National High Speed Rail Corporation Limited (NHSRCL)

TENDER FOR FINAL ALIGNMENT DESIGN INCLUDING AERIAL LIDAR SURVEY AND OTHER RELATED WORKS FOR SIX HIGH SPEED RAIL CORRIDORS Tender No- NHSRCL/CO/CONTRACT/LIDAR/2020/03

Response to Bid Queries-2

Sr. No	Page. No	Section No.	Refer Clause No.	Existing Clause	Bidder Query	Employer's Reply
1			General		We request you to please consider our request in allowing global companies and experience for better quality and service.	Tender Condition shall remain unaltered.
2	Page no. 24	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY		LIDAR Works carried out by another Contractor on behalf of the Bidder on a back to back basis will not be considered for satisfaction of the Qualification Criterion by the Bidder.	incidentally clause at SI. No. 1 has been only specified for the LiDAR survey activity and not been quoted as a condition in the main deliverable i.e. FAD, raises serious eyebrows only over the focus on LiDAR or it pertains to alignment works also?	Tender Condition shall remain unaltered.
3	Page no. 23	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Clause No. 2.2.1 SN 3	2.2.1 The bidder must own/lease (as indicated against each item) the following instrument/ machine/software/ manpower, as minimum, to be eligible to bid: 3. Aircraft (excluding Drones & Unmanned Aerial Vehicles) / Helicopter Own/ Lease 1. Ownership documents/ Lease Copy 2. NSOP copy of Aircraft operator	We understand that a foreign Aircraft Owner / owning Company providing Aerial LIDAR and Photography Services can import the Aircraft under an Indian NSOP holder and execute the project, on award. The Lead Indian Company with foreign Aircraft Owner / owning Company and Indian NSOP operator qualifies to bid for the Project as a Consortium / Associates. Please confirm.	Please Refer Addendum No. 02, Item no 03.
4	Page no. 24	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Clause No. 2.2.2		To facilitate wider participation, NHSRCL is requested to include international project experience and suitably amend requirement as: "Aerial LIDAR survey work including data processing for at least 100 km for any linear project in India! of their countries carried out for Railways, NHAI, CPWD, MES, DOT, State PWD or any other Central / State Government Undertaking" And "Final alignment design or any other Central / State Government Undertaking" NHSRCL is also requested to consider the agencies having large area LIDAR survey experience and not limit to linear LIDAR Survey experience only to qualify for bidding. We request you to kindly consider the experience of carrying out the work by the bidder outside India for public/private client.	Tender Condition shall remain unaltered.
5	Page no. 25	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY		Sr. Photo-grammetry Expert (A) I. Graduate in Civil Engineering/ M Sc Geomatics/ M Sc Geology/Surveying and Mapping with minimum of 5 years' experience in Photogrammetry related works	Since Photogrammetry is under the domain of Remote sensing, request to consider graduate / Master degree in Remote Sensing / Geoinformatics	Please Refer Addendum No. 01, Item no 11.
6	Page no. 26	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY		Sr. LIDAR Professional (C) I. (Graduate in Civil Engineering/M Sc Geomatics/M Sc Geology/Surveying & Mapping with minimum of 5 years' experience in LIDAR works.	Since LIDAR is under the domain of Remote sensing, request to consider Masters degree in Remote Sensing / Geoinformatics.	
7	Page no. 33	SECTION V TERMS OF REFERENCE	Clause 3.2.2	3.2.2. Study of provided Raw satellite imagery data DTM/DSM, if required processing to create DEM & DSM and referencing the supplied or created DTM/DSM to Indian MSL using Ground control. The provided satellite data from NRSC Hyderabad shall be as follows: 3.2.2.1. For different corridors, the client shall/may provide either off-the-shelf Orthophotos of 50 cm Ground Sampling Distance (GSD) or Stereof Mono Imagery 3.2.2.2. Off-the-shelf DEM & DSM generated from off-the-shelf multi-look mono imagery with accuracy of ±3m at 90% Confidence Interval may be provided by the Employer for some corridors in case Stereo Imagery is not available.	Our understanding is that raw satellite 0.5m resolution stereo images will be provided by NHSRCL to the successful bidder and bidder need to analyse the images using photogrammetry method to derive DSM/DEM/DTM, contour map, ortho-image and seamless mosaic of the area of interest. Request to confirm	Please Refer Addendum No. 01, Item no 15,16 & 23 along with Tender Document.



Sr. No	Page. No	Section No.	Refer Clause No.	Existing Clause	Bidder Query	Employer's Reply
8	Page no. 33	SECTION V TERMS OF REFERENCE	Clause 3.2.3	DEM/DSM generation from Stereo-Imagery: If required for a corridor, the contractor shall generate DEM/DSM from supplied Stereo-Imagery by undertaking Stereo Image processing for production of 3 m resolution DEM/DSM.	Our understanding is that raw satellite 0.5m resolution stereo images will be provided by NHSRCL to the successful bidder and bidder need to analyse the images using photogrammetry method to derive DSM/DEM/DTM, contour map, ortho-image and seamless mosaic of the area of interest. Request to confirm	Please Refer Addendum No. 01, Item no 15,16 & 23 along with Tender Document.
9	Page no. 33	SECTION V TERMS OF REFERENCE	Clause 3.2.5	Orthophoto generation: If required, the contractor shall ortho-rectify supplied Satellitie imagery to generate seamlessly mosaiced orthophotos of 50 cm GSD using the DEM/DSM generated/corrected by the contractor.	Our understanding is that raw satellite 0.5m resolution stereo images will be provided by NHSRCL to the successful bidder and bidder need to analyse the images using photogrammetry method to derive DSM/DEM/DTM, contour map, ortho-image and seamless mosaic of the area of interest. Request to confirm	Please Refer Addendum No. 01, Item no 15,16 & 23 along with Tender Document.
10	Page no. 37	SECTION V TERMS OF REFERENCE	Clause 3.3.1.3	Applying to DGCA/Ministry of Defence for flying permissions as per DGCA guidelines and procedures along with adherence to all security stipulations issued by Ministry of Defence in the issue of the permit. NHSRCL will provide the necessary support.	There are possibilities that DGCA / MoD will be providing permission with restriction indicating sensitive areas where Aerial Survey cannot be under taken. Hence, suggested to use 0.3 m stereo HRSI data in the restricted areas indicated by DGCA / