any field of civil engineering		1

S. No.	Description	Maximum Points	Sub- Points
	nt in the firm for more than one year. The current Employment Certifion INFRACON.	icate shall be uploaded	by Key
6	Quality of Past Performance (based on self certification)	10	
6.1	Average CoS (net of positive and negative) as percentage of contract price in last 5 DPRs prepared by the firm	2.5	
6.1.1	0		2.5
6.1.2	> 0 but ≤2.5		2
6.1.3	>2.5 but ≤5		1.5
6.1.4	>5 but ≤7.5		1
6.1.5	>7.5 but ≤10		0.5
6.1.6	>10		0
6.2	Delay in completion of DPR as percentage of original contract period in last 5 DPRs prepared by the firm	2.5	
6.2.1	0		2.5
6.2.2	> 0 but ≤ 25		2
6.2.3	>25 but $\leq$ 50		1.5
6.2.4	>50 but ≤ 75		1
6.2.5	>75 but ≤ 100		0.5
6.2.6	>100		0
6.3	Average delay in land acquisition in last 5 DPRs prepared by the firm (delay in 90% site possession wrt contract period)	2.5	
6.3.1	≤3 months		2.5
6.3.2	>3 but ≤6 months		2
6.3.3	>6 but ≤9 months		1.5
6.3.4	>9 but ≤12 months		1
6.3.5	>12 months		0

S.	Description	Maximum	Sub-Points
No		Points	

S. No.	Description	Maximum Points	Sub- Points
6.4	Average use of new materials/waste materials/new technology used in last 5 DPRs prepared by the firm as percentage of total cost of civil works		
6.4.1	≤2.5		0
6.4.2	>2.5 but ≤5		1
6.4.3	>5 but ≤7.5		1.5
6.4.4	>7.5 but ≤10		2
	6.4.5 >10		2.5

Note:

A. In case feasibility study is a part of DPR services the experience shall be counted in DPR only. In case bridge is included as part of DPR of highway the experience will be (1) and (2)

B. Material testing, survey and investigation, equipment and software proposed to be used (10)

1	Availability of Material Testing Facilities with persons/resources having operational skills of the equipment	1	
1.1	Owned* (Available In House)		1.00
	all be ascertained through the ownership evidence uploaded on INFRACON in regarding of materials to be used for construction of Highway Project.	d to major eo	quipment required for
2	Availability of Field Investigation Facilities with persons/resources having operational skills of the equipment	2	
2.1	Owned** (Available In House)		2.00
** Sh	all be ascertained through ownership evidence uploaded on INFRACON for construction	tion of Highv	vay Project.
3	Availability of Office Equipment and Software with persons/resources having operational skills of the equipment	1.5	
3.1	Owned*** (Available In House)		1.50
	Shall be ascertained through ownership evidence uploaded on INFRACON for ke way consultancy assignment.	y hardware/s	oftware required for
4	Experience in LiDAR or better technology for topographic survey (Infrastructure	3.5	
	sector)		
4.1	sector) 1 project		1
4.1 4.2			1 2
	1 project		
4.2	1 project 2 projects		2
4.2 4.3	1 project 2 projects 3 projects		2 2.5
4.2 4.3 4.4	1 project 2 projects 3 projects 4 projects	1	2 2.5 3
<ol> <li>4.2</li> <li>4.3</li> <li>4.4</li> <li>4.5</li> </ol>	1 project 2 projects 3 projects 4 projects ≥ 5 projects Experience in using GPR and Induction Locator or better technologies for	1	2 2.5 3
4.2 4.3 4.4 4.5 <b>5</b>	1 project 2 projects 3 projects 4 projects ≥ 5 projects Experience in using GPR and Induction Locator or better technologies for detection of sub-surface utilities (Infrastructure sector)	1	2 2.5 3 3.5
4.2 4.3 4.4 4.5 <b>5</b>	1 project 2 projects 3 projects 4 projects ≥ 5 projects Experience in using GPR and Induction Locator or better technologies for detection of sub-surface utilities (Infrastructure sector) 1 project	1	2 2.5 3 3.5 0.25
4.2 4.3 4.4 4.5 <b>5</b> 5.1 5.2	1 project 2 projects 3 projects 4 projects ≥ 5 projects Experience in using GPR and Induction Locator or better technologies for detection of sub-surface utilities (Infrastructure sector) 1 project 2 projects	1	2 2.5 3 3.5 0.25 0.50
4.2 4.3 4.4 5.1 5.1 5.2 5.3	1 project 2 projects 3 projects 4 projects ≥ 5 projects Experience in using GPR and Induction Locator or better technologies for detection of sub-surface utilities (Infrastructure sector) 1 project 2 projects 3 projects	1	2 2.5 3 3.5 0.25 0.50 0.75

6.2	Area between 100-500 ha	0.75
6.3	Area > 500 ha	1

\* Shall be ascertained through the ownership evidence uploaded on INFRACON in regard to major equipments required for testing of materials to be used for construction of Highway Project.

Note:1- The experience of firm in Lidar or equivalent technology, GPR and Induction Locator or equivalent technologies and Experience in digitization of cadastral maps for land acquisition shall be supported by experience certificate. The experience of a firm in Lidar or equivalent technology, GPR and Induction Locator or equivalent technologies and Experience in Digitization of cadastral maps for land acquisition for a private concessionaire/contractor shall be considered only if the experience certificate is authenticated by the concerned competent Government department/authority. In case of overseas experience the weightage to be assigned to the certificate for experience in use of the equipment, a self-certificate followed by the client certificate may be accepted.

**Note:2-** In case ownership document of equipment of Consultancy/Associate Firm is found to be false, the consultancy/Associate firm, as the case may be, shall be put on holiday listing (temporary debarment) for a period upto 12 months.

List of minimum essential equipment which the firm must possess for eligibility:

Material Testing Facilities					
a. Aggregate testing facility including flakiness index, elongation index, abrasion, impact, crushing, stripping value etc.					
b. Soil testing facility including Atterberg limits, soil classifications, moisture content, density, CBR value, etc.					
Field Investigation Facilities					
a. Falling weight deflectometer					
b. Roughometer or equivalent / better					
c. DGPS and Total station with appropriate software or equivalent / better					
d. Drone with LiDAR sensor or better with appropriate processing software					
e. Ground Penetrating Radar (GPR), hand held GPS, Laser Distance Measuring Instrument					
Office Equipment and Software					
a.Office equipment setup including Computer, plotter, A0 printer etc.					
b. MX/ Open Roads or equivalent / better					

c. AutoCAD
d. MIDAS or equivalent / better
e. Road Estimator 9.9 or better
f. AutoPlotter 10.9 or better
g. MS Project or Primavera or equivalent
h. HDM-4 or equivalent

#### A-3 ENCLOSURE-II

## Qualification and Experience Requirement of Key Personnel

TeamLeadercum Highway Engineer

i)	Educational Qualification	
	Essential	Graduate in Civil Engineering or equivalent as approved by AICTE
	Desirable	Post graduate in Civil Engineering / Construction Management /Transportation) {AICTE Approved}
ii)	EssentialExperience	
	a)Total Professional Experience	Min. 12 years
	b) Experience in Highway projects	Min. 8 years in Planning, project preparation and design of <b>Highway projects</b> , including 2/4/6 laning of NH/SH/ expressways. For hill roads, respective hill roads experience is required
	c)Experience in similar capacity (Either as Team Leader or in Similar capacity )	In Feasibility of two / Four/Six Laning works and DPR/IC/ Construction Supervision of Two/Four/six laning of major highway projects(NH/SH/Expressways)/ feasibility cum detailed project report of two/ four laning projects of minimum aggregate length of 80 km. For hill roads, respective hill roads experience is required.
iii	Age Limit	65 years on the date of submission of proposal

## Bridge Engineer

i)	Educational Qualification	
	Essential	Graduate in Civil Engineering or equivalent
	Desirable	Mastersin StructuralEngineering / Foundation Engineering/ Hydraulics
ii)	EssentialExperience	
	a)Total Professional Experience	Min. 8 years
	b) Experience in Bridge projects	Min.06 years in project preparation and design of bridge projects.
	c) Experience in similar capacity	Bridge Engineer in highway design consultancy projects (2/4/6 lane NH/SH/ Expressways)involving design of minimum two <b>major bridges</b> (length more than 200 m)
iii)	Age Limit	65 years on the date of submission of Proposal

#### QUALIFICATION AND EXPERIENCE REQUIREMENT OF KEY PERSONNEL

## Pavement Engineer

i)	Educational Qualification	
	Essential	Degree in Civil Engineering
	Desirable	Masters in Civil Engineering
ii)	Experience	
	a)Total Professional Experience	Min. 08 years
	b) Experience in Highway projects	Minimum 06 years' experience in pavement design and maintenance of highways
	c) Experience in similar capacity	Pavement design for major highway projects (2/4/6 lane NH/SH/Expressways) of minimum 2 projects
iii)	Age Limit	65 years on the date of submission of Proposal

i)	Educational Qualification	
	Essential	Graduate in Civil Engineering or M.Sc. Geology
	Desirable	Masters in Foundation Engineering / Soil Mechanics / Phd in Geology /Geo Tech Engineering
ii) EssentialExperience		
	a)TotalProfessional Experience	Min. 8 years
	b) Experience in Highway Projects	Min. 6 years on similar projects in design and/or construction
	c) Experience in similar capacity	Material cum Geo-technical Engineer on highway projects (2/4/6 lane NH/SH/Expressways) of minimum aggregate length of 80 km.
iii)	Age Limit	65 years on the date of submission of Proposal

### QUALIFICATION AND EXPERIENCE REQUIREMENT OF KEY PERSONNEL

### Survey Engineer

i)	Educational Qualification	
	Essential	Graduate or equivalent in Civil Engineering or Diploma in Civil Engg or Diploma in Surveying
	Desirable	Masters in Remote Sensing/Photogrammetry or equivalent
ii)	EssentialExperience	
	a)TotalProfessional Experience	Min. 8 years
	b) Experience in Highway projects	Min. 6 years on similar projects in project preparation and construction & thorough understanding of modern computer based methods of surveying
	c) Experience in similar capacity	Survey Engineer for projects preparation of highway project (NH/SH/Expressways) involving 2/4/6- laning of minimum aggregate length of 80 km.
iii)	Age Limit	65 years on the date of submission of Proposal

i)	Educational Qualification	
	Essential	Graduate in Civil Engineering
	Desirable	MastersinTrafficEngineering/Transportation Engineering / Transport Planning
ii)	EssentialExperience	
	a)TotalProfessional Experience	Min. 06 years
	b) Experience in Highway projects	Min. 05 years on similar projects.
	c)Experience in similar capacity	Traffic Engineer in highway Projects (NH/SH/Expressways) involving 2/4/6 laning of minimum aggregate length of 80 km.
	d)	It is mandatory for the Road Safety Expert to have completed at least 15 days' certification course on Road Safety Audit from IAHE/IITs/NITs/CRRI. The CV of the proposed key personnel not having completed minimum 15 days certification course shall not be evaluated.
iii)	Age Limit	65yearson the date of submission of Proposal

## EnvironmentalSpecialist

i)	Educational Qualification	
	Essential	Graduate in Civil Engineering / Environment Engineering / Masters in Environment Science
	Desirable	Post Graduate in Environmental Engineering
ii)	Essential Experience	
	a) Total Professional Experience	Min. 06 years
	b) Experience in Highway Projects	Min. 5 years in environment impact assessment and permitting of highway projects (2/4/6 laning)
	c) Experience in similar capacity	Environmental Specialist in at least two highway projects (2/4/6 laning)
iii)	Age Limit	65 years on the date of submission of bid

## Quantity Surveyor

i)	Educational Qualification	
	Essential	Graduate or equivalent in Civil Engineering / Certificate course from 'Institution of Quantity Surveying'
	Desirable	
ii)	Essential Experience	
	a) Total Professional Experience	Min. 8 years
	b) Experience in Highway Projects	Min. 6 years in Preparation of Bill of Quantities, Contract documents and documentation for major highway projects involving two/ four laning
	c) Experience in similar capacity	Quantity Surveyor in highway projects (NH/SH/Expressways) involving two/four/six laning of minimum aggregate length of 80 km.
iii)	Age Limit	65 years on the date of submission of Proposal

# Landacquisition expert

i)	Educational Qualification	
	Essential	Graduate or equivalent
ii)	Essential Experience	
	a) Total Professional Experience	15 years as Deputy-Tehsildar or above Desirable: Ex- revenue officers like Ex-ADM/SDM, Ex- Tehsildar, Ex-Deputy- Tehsildar etc.
	b) Role specific experience	Min 10 years in Land acquisition for government/ authority projects
iii)	Age Limit	65 years on the date of submission of bid

#### Utilityexpert

i)	Educational Qualification	
	Essential	Graduate or equivalent in major engineering disciplines viz. mechanical/ electrical/ civil engineering
ii)	Essential Experience	
	a) Total Professional Experience	Min 10 years Desirable: Ex- officers or engineers from utility agencies
	b) Role specific experience	Min. 8 years in Utility estimation and relocation/ erection of electric/ gas/ other utilities Desirable: Experience with utilities along the highway/road.
iii)	Age Limit	65 years on the date of submission of bid

#### TEAMLEADERCUMBRIDGE ENGINEER

i)	Educational Qualification	
	Essential	Graduate in Civil Engineering or equivalent as approved by AICTE
	Desirable	Post graduate in Structural Engineering/ Foundation Engineering/ Hydraulics
ii)	Essential Experience	
	a)Total Professional Experience	Min. 12 years
	b) Experience in Bridge projects	Min. 6 years in major Bridge Construction / Development Project.
	c) Experience in similar capacity (Either as Team Leader or in Similar capacity )	He should have handled as Team Leader/Project Manager or similar capacity of at least Two projects in Construction Supervision / IC involving 4 laning/6-laning/Expressway of minimum 50km length and atleast two major bridge of a length 500 mtr. (Excluding approaches).
iii)	Age Limit	65 years on the date of submission of proposal

ij	Educational Qualification	
	Essential	Graduatein Civil Engineering or equivalent
	Desirable	Masters in Structural Engineering/ Foundation Engineering/ Hydraulics
ii	EssentialExperience	
	a)Total Professional Experience	Min. 8 years
	b) Experience in Bridge projects	Min. 05 years in project preparation and design of bridge projects.
	c) Experience in similar capacity	Bridge Engineer in highway design consultancy projects (2/4/6 lane NH/SH/ Expressways)involving design of minimum two <b>major</b> <b>bridges</b> (length more than 200 m)
iii)	Age Limit	65 years on the date of submission of Proposal

## Team Leader cum Tunnel Expert

	Educational Qualification	
	Essential	Graduate in Civil Engineering/Tunnel Engineering/Mining Engineering
	Desirable	Post Graduate in Civil Engineering/Tunnel Engineering/Mining Engineering
	Essential Experience	
,	Total Professional Experience	Min. 10 years
		(i) Professional experience in handling major tunnel projects (Road/Rail/Metro)
		(ii)Experienceinmajortunnelconstruction/construction supervision projects (Road/Rail/Metro)
		(iii) Experience in preparation of DPR or Feasibility report of major tunnel projects (Road/Rail/Metro)
		(iv) Experience in DPR preparation of minimum 5 km Tunnel length
,	Experience in Tunnel projects	(v) Experience in construction/construction supervision/ preparation of DPR/feasibility report of major tunnel projects (Road/Rail/metro) using NATM
		(i) Experience as Team Leader or similar capacity in major tunnel construction/construction supervision projects (Road/Rail/Metro)
,	Experience in similar capacity	(ii) Experience as Team Leader or similar capacity in preparation of DPR or Feasibility report of major tunnel projects (Road/Rail/Metro)
	Age Limit	65 years on the date of submission of proposal

## **Tunnel Design Expert**

Educational Qualification	
Essential	Degree in Civil/ Mining Engineering
Desirable	PostGraduationinDesign/ Structural Engineering or equivalent.
<b>II</b> EssentialExperienc	e
a)Total Professiona Experience	Min. 10 years
	(i) Professional Experience in handling major tunnel projects (Road/Rail/Metro)
	(ii) Experience of major tunnel construction/construction supervision projects (Road/Rail/Metro)
b) Experience in Tunnel projects	(iii)Experience in preparation of DPR or Feasibility report of major tunnel projects (Road/Rail/Metro)
	(i)ProfessionalExperienceasTunnelDesignEngineer (Structural)
	(ii) Experience as Tunnel Design Engineer (Structural) of major tunnel construction/construction supervision projects (Road/Rail/Metro)
	(iii) Experience as Tunnel Design Engineer (Structural) of major tunnel for preparation of DPR projects (Road/Rail/Metro)
c) Experience in similar capacity	(iv)Experience as Tunnel Design Engineer (Structural) in preparation of DPR/ Feasibility report of major tunnel projects (Road/Rail/Metro) using NATM
IIIAge Limit	65 years on the date of submission of Proposal

## Geotechnical Engineer

Ι	Educational Q	ualification
	Essential	CivilEngineering/Mining Engineering / Engineering Geology
	Desirable	Geotechnical Engineering /Foundation Engineering/Rock Mechanics/Geo science or equivalent
II	Essential Experience	
	a) Total Professional Experience	Min. 10 years
		(i) Professional experience in handling major tunnel projects (Road/Rail/Metro)
		(ii) Experience in major tunnel construction/construction supervision projects (Road/Rail/Metro)
	b)Experience in Tunnel Projects	(iii)ExperienceinpreparationofDPRorFeasibility report of major tunnel projects (Road/Rail/Metro)
		(i) ProfessionalExperience as Senior Geotechnical Engineer
		(ii) Experience as Senior Geotechnical Engineer or similar capacity in major tunnel construction/construction supervision projects (Road/Rail/Metro)
		(iii) Experience as Senior Geotechnical Engineer or similar capacity in preparation of DPR or Feasibility report of major tunnel projects (Road/Rail/Metro)
	c) Experience in similar capacity	(iv) Experience as Senior Geotechnical Engineer or similar capacityinpreparationofDPR/Feasibility report of major tunnel projects (Road/Rail/Metro) using NATM
III	Age Limit	65 years on the date of submission of proposal

## Geophysicist

Essential	Graduate in Geophysics/Geo science/ Earth science or equivalent.
Desirable	Post Graduation in Geophysics/Geo science/ Earth science or equivalent
Essential Experience	
a) Total Professional Experience	Min. 10 years
	(i) Professional Experience in handling tunnel/ mineral and oil exploration projects
	(ii)ExperienceofcarryingoutAEMsurveyfortunneling/ mineral andoilexploration or any other similar wor for area of more than 2.7 sq km
	(iii) Processing, Interpreting, generating 3D resistivity model of AEMsurvey'srawdatafortunneling/mineraland oil exploration or any other similar work for area of more than 2.7 sq km
b) Experience in Relevant works	(iv) Experience in carrying out AEM survey, processing, interpreting, generating 3D resistivity of AE survey's raw data for major tunnel work (Rail/Road/Metro)
llAge Limit	
	65 years on the date of submission of proposal

## Geologist

i)Educational Qual	i)Educational Qualification	
Essential	Post Graduate Degree in Geology/Related field.	
Desirable	PhdinGeology/Related fields.	
ii)Essential Experie	nce	
a)Total Professional Experience	Min. 10 years	
b) Experience in Tunnel projects	He should have a minimum 10 years of professional experience and should have involved in project preparation/ DPR/ Tunnel Design for atleast two major Tunnel projects.	
c) Experience in similar capacity	He should have experience in similar capacity per five years on Design/ Construction/ Supervision of Tunnel Projects. The minimum cost of the project handled in the similar capacityshould be 2500 Millions	
iii)Age Limit	65 years on the date of submission of Proposal	

## E&M Expert

i)	EducationalQualification	
	Essential	Degreein Electrical/Mechanical Engineering.
	Desirable	Post Graduation in Degree in Electrical/Mech Engineering.
ii)	EssentialExper	ience
	a) Total Professional Experience	Min. 10 years
	b) Experience in Tunnel projects	10 years in Tunnel Projects and should have worked for atleast five years as an E&M Expert for Tunnel Design/ Construction projects.
	c) Experience in similar capacity	He should have handled atleast two tunneling projects in similar capacity.
iii)	Age Limit	65 years on the date of submission of Proposal

#### Material Engineer

i)	EducationalQualification							
	Essential	GraduateinCivilEngineering/Material Science and Engineering or equivalent						
	Desirable Post-graduation in Material Science and Engineering or equivalent							
ii)	EssentialExper	itialExperience						
	a) Total Professional Experience	Min. 12 years						
	b) Experience in Highway Projects	Minimum 8 years on Tunnel projects in design and /or construction. Experience on Tunnel projects shall be preferred.						
	c) Experience in similar capacity	Material Engineer on highway projects (2/4/6 lane NH/SH/Expressway) of minimum aggregate length of 80 km.						
iii)	Age Limit	65 years on the date of submission of proposal						

#### Format for Technical Capacity of Applicants

#### (TO BE FILLED BY THE SOLE CONSULTANT & IN CASE OF JV, SEPARATELY BY JV MEMBERS BIDDING FOR THE ASSIGNMENT)

(i) No. of Key Professionals on full time roll:

Sl. No.	Name of the KeyD Professional	esignation	Continuous Employment from (Date)	Nos. of Years with the firm

Note: Attach copy of Form-26AS to certify permanent key professional.

(ii) Details of all in-hand DPR projects or DPR projects awarded by MoRTH or its executing agencies for NH works and centrally sponsored road works:

Sl.	-	Bids for Civil	Start	Scheduled	Whether	In case of JV, share of Contract Fee (%)
No.	Description	Works	Date	Completion	awarded in	
	-	received or			Current	
		Original			Financial	
		assignment			Year	
		period+ one				
		year lapsed				
		year apsea				
		(Yes/ No)			(Yes/ No)	
		(103/110)			(105/100)	
1	2	3	4	5	6	7

Format for undertaking by the firm for DPR Projects:

The undersigned on behalf of ------ (name of consulting firm) certify that the firm do not have any other in-hand/ awarded DPR project other than those listed above.

Date: ..... (dd/mm/yyyy)

[Signature of authorized representative of the Firm]
(iii) Details of all in-hand AE/ IE/ SC projects or AE/ IE/ SC awarded by MoRTH or its executing agencies for NH works and centrally sponsored road works:

Sl. No.	Project Description	completed or Original assignment period+ one year lapsed	Start Date	Scheduled Completion	Whether awarded in Current Financial Year	In case of JV, share of Contract Fee (%)
		(Yes/ No)			(Yes/ No)	
1	2	3	4	5	6	7

Format for undertaking by the firm for in-hand AE/ IE/ SC Projects:

The undersigned on behalf of ------ (name of consulting firm) certify that the firm do not have any other in-hand/ awarded AE/ IE/ SC project other than those listed above.

Date: ..... (dd/mm/yyyy)

[Signature of authorized representative of the Firm]

#### Note 1:

The figures in Col 7 be rounded off to the nearest integer i.e. in case remaining bid-capacity comes to 0.5 or more then it will be considered as 1, in case less than 0.5 then it will be considered as 0 (Zero).

#### Note 2:

Clarification for technical capacity utilised in case of JV with other firm than proposed in current assignment.

In case Firm-1 proposes for new JV with other partner, then capacity utilisation will be calculated on the basis of JV share in existing assignments e.g.

JV in one project with 30% share:- One project X 0.3 = 0.3

JV in one project with 70% share :- One project X 0.7 = 0.7

JV in one project with 50% share :- One project X 0.5 = 0.5

JV in two project with 80% share :- Two projects X 0.8 = 1.6

The weighted utilisation of the capacity of Firm-1 = 3.1

### Note 3:

The Consultant shall re-submit the bid capacity details as per above format at the time of opening of Financial Bid.

### Form T-12

#### INTEGRITY PACT FORMAT

(To be executed on plain paper and submitted along with Technical Bid/Tender documents for tenders having a value of Rs. 5 cr or above for Consultancy projects and 100 cr. or above for Construction projects. To be signed by the Bidder and same signatory competent/ authorized to sign the relevant contract on behalf of the MoRTH)

This integrity Pact is made at \_\_\_\_\_ on this \_\_\_\_\_day of \_\_\_\_2016.

BETWEEN

[President of India through Ministry of Road Transport & Highways, Government of India

represented by Director General (Road Development) & Special Secretary, Transport Bhawan,

1- Parliament Street New Delhi-110001], (hereinafter referred to as the "Principal/Owner"

which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns)

AND

{Name and address of the Firm/Company}, (hereinafter referred to as "The Bidder(s)/Contractor(s)/Concessionaire(s)/Consultant(s)" and which expression shall unless repugnant to be meaning or context thereof include its successors and permitted assigns.)

Preamble

Whereas, the Principal has floated the Tender {NIT No.......dtd......dtd.....} (here in after referred to as "Tender/Bid") and intends to award, under laid down organizational procedure, contract/s for {Name of the work} (hereinafter referred to as the "Contract").

And Whereas the Principal values full compliance with all relevant laws of the land, rules of land, regulations, economic use of resources and of fairness/ transparency in its relations with its Bidder(s) and/ or Contractor(s)/Concessionaire(s)/Consultant(s).

And whereas to meet the purpose aforesaid, both the parties have agreed to enter into this Integrity Pact (hereafter referred to as "Integrity Pact" or "Pact") the terms and conditions of which shall also be read as integral part and parcel of the Tender documents and contract between the parties.

Now, therefore, in consideration of mutual covenants contained in this pact, the parties hereby agree as follows and this pact witnesses as under:

Article-1: Commitments of the Principal

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

(a) No employee of the Principal, personally or through family members, will in connection with the Tender for, or the execution of a Contract, demand, take a promise for or accept, for self, or third person, any material of immaterial benefit which the person is not legally entitled to.

(b) The Principal will, during the Tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/ additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

(c) The Principal will exclude all known prejudiced persons from the process, whose conduct in the past has been of biased nature.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act or any other Statutory Acts or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions as per its internal laid down

Rules/Regulations.

Article - 2: Commitments of the Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s).

The Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

(a) The Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

(b) The Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal.

This applies in particular to prices, specifications, certifications, subsidiary contract, submission or nonsubmission or bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

(c) The Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) will not commit any offence under the relevant IPC/PC Act and other Statutory Acts; further the Bidder(s)/Contractor(s)/Concessionaire(s)/Consultant(s) will not use improperly, for purposes of completion or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

(d) The Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) of foreign origin shall disclose the name and address of the Agents/ Representatives in India, if any. Similarly, the Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) of Indian Nationality shall furnish the name and address of the foreign principle, if any.

(e) The Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract. He shall also disclose the details of services agreed upon for such payments.

(f) The Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

(g) The Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) will not bring any outside influence through any Govt. bodies/quarters directly or indirectly on the bidding process in furtherance of his bid.

Article - 3 Disqualification from tender process and exclusion from future contracts.

(1) If the Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s), before award or during execution has committed a transgression through a violation of any provision of Article-2, above or in any other form such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) from the tender process.

(2) If the Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) has committed a transgression through a violation of Article-2 such as to put his reliability or credibility into question, the Principal shall be entitled to exclude including blacklist and put on holiday the Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) for any future tenders/ contract award process. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the Principal taking into consideration the full facts and circumstances of each case particularly taking into

account the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder(s)/Contractor(s)/Concessionaire(s)/Consultant(s) and the amount of the damage. The exclusion will be

imposed for a maximum of 3 years.

(3) A transgression is considered to have occurred if the Principal after due consideration of the available evidence concludes that "On the basis of facts available there are no material doubts".

(4) The Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) with its free consent and without any influence agrees and undertakes to respect and uphold the Principal's absolute rights to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.

(5) The decision of the Principal to the effect that a breach of the provisions of this Integrity Pact has been committed by the Bidder(s)/ Contractor(s)/ Concessionaire(s)/Consultant(s)shall be final and binding on the Bidder(s)/ Contractor(s)/Concessionaire(s)/ Consultant(s), however, the Bidder(s)/ Contractor(s)/Concessionaire(s)/ Consultant(s) can approach IEM(s) appointed for the purpose of this Pact.

(6) On occurrence of any sanctions/ disqualification etc arising out from violation of integrity pact, the Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) shall not be entitled for any compensation on this account.

(7) Subject to full satisfaction of the Principal, the exclusion of the Bidder(s)/ Contractor(s)/Concessionaire(s)/ Consultant(s) could be revoked by the Principal if the Bidder(s)/Contractor(s)/ Concessionaire(s)/ Consultant(s)can prove that he has restored/ recouped the damage caused by him and has installed a suitable corruption prevention system in his organization.

Article - 4: Compensation for Damages.

(1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Arcticle-3, the Principal shall be entitled to forfeit the Earnest Money Deposit/ Bid Security or demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security apart from any other legal right that may have accrued to the Principal.

(2) In addition to 1 above, the Principal shall be entitled to take recourse to the relevant provisions of the contract related to Termination of Contract due to Contractor/Concessionaire/Consultant's Default. In such case, the Principal shall be entitled to forfeit the Performance Bank Guarantee of the Contractor/ Concessionaire/ Consultant and/ or demand and recover liquidated and all damages as per the provisions of the contract/concession agreement against Termination.

Article - 5: Previous Transgressions

(1) The Bidder declares that no previous transgressions occurred in the last 3 years immediately before signing of this Integrity Pact with any other Company in any country conforming to the anti corruption/ Transparency International (TI) approach or with any other Public Sector Enterprise/ Undertaking in India or any Government Department in India that could justify his exclusion from the tender process.

(2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action for his exclusion can be taken as mentioned under Article-3 above for transgressions of Article-2 and shall be liable for compensation for damages as per Article-4 above.

Article - 6: Equal treatment of all Bidders/ Contractors/ Concessionaires/ Consultants/Subcontractors.

(1) The Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) undertake(s) to demand from all sub-contractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.

(2) The Principal will enter into agreements with identical conditions as this one with all Bidders/ Contractors/ Concessionaires/ Consultants and subcontractors.

(3) The Principal will disqualify from the tender process all Bidders who do not sign this Pact or violate its provisions.

Article - 7: Criminal charges against violating Bidder(s)/ Contractor(s)/ Concessionaire(s)/Consultant(s)/ Sub-contractor(s).

If the Principal obtains knowledge of conduct of a Bidder/ Contractor/ Concessionaire/Consultant or subcontractor, or of an employee or a representative or an associate of a Bidder/Contractor/ Concessionaire/ Consultant or Subcontractor, which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

Article- 8: Independent External Monitor (IEM)

(1) The Principal has appointed Shri. R.S. Gujral as Independent External Monitor (herein after referred to as "Monitor") for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

(2) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Director General (Road Development) & Special Secretary.

(3) The Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s)accepts that the Monitor has the right to access without restriction to all project documentation of the Principal including that provided by the Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s). The Bidder(s)/ Contractor(s)/ Concessionaire(s)/ Consultant(s) will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation.

The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/Contractor(s)/Subcontractor(s) with confidentiality. (4) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

(5) As soon as the Monitor notices, or has reason to believe, a violation of this Pact, he will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

(6) The Monitor will submit a written report to the Director General (Road Development) & Special Secretary within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.

(7) If the Monitor has reported to the Director General (Road Development) & Special Secretary, a substantiated suspicion of an offence under relevant IPC/PC Act, and the Director General (Road Development) & Special Secretary has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.

(8) The word 'Monitor' would include both singular and plural.

#### Article - 9 Pact Duration

This Pact begins when both parties have legally signed it (in case of EPC i.e. for projects funded by Principal and consultancy services). It expires for the Contractor/ Consultant 12 months after his Defect Liability Period is over or 12 months after his last payment under the contract whichever is later and for all other unsuccessful Bidders 6 months after this Contract has been awarded. (In case of BOT Projects) It expires for the concessionaire 24 months after his concession period is over and for all other unsuccessful Bidders 6 months after this Contract has been awarded. If any claim is made/ lodged during his time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/ determined by Director General (Road Development) & Special Secretary.

Article - 10 Other Provisions.

(1) This pact is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. New Delhi.

(2) Changes and supplements as well as termination notices need to be made in writing.

(3) If the Bidder/Contractor/Concessionaire/Consultant is in a partnership or a consortium Joint Venture partner, this pact must be signed by all partners or consortium members.

(4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(5) Any disputes/ differences arising between the parties with regard to term of this pact, any action taken by the Principal in accordance with this Pact or interpretation thereof shall not be subject to any Arbitration.

(6) The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provision of the extent law in force relating to any civil or criminal proceedings.

In witness whereof the parties have signed and executed this Pact at the place and date first done mentioned in the presence of following witness:-

(For & On behalf of the Principal)

(Office Seal)

(For & On behalf of the Bidder/ Contractor/Concessionaire/ Consultant )

Place\_\_\_\_\_

Date\_\_\_\_\_

Witness 1 : (Name & Address):

Witness 2 : (Name & Address):

{COUNTERSIGNED and accepted by:

JV Partner}

# A Firm's Relevant Experience (50)

For standard highways, the following is the break-up:

S. No.	Description	Maximum Points	Sub-Points
1	Specific experience of the DPR consultancy related to the assignment for eligibility	20	
1.1	Aggregate Length of DPR / Feasibility study of 2/4/ 6 lane projects	10	
1.1.1	> 1 but $\leq$ 2 the indicative Length of the package applied for		6
1.1.2	>2 but $\leq$ 3 times the indicative length of the package applied for		7
1.1.3	> 3 but $\leq$ 4 times the indicative length of the package applied for		8
1.1.4	> 4 but $\leq$ 5 times the indicative length of the package applied for		9
1.1.5	> 5 times the indicative length of the package applied for		10
1.2	DPR for 2/4/6 laning projects each equal to or more than 40 % of indicative length of a package applied for (or Feasibility Study for 2/4/6 laning projects each equal to or more than 60 % of indicative length of a package applied for)	10	
1.2.1	1 project		6
1.2.2	2 projects		7
1.2.3	3 projects		8
1.2.4	4 projects		9
1.2.5	≥ 5 projects		10
2	DPR of Bridge having length more than 200 m	5	
2.1	1 bridge		1
2.2	2 bridges		2
2.3	3 bridges		3

S. No.	Description	Maximum Points	Sub-Points
2.4	4 bridges		4
2.5	≥ 5 bridges		5
3	Specific experience of firms in terms of turnover	5	
3.1	Firm's Average Turnover of last 5 years > 50 crore		5
3.2	Firm Average Turnover of last 5 years 20 - 50 crore		4
3.3	Firm Average Turnover of last 5 years > 5 but < 20 crore		3
4	Highway Professionals * working with the firm	10	
4.1	<10 nos.		0
4.2	10-19 nos.		7
4.3	20-29 nos.		8
4.4	> 30 nos.		9
4.5	Additional one mark will be given if minimum 20% of the above key personnel have <i>I</i> in any field of civil engineering	۸.Tech	1
Manager employm on INFRA		erience in highway/bridg icate shall be uploaded by	e/tunnel with
5	Quality of Past Performance (based on self certification)	10	
5.1	Average CoS (net of positive and negative) as percentage of 2 contract price in last 5 DPRs prepared by the firm	2.5	
5.1.1	0		2.5
5.1.2	> 0 but ≤2.5		2
5.1.3	>2.5 but ≤5		4 5
			1.5
5.1.4	>5 but ≤7.5		1.5

S. No.	Description		Maximum Points	Sub-Points
5.1.6	>10			0
5.2	Average area variation as percentage of acquired private land as per 1 <sup>st</sup> 3D notification in last 5 DPRs prepared by the firm	2.5		
5.2.1	0			2.5
5.2.2	> 0 but ≤4			2
5.2.3	>4 but ≤8			1.5
5.2.4	>8 but ≤12			1
5.2.5	>12 but ≤16			0.5
5.2.6	>16			0
5.3	Average delay in land acquisition in last 5 DPRs prepared by the firm (delay in 90% site possession wrt contract period)	2.5		
5.3.1	≤3 months			2.5
5.3.2	>3 but ≤6 months			2
5.3.3	>6 but ≤9 months			1.5
5.3.4	>9 but ≤12 months			1
5.3.5	>12 months			0
5.4	Average use of new materials/waste materials/new technology used in last 5 DPRs prepared by the firm as percentage of total cost of civil works	2.5		
5.4.1	<2.5			0
5.4.2	>2.5 but ≤5			1
5.4.3	>5 but ≤7.5			1.5
5.4.4	>7.5 but ≤10			2
5.4.5	>10			2.5

For special projects such as special bridges, tunnels and expressways that require specialized capabilities and skill sets, the following is the break-up:

S. No.	Description	Maximum Points	Sub-Points
1	Specific experience of the DPR consultancy related to the assignment for eligibility	15	
1.1	Aggregate Length of DPR / Feasibility study of 2/4/ 6 lane projects	8	
1.1.1	> 1 but $\leq 2$ the indicative Length of the package applied for		4
1.1.2	>2 but $\leq$ 3 times the indicative length of the package applied for		5
1.1.3	> 3 but $\leq$ 4 times the indicative length of the package applied for		6
1.1.4	> 4 but $\leq$ 5 times the indicative length of the package applied for		7
1.1.5	> 5 times the indicative length of the package applied for		8
1.2	DPR for 2/4/6 laning projects each equal to or more than 40 % of indicative length of a package applied for (or Feasibility Study for 2/4/6 laning projects each equal to or more than 60 % of indicative length of a package applied for)	7	
1.2.1	1 project		3
1.2.2	2 projects		4
1.2.3	3 projects		5
1.2.4	4 projects		6
1.2.5	≥ 5 projects		7
2	DPR of Bridge having length more than 200 m	5	
2.1	1 bridge		1
2.2	2 bridges		2
2.3	3 bridges		3
2.4	4 bridges		4
2.5	≥ 5 bridges		5
3	Specific experience of firms in terms of turnover	5	

S. No.	Description	Maximum Points	Sub-Points
3.1	Firm's Average Turnover of last 5 years > 50 crore		5
3.2	Firm Average Turnover of last 5 years 20-50 crore		4
3.3	Firm Average Turnover of last 5 years >5 but <20 crore		3
4	Highway Professionals * working with the firm	10	
4.1	<10 nos.		0
4.2	10-19 nos.		7
4.3	20-29 nos.		8
4.4	≥30 nos.		9
4.5	Additional one mark will be given if minimum 20% of the above key personnel have M.Tech in any field of civil engineering		1
4	DPR for special category projects (Special bridges/ tunnels or expressways, whichever applicable). It is to be noted that either 4.1 or 4.2 shall be applicable, and not both.		
4.1	DPR of number of special bridges/ tunnels (if applicable)	5	
4.1.1	1 project		1
4.1.2	2 projects		2
4.1.3	3 projects		3
4.1.4	4 projects		4
4.1.5	≥ 5 projects		5
4.2	Aggregate length of DPR/ Feasibility study for expressways	5	
4.2.1	Upto 50 km		2
4.2.2	50km to 100 km		3
4.2.3	100km to 150 km		4
4.2.4	> 150 Km		5
5	Highway Professionals * working with the firm	10	

S. No.	Description	Maximum Points	Sub-Points
5.1	<10 nos.		0
5.2	10-19 nos.		7
5.3	20-29 nos.		8
5.4	> 30 nos.		9
5.5	Additional one mark will be given if minimum 20% of the above key personnel have M.Tech in any field of civil engineering		1
Manaş emplo	professionals who possess degree in Civil Engineering/Transport gement/Geology/Environment Science or Engineering and 8 years Exp pyment in the firm for more than one year. The current Employment Certin FRACON.	perience in	highway/bridge/tunnel with
6	Quality of Past Performance (based on self certification)	10	
6.1	Average CoS (net of positive and negative) as percentage of contract price in last 5 DPRs prepared by the firm	2.5	
6.1.1	0		2.5
6.1.2	> 0 but ≤2.5		2
6.1.3	>2.5 but ≤5		1.5
6.1.4	>5 but ≤7.5		1
6.1.5	>7.5 but ≤10		0.5
6.1.6	>10		0
6.2	Delay in completion of DPR as percentage of original contract period in last 5 DPRs prepared by the firm	2.5	
6.2.1	0		2.5
6.2.2	> 0 but ≤ 25		2
6.2.3	>25 but ≤ 50		1.5
6.2.4	>50 but ≤ 75		1
6.2.5	>75 but ≤ 100		0.5

S. No.	Description	Maximum Points	Sub-Points
6.2.6	>100		0
6.3	Average delay in land acquisition in last 5 DPRs prepared by the firm (delay in 90% site possession wrt contract period)	2.5	
6.3.1	≤3 months		2.5
6.3.2	>3 but ≤6 months		2
6.3.3	>6 but ≤9 months		1.5
6.3.4	>9 but ≤12 months		1
6.3.5	>12 months		0
6.4	Average use of new materials/waste materials/new technology used in last 5 DPRs prepared by the firm as percentage of total cost of civil works	2.5	
6.4.1	≤2.5		0
6.4.2	>2.5 but ≤5		1
6.4.3	>5 but ≤7.5		1.5
6.4.4	>7.5 but ≤10		2
6.4.5	>10		2.5

Note:

A. In case feasibility study is a part of DPR services the experience shall be counted in DPR only. In case bridge is included as part of DPR of highway the experience will be (1) and (2)

B. Similar project means 2/4/6 lane as applicable for the project for which RFP is invited. For 2-lane projects experience of 4/6 lane also to be considered with a multiplication factor of 1.5. Experience of 4/6 lane shall be considered interchangeably for 4/6 laning projects. For 4/6 laning projects, experience of 2 lane will be considered with a multiplication factor of 0.4, but only for those 2 lane projects whose cost of consultancy services was more than Rs.1.0 crore

Note: (i) Weightage to be given when experience by a Firm as Sole Firm/Lead Partner in a JV/Other Partner in a JV/As Associate

No.	Status of the firm in carrying out DPR/ Feasibility Study	Weightage for experience
1	Sole firm	100 %
2	Lead partner in a JV	75%
3	Other partner in a JV	50 %
4	As Associate	25%

(ii) The experience of a firm in preparation of DPR for a private Concessionaire/contractor shall not be considered.

### B Material testing, survey and investigation, equipment and software proposed to be used (10)

S. No.	Description	Maximum Points	Sub-Points
1	Availability of Material Testing Facilities with persons/resources having operational skills of the equipment	1	
1.1	Owned* (Available In House)		1.00
	all be ascertained through the ownership evidence uploaded on INFRACON in testing of materials to be used for construction of Highway Project.	n regard to major equ	ipment required
2	Availability of Field Investigation Facilities with persons/resources having	2	

S. No.	Description	Maximum Points	Sub-Points
	operational skills of the equipment		
2.1	Owned** (Available In House)		2.00
** Sł	nall be ascertained through ownership evidence uploaded on INFRACON for co	onstruction of Highwa	y Project.
3	Availability of Office Equipment and Software with persons/resources having operational skills of the equipment	1.5	
3.1	Owned*** (Available In House)		1.50
	Shall be ascertained through ownership evidence uploaded on INFRACON fo way consultancy assignment.	r key hardware/softv	vare required for
4	Experience in LiDAR or better technology for topographic survey (Infrastructure sector)	3.5	
4.1	1 project		1
4.2	2 projects		2
4.3	3 projects		2.5
4.4	4 projects		3
4.5	≥ 5 projects		3.5
5	Experience in using GPR and Induction Locator or better technologies for detection of sub-surface utilities (Infrastructure sector)	1	
5.1	1 project		0.25
5.2	2 projects		0.50
5.3	3 projects		0.75
5.4	≥ 4 projects		1
6	Experience in digitization of cadastral maps for land surveys	1	
6.1	Area upto 100 ha		0.5
6.2	Area between 100-500 ha		0.75
6.3	Area > 500 ha		1

**Note:** The experience of firm in Lidar or equivalent technology, GPR and Induction Locator or equivalent technologies and Experience in digitization of cadastral maps for land acquisition shall be supported by experience certificate. The experience of a firm in Lidar or equivalent technology, GPR and Induction Locator or equivalent technologies and Experience in digitization of cadastral maps for land acquisition for a private concessionaire/contractor shall not be considered.

2.4. Qualification and Competency of Key Personnel for adequacy of the assignment.

(Para 12.2 of Data Sheet and Enclosure II of TOR)

### 2.4.1 TEAM LEADER cum HIGHWAY ENGINEER

S.No	p.Description		Max. Points	
I	General Qualification		25	
i)	Degree in Civil Engineering or equivalent [AICTI	E Approved]	20	
ii)	Post Graduation in Civil Engg./ Construction Man [AICTE Approved]	agement/ Transportatio	n 5	
П	Relevant Experience & Adequacy for the Project		70	
a)	Total Professional Experience		15	
	<12 years	0		
	≥12 but <14 years	11		
	≥14 but <16 years	12		
	≥16 but < 18 years	13		
	≥18 but <20 years	14		
	≥ 20 years	15		
(b)	Experience in Highway Projects- Experience in and design of Highway Projects (2/4/6 laning o			
	<8 years	0		

	≥8 but <10 years	17	
	≥10 but <12 years	19	
	≥12 but < 14 years	21	
	≥14 but <16 years	23	
	≥ 16 years	25	
c)	Experience in Similar Capacity		30
(i)	In Feasibility of 2/4/6 laning works or DPR/IC/ major highway projects i.e. 2/4/6 laning of NI Capacity ( Minimum Aggregate length of 80 km	H/SH/Expressways in Similar	20
	< 80km	0	
	≥80 km but <100km	15	
	≥100km but <150km	17	
	≥ 150km but <200 km	18	
	≥200 km but < 250 km	19	
	≥250 km	20	
(ii)	In Feasibility of 2/4/6 laning works or DPR/IC/Construction Supervision of major highway projects i.e. 2/4/6 laning of NH/SH/Expressways in Similar Capacity- Number of Projects		10
	< 2 projects	0	
	2 projects	6	
	3 projects	7	
	4 projects	8	
	5 projects	9	
	> 5 projects	10	

	Employment with Firm		5
	> 1 Year	0	
	1 year	3	
S. No.	Description		Max. Points
	Add 0.5 marks for each subsequent year subject to maximum of 2 marks		
	Total		100

# 2.4.2 Highway Engineer

S.	Description		Max. Points
No			
I	General Qualification		25
i)	Degree in Civil Engineering or equivalent [AICTE App	roved]	20
ii)	Post graduation in Civil Engg [AICTE Approved]		5
II	Relevant Experience & Adequacy for the Project		70
a)	Total Professional Experience		15
	<8years	0	
	≥8 but <10 years	11	
	≥10 but <12 years	12	
	≥12 but < 14 years	13	
	≥16 but <16 years	14	
	≥ 16 years	15	

(b	Experience in Highway Projects - Experience in Desi	gn/ Pavement Design	25	
	of Highway Projects (2/4/6 laning of NH/SH/Expre			
	<6 years	<6 years 0		
	≥6 but <8 years	17		
	≥8 but <10 years	19		
	≥10 but < 12 years	21		
	≥12 but <14 years	23		
	≥ 14 years	25		
c)	Experience in Similar Capacity		30	
	In Design/ Pavement Design of Highway Projects (2/	4/6 laning of	30	
	NH/SH/Expressways) in Similar Capacity			
	<2 projects	0		
	2 projects	18		
	3 projects	21		
	4 projects	24		
	5 projects	27		
	>5 projects	30		
	Employment with Firm		5	
	Less than 1 Year	0		
	1 year 3			
	Add 0.5 marks for each subsequent year			
	subject to maximum of 2 marks			
$\vdash$	Total		100	

# 2.4.3 Bridge Engineer

S.	Description		Max. Points	
No				
I	General Qualification		25	
i)	Degree in Civil Engineering or equivalent[AICTE Approved	1]	20	
ii)	Post Graduation in Structural Engineering/ Foundation Engineering/Hydraulics[AICTE Approved]		5	
II	Relevant Experience & Adequacy for the Project		70	
a)	Total Professional Experience		15	
	<8 years	0		
	≥8 but <10 years	11		
	≥10 but <12 years	12		
	≥12 but < 14 years	13		
	≥14 but <16 years	14		
	≥ 16 years	15		
b)	Experience in Bridge Projects		25	
(i)	Experience in project preparation and design of bridge p	rojects	20	
	< 6 years	0		
	≥6 but <8 years	17		
	≥8 but <10 years	19		
	≥10 but < 12 years	21		
	≥12 but <14 years	23		

	≥ 14 years	25	
(ii)	Experience of 2/4 lane configuration bridges		5
	<2 Projects	0	
	2 projects	3	
	3 projects	3.5	
	4 projects	4	
	5 projects	4.5	
	> 5 projects	5	
c)	Experience as Senior Bridge Engineer or Similar Capacity in Highway Design Consultancy Projects (2/4/6 laning of NH/SH/Expressways) involving design of Major Bridges (minimum 2 nos. of length more than 200m)		30
	<2 numbers	0	
-	3 numbers	18	
	4 numbers	21	
	5 numbers	24	
	6 numbers	27	
	> 6 numbers	30	
III	Employment with Firm		5
	Less than 1 Year	0	
	1 year	3	
	Add 0.5 marks for each subsequent year subject to maximum of 2 marks		
	Total		100

# 2.4.4 Traffic/Road Signage/Marking & safety Expert

S.	Description		Max. Points	
No.				
I	General Qualification		25	
i)	Degree in Civil Engineering[AICTE Approved]		20	
ii)	Post graduation in Traffic Engineering /Transportati Transportation Planning[AICTE Approved]	on Engineering /	5	
II	Relevant Experience & Adequacy for the Project		70	
a)	Total Professional Experience		15	
	<6 years	0		
	≥6 but <8 years	11		
	≥8 but <10 years	12		
	≥10 but < 12 years	13		
	≥12 but <14 years	14		
	≥ 14 years	15		
	Experience in Highway Projects - Experience on Simil NH/SH/ Expressways)	ar Projects (2/4/6	aning of 20	
	<5 years	0		
	≥5 but <7 years	13		
	≥7 but <9 years	15		
	≥9 but < 11 years	17		
	≥11 but <13 years	19		

	≥ 13 years	20	
c)	Experience as Traffic and Safety Expert / Traffic Engineer or in Similar Capacity in Highway Projects (2/4/6 laning of NH/SH/Expressways) (Minimum aggregate length 80 km)		
	<80km	0	
	≥80 km but <100km	17	
	≥100km but <150km	19	
	≥ 150km but <200 km	21	
	≥200 km but < 250 km	23	
	≥250km	25	
d)	15 days' certification course on Road Safety Audit from IAHE/IITs/NITs/CRRI		RRI 10
	No	0	
	Yes	10	
	Employment with Firm		5
	Less than 1 Year	0	
<u> </u>	1 year	3	
	Add 0.5 marks for each subsequent year subject to maximum of 2 marks		
	Total		100

### 2.4.5 MATERIAL ENGINEER cum GEOTECHNICAL ENGINEER

S.	Description	Max. Points
No.		
I	General Qualification	25

i)	Degree in Civil Engineering /M. Sc. in Geology[AICTE Apple and the second s	20	
ii)	Post graduation in Foundation Engineering / Soil Mechanics / Geo Tech Engineering		5
	or Phd in Geology[AICTE Approved]		
11	Relevant Experience & Adequacy for the Project		70
a)	Total Professional Experience		15
	<8 years	0	
	8-10 years	11	
	>10-13 years	13	
	>13 years	15	
b)	Experience in Highway Projects - In Similar Projects (2 NH/SH/Expressways) in design and or Construction/ Con	25	
	<6 years	0	
	6-9 years	19	
	>9 -11 years	22	
	>11 years	25	
c)	Experience as Material cum Geo-technical Engineer or ir Highway Projects (2/4/6 laning of NH/SH/Expressways) length 80 km)		30
	<80km	0	
	80km-150km		
	>150km - 250km 27		
	>250km	30	
	Employment with Firm		5

Less than 1 Year	0	
1 year	3	
Add 0.5 marks for each subsequent year subject to maximum of 2 marks		
Total		100

# 2.4.6 Survey Engineer

S.	Description		Max. Points
No			
-	General Qualification		25
1			25
i)	Degree or equivalent in Civil Engineering / Diploma in Civ	il Engineering / Diploma	20
	in Surveying[AICTE Approved]		
ii)	Post Graduation in Remote Sensing/Photogrammetry or e	ouivalent [AICTE	5
,	Approved]		5
II	Relevant Experience & Adequacy for the Project		70
a)	Total Professional Experience		15
	<8 years	0	
	8-10 years	11	
	>10-13 years	13	
	>13 years	15	
b)	Experience in Highway Projects		25
i)	Experience in Similar Projects (2/4/6 laning of NH / SH / preparation/ Construction / Construction Supervision	Expressways) in project	20
	<6 years	0	
	6 -8 years	15	
	>8-10 years	17	
	>10 years	20	
ii)	Knowledge and understanding of modern Computer based	method of Surveying	5
	Yes	5	

	No	0	
	Experience as Survey Engineer or in Similar Capacity for project preparation of highway project (2/4/6 laning of NH/SH/Expressways) (Minimum Aggregate Length of to 80km)		30
	<80km	0	
	80km-150km	24	
	>150km-250km	27	
	>250km	30	
	Employment with Firm		5
	Less than 1 Year	0	
	1 year	3	
	Add 0.5 marks for each subsequent year subject to maximum of 2 marks		
	Total		100

### 2.4.7 Environmental Specialist

S. No.	Description	Max. Points
I	General Qualification	25
	Degree in Civil Engineering / Environmental Engineering or Post Graduate in Environmental Sciences[AICTE Approved]	20
ii)	Post-Graduation in Environmental Engineering [AICTE Approved]	5
II	Relevant Experience & Adequacy for the Project	70
a)	Total Professional Experience	15

	<6 years	0		
	6-8 years	11		
	>8-10 years	13		
	>10 years	15		
b)	Experience in Highway Projects- Experience in Environment impact assessment 25 of Highway Projects (2/4/6 laning of NH/SH/Expressways)			
	<5 years	0		
	5 -7 years	19		
	>7-10 years	22		
	>10 years	25		
c)	Experience as Environmer Projects(2/4/6 laning of N	ntal Specialist or in Similar Capacity in Highway 30 NH/SH/Expressways)		
	<2 projects	0		
	<2 projects	0		
	<2 projects 2- 4 projects	0 24		
	<2 projects 2- 4 projects 5-7 projects	0 24 27		
	<2 projects 2- 4 projects 5-7 projects >7 projects	0 24 27 30		
	<2 projects 2- 4 projects 5-7 projects >7 projects Employment with Firm	0 24 27 30 5		
111	<2 projects 2- 4 projects 5-7 projects >7 projects Employment with Firm Less than 1 Year	0 24   27 30   5 0		

2.4.8 Quantity Surveyor

	Description	Max. Points
No.	•	
I	General Qualification	25
	Graduation or equivalent in Civil Engineering / Certificate course from 'Institution of Quantity Surveying'[AICTE Approved]	20
ii)	Graduation Approved] or equivalent in Civil Engineering [AICTE	5
	Relevant Experience & Adequacy for the Project	70
a)	Total Professional Experience	15
	<8 years 0	
	8-10 years 11	
	>10-13 years 13	
	>13 years 15	
	Experience in Highway Projects- Experience in preparation of Bill of Quantities, Contract documents and documentation for major highway projects (2/4/6 laning of NH/SH/Expressways)	25
	<6 years 0	
	6 -8 years 19	
	>8-10 years 22	
	>10 years 25	
	Experience as Quantity Surveyor / Documentation Expert or in Similar Capacity in Highway Projects (2/4/6 laning of NH/SH/Expressways) (Minimum Aggregate length of 80km)	30
	<80km 0	
	80km-150km 24	

	>150km - 250km	27	
	>250km	30	
	Employment with Firm		5
	Less than 1 Year	0	
	1 year	3	
	Add 0.5 marks for each subsequent year subject to maximum of 2 marks		
	Total		100

# 2.4.9 Land Acquisition Expert

S.	Description		Max. Points
No.			
I	General Qualification		25
i)	Graduation or equivalent		20
ii)	Post Graduation		5
	Relevant Experience & Adequacy for the Project		70
a)	Total Professional Experier	ce	15
	<15 years	0	
	15-17 years	11	
	>17-20 years	13	
	>20 years	15	
	Experience in Land Acquisition works of Government/Authority		20
	<10 years	0	
	10 -12 years	15	
	>12-15 years	17	
	>15 years	20	
	Experience in Land Acquisition works in Highway/road sector		25
	Nil project	0	
	1 project	19	
	2 projects	22	
L			l

	3 projects	25	
	Retired Revenue officer at the level of ADM/SDM / Tehsildar		10
	Employment with Firm		5
	Less than 1 Year	0	
	1 year	3	
	Add 0.5 marks for each subsequent year subject to maximum of 2 marks		
	Total		100

# 2.4.10 Utility Expert

S.	Description		Max. Points
No.			
I	General Qualification		25
i)	Graduation or equivalent		20
ii)	Post Graduation		5
	Relevant Experience & Adequacy for the Project		70
a)	Total Professional Experience		15
	<10 years	0	
	10-12 years	11	
	>12-15 years	13	
	>15 years	15	
b)	Experience in Utility esti erection	mation and its laying/	30
-----	--	--	-----
	<8 years	0	
	8 -10 years	24	
	>10-12 years	27	
	>12 years	30	
c)	Experience in Utility shifti erection along Highway/	ng estimation and its laying, roads	25
	Nil project	0	
	1 project	19	
	2 projects	22	
	3 projects	25	
III	Employment with Firm		5
	Less than 1 Year	0	
	1 year	3	
	Add 0.5 marks for each subsequent year subject to maximum of 2 marks		
	Total		100

# 2.4.11 Team Leader cum Bridge Engineer

S.	Description	Max. Points
No		
I	General Qualification	25

i)	Degree in Civil Enginee Approved]	ering or equivalent [AICTE	20
	Post Graduation in Struc Degree/Diploma/Certifi Management		5
II	Relevant Experience & /	Adequacy for the Project	70
a)	Total Professional Expe	rience	15
	<12 years	0	
	≥12 but <14 years	11	
	≥14 but <16 years	12	
	≥16 but < 18 years	13	
	≥18 but <20 years	14	
	≥ 20 years	15	
(b)	Experience in Bridge Pro Bridge Construction / Do	oject - Experience in major evelopment Project	25
	< 8 years	0	
	≥8 but <10 years	17	
	≥10 but <12 years	19	
	≥12 but < 14 years	21	
	≥14 but <16 years	23	
	≥ 16 years	25	
c)	Experience in Similar Capacity		30

(i)	As Team Leader/Project N	Nanager or similar capacity	20
	of at least Two projects	in Construction Supervision	
	/ IC involving 4 laning/6-la	aning/ Expressway of	
	minimum 50km length and atleast two major bridge		
	of a length 500 mtr. (Excluding approaches		
	< 80km	0	
	≥80 km but <100km	15	
	≥100km but <150km	17	
	≥ 150km but <200 km	18	
	≥200 km but < 250 km	19	
	≥250 km	20	
	DPR/IC/Construction Sup	ervision of major highway ng of NH/SH/Expressways ir	
	< 2 projects	0	
	2 projects	6	
	3 projects	7	
	4 projects	8	
	5 projects	9	
	5 projects	10	
	Employment with Firm		5
	> 1 Year	0	
	1 year	3	
	Add 0.5 marks for each s maximum of 2 marks	ubsequent year subject to	

	Total		100
<u></u>	2 / 12 Pridge/Structural Engineer		

2.4.12. Bridge/Structural Engineer

S.	Description		Max. Points
No.			
I	General Qualification		25
i)	Degree in Civil Engineering or equivalent[AICTE Approved]		20
ii)	Post Graduation in Structural Engineerin Approved]	ng/Bridge Engineering[AICTE	5
II	Relevant Experience & Adequacy for t	he Project	70
a)	Total Professional Experience		15
	<8 years	0	
	≥8 but <10 years	11	
	≥10 but <12 years	12	
	≥12 but < 14 years	13	
	≥14 but <16 years	14	
	≥ 16 years	15	
b)	Experience in Bridge Projects		25
(i)	Experience in project preparation and	design of bridge projects	25
	<5 years	0	
	≥5 but <7 years	17	
<u> </u>	≥7 but <9 years	19	

	≥9 but < 11 years	21	
	≥11 but <13 years	23	
	≥ 13 years	25	
c)	Experience as Senior Bridge Engineer or Similar Capacity in Highway Design Consultancy Projects (2/4/6 laning of NH/SH/Expressways involving design of Major Bridges (minimum 2 nos. of length more than 200m)		30
	<2 numbers	0	
	2 projects	18	
	3 projects	21	
	4 projects	24	
	5 projects	27	
	5 projects	30	
	Employment with Firm		5
	Less than 1 Year	0	
	1 year	3	
	Add 0.5 marks for each subsequent year subject to maximum of 2 marks		
	Total		100

## 2.4.13. Team Leader cum Tunnel Expert

S.No.	Description		Max. Points
	General Qualification		25
i)	Degree in Civil Engineering/Tunnel Engineer	ing / Mining Engineering	20
ii)	Post Graduation in Civil Engineering /Tunne	l Engineering/Mining Engineering	5
11	Relevant Experience & Adequacy for the	Project	65
a)	Total Professional Experience		10
	<10 years	0	
	≥10 but <12 years	6	
	≥12 but <14 years	7	
	≥14 but < 16 years	8	
	≥16 but <18 years	9	
	≥ 18 years	10	
(b)	Experience in Tunnel Projects	40	
	(i) Professional experience in handling majo	8	
	<8 years	0	
	≥8 but <9 years	4	
	≥9 but <10 years	5	
	≥10 but < 11 years	6	
	≥11 but <12 years	7	
	≥ 12 years	8	
	(ii) Experience in major tunnel constructio (Road/Rail/Metro)	n/construction supervision projects	8

	<8 years	0	
	≥8 but <9 years	4	
	≥9 but <10 years	5	
	≥10 but < 11 years	6	
	≥11 but <12 years	7	
	≥ 12 years	8	
	(iii)Experience in preparation of DPR or Feas projects (Road/Rail/Metro)	ibility report of major tunnel	8
	<8 years	0	
	≥8 but <9 years	4	
	≥9 but <10 years	5	
	≥10 but < 11 years	6	
	≥11 but <12 years	7	
	≥ 12 years	8	
	(iv) Experience in DPR preparation of minin	num 5 km Tunnel length	8
	< 3 projects	0	
	3 projects	5	
	4 projects	6	
	5 projects	7	
	>5 projects	8	
(d)	Experience in construction/construction su DPR/feasibility report of major tunnel proje		8
	<8 years	0	

	≥8 but <9 years	4	
	≥9 but <10 years	5	
	≥10 but < 11 years	6	
	≥11 but <12 years	7	
	≥ 12 years	8	
c)	Experience in Similar Capacity		15
	(i) Experience as Team Leader or similar ca	pacity in major tunnel	7

S.	Description		Max. Points
No.			
	construction/construction supervision projects (Road/Rail/Metro)		
	2 projects	5	
	3 projects	5	
	4 projects	6	
	>4 projects	7	
	(ii) Experience as Team Leader or similar capacity in preparation of DPR or Feasibility report of major tunnel projects (Road/Rail/Metro)		8
	2 projects	4	
	3 projects	5	
	4 projects	6	
	5 projects 7		
	>5 projects	8	
111	Employment with Firm		10

Less than 1 Year	0	
1-2 years	7.5	
Add 0.5 marks for each subsequent year subject to maximum of 2.5 marks		
Total		100

## 2.4.14 Tunnel Design Expert

Sr.	Description		Max. Points	
No.				
I	General Qualification	25		
i)	Degree in Civil/ Mining Engineering		20	
ii)	Post Graduation in Design/Structural	Engineering or equivalent	5	
II	Relevant Experience & Adequacy for	the Project	65	
a)	Total Professional Experience		10	
	<10 years	0		
	≥10 but <12 years	6		
	≥12 but <14 years	7		
	≥14 but < 16 years	8		
	≥16 but <18 years	9		
	≥ 18 years	10		
b)	Experience in Tunnel Projects		24	
	(i) Professional Experience in handling major tunnel projects (Road/Rail/Metro)		8	
	<8 years	0		
	≥8 but <9 years	4		
	≥9 but <10 years	5		
	≥10 but < 11 years	6		
	≥11 but <12 years	7		
	≥ 12 years	8		

(ii) Experience of major tunnel construction/ (Road/Rail/Metro)	8	
<8 years	0	
≥8 but <9 years	4	
≥9 but <10 years	5	
≥10 but < 11 years	6	
≥11 but <12 years	7	
≥ 12 years	8	
(iii) Experience in preparation of DPR or Fea projects (Road/Rail/Metro)	asibility report of major tunnel	8
<8 years	0	
≥8 but <9 years	4	
≥9 but <10 years	5	
≥10 but < 11 years	6	
≥11 but <12 years	7	
≥ 12 years	8	
Experience in Similar Capacity		31
(i) Professional Experience as Tunnel Design	Engineer (Structural)	8
<5 years	0	
≥5 but <6 years	4	
≥6 but <7 years	5	
≥7 but < 8 years	6	
 ≥8 but <9 years	7	

≥ 9 years	8	

ir. Io.	Description		Max. Points	
	(ii) Experience as Tunnel Design Engineer (Structural) of major tunnel construction/construction supervision projects (Road/Rail/Metro)			
	<5 years	0		
	≥5 but <7 years	4		
	≥7 but <9 years	5		
	≥9 but < 11 years	6		
	≥11 but <13 years	7		
	≥ 13 years	8		
	(iii) Experience as Tunnel Design preparation of DPR projects (Road)	8		
	<5 years	0		
	≥5 but <7 years	4		
	≥7 but <9 years	5		
	≥9 but < 11 years	6		
	≥11 but <13 years	7		
	≥ 13 years	8		
	(iv)Experience as Tunnel Design Engineer (Structural) in preparation of DPR/ Feasibility report of major tunnel projects (Road/Rail/Metro) using NATM		/ 7	
	< 3 projects	0		
	3 projects	4		
	4 projects	5		

	5 projects	6	
	>5 projects	7	
	Employment with Firm		10
	Less than 1 Year	0	
	1-2 years	7.5	
	Add 0.5 marks for each subsequent year sub	ject to maximum of 2.5 marks	
	Total		100

## 2.4.15 Geotechnical Engineer

S.No	p.Description		Max. Points	
I	General Qualification	25		
i)	Degree in Civil Engineering/Mining Er	ngineering / Engineering Geology	20	
ii)	Post Graduation in Geotechnical Engineering /Foundation Engineering/Rock Mechanics/Geo science or equivalent		5	
	Relevant Experience & Adequacy for	the Project	65	
a)	Total Professional Experience		10	
	<10 years	0		
	≥10 but <12 years	6		
	≥12 but <14 years	7		
	≥14 but < 16 years	8		
	≥16 but <18 years	9		
	≥ 18 years	10		
(b)	Experience in Tunnel Projects		24	

<8 years	0	
-		
≥8 but <10 years	4	
≥10 but <12 years	5	
≥12 but < 14 years	6	
≥14 but <16 years	7	
≥ 16 years	8	
ii) Experience in major tunnel Road/Rail/Metro)	construction/construction supervisio	n projects 8
<8 years	0	
28 but <10 years	4	
10 but <12 years	5	
≥12 but < 14 years	6	
≥14 but <16 years	7	
≥ 16 years	8	
(iii)Experience in preparation of projects (Road/Rail/Metro)	DPR or Feasibility report of major t	unnel 8
<8 years	0	
≥8 but <10 years	4	
10 but <12 years	5	
212 but < 14 years	6	
14 but <16 years	7	
≥ 16 years	8	

c)	Experience in Similar Capacity		31
	(i) Professional Experience as Tunnel D	Design Engineer (Structural)	8
	<5 years	0	
	≥5 but <7 years	4	
	≥7 but <9 years	5	
	≥9 but < 11 years	6	
	≥11 but <13 years	7	
	≥ 13 years	8	
S. No.	Description		Max. Points
	(ii) Experience as Senior Geotechnical Engineer or similar capacity in major tunnel construction/construction supervision projects (Road/Rail/Metro)		8
	<5 years	0	
	≥5 but <7 years	4	
	≥7 but <9 years	5	
	≥9 but < 11 years	6	
	≥11 but <13 years	7	
	≥ 13 years	8	
	(iii) Experience as Senior Geotechnical Engineer or similar capacity in preparation of DPR or Feasibility report of major tunnel projects (Road/Rail/Metro)		8
	<5 years	0	
	≥5 but <7 years	4	

	≥7 but <9 years	5	
	≥9 but < 11 years	6	
	≥11 but <13 years	7	
	≥ 13 years	8	
	(iv) Experience in construction/construction DPR/feasibility report of major tunnel proje		7
	<5 years	0	
	≥5 but <7 years	4	
	≥7 but <9 years	5	
	≥9 but < 11 years	6	
	≥11 but <13 years	7	
	≥ 13 years	8	
	Employment with Firm		10
	Less than 1 Year	0	
	1-2 years	7.5	
	Add 0.5 marks for each subsequent year subj	ect to maximum of 2.5 marks	
	Total		100

## 2.4.16 Geophysicist

Sr.	Description		Max. Points
No.			
I	General Qualification		25
i)	Graduate in Geophysics/Geo science/ Earth science	ce or equivalent	20
ii)	Post Graduation in Geophysics/Geo science/ Earth	Science or equivalent	5
11	Relevant Experience & Adequacy for the Project		65
a)	Total Professional Experience		15
	<10 years	0	
	≥10 but <12 years	8	
	≥12 but <14 years	9	
	≥14 but < 16 years	11	
	≥16 but <18 years	13	
	≥ 18 years	15	
b)	Experience in Relevant works		50
	(i) Professional Experience in handling tunnel/ mineral and oil exploration projects		12
	<8 years	0	
	≥8 but <10 years	7	
	≥10 but <12 years	9	
	≥12 but < 14 years	10	
	≥14 but <16 years	11	
	≥ 16 years	12	

<ul><li>(ii) Experience of carrying out AE/ exploration or any other similar</li></ul>		
< 2 projects	0	
2 projects	8	
3 projects	9	
4 projects	10	
5 projects	11	
>5 projects	12	
(iii) Processing, Interpreting, generating data for tunneling/ mineral work for area of more than 2.7 s		
< 2 projects	0	
2 projects	8	
3 projects	9	
4 projects	10	
5 projects	11	
>5 projects	12	
(iv) Experience in carrying out AEM survey, processing, interpreting, generating 3D resistivity of AEM survey's raw data for major tunnel work (Rail/Road/Metro)		generating 14
< 3 projects	0	
3 projects	8	
4 projects	9	

	6 projects	12	
	>6 projects	14	
Sr. No.	Description		Max. Points
11	Employment with Firm	I	10
-	Less than 1 Year	0	
	1-2 years	7.5	
	Add 0.5 marks for each subsequent year subject to maximum of 2.5 marks		
	Total		100

Assumptions to be made regarding Similar Capacity for various positions.

#### Note

### XX

#### **Different formulation**

### Comments on "amendments to RFP for DPR consultancy (QCBS)" documents -

SI. No. of RFP Documents	RFP Clause Reference	Existing Provision of RFP	Proposed amendments to RFP for DPR consultancy (QCBS)
8.	Clause 5.3.3 of LOI	For a package, the procedure as mentioned at Clauses 5.3.4, 5.4 and, 5.5 as mentioned below shall be followed for determining the "most preferred bidder (H- 1 bidder)" for this package.	<ul> <li>5.3.3.1 Financial Proposal (excluding GST) of a Consultant quotingbeyond<u>+</u>10% above / below of normative cost*of DPR Consultancy Services (i.e. either more than Rs. [#]crore, or less than Rs. [@] crore for the instant project)will not be considered for further evaluation for award of consultancy services provided the Consultancy firm has scored highest marks in Technical Proposal evaluation.</li> <li>5.3.3.2Only reasonable Financial Proposals shall be considered for determining the "most preferred bidder (H- 1 bidder)" using the procedure as given at Clauses 5.3.4, 5.4 and 5.5 as mentioned below.</li> </ul>
			5.3.3.3 While determining reasonable Financial Proposals for a particular package in accordance with Clause 5.3.3.1, if the Financial Proposal of only one Consultant comes out as a reasonable Financial Proposal and all other Financial Proposals do not turn out to be reasonable Financial Proposals, the Consultant quoting the reasonable Financial Proposal shall be declared as the most preferred bidder(H-1) for that particular package.

\* - The normative cost for Consultancy Services per km may be worked out in the Ministry for different terrain conditions / lane configurations / ranges of representative project length based on the detailed analysis rather than calculating it on the basis of average L1 bids prices received over the years so as to have a realistic assessment of estimated cost.

# -1.1 x normative cost (Rs. Cr. / km) \* x length (km) for the specific project.

O.9 x normative cost (Rs. Cr. / km) \* x length (km)for the specific project.

### Comments on Annexure - II & Annexure-III -

It would be desirable to get all back up details and supporting documents as part of the RFP from bidders, especially for "Quality of Past Performance" instead of allowing marking on the basis of self-certification the bidders (Reference- Sl. No. 5 & 6 under Part-A of Annexure-II; Sl. No. 5 & 6 under Part-A of Annexure-III).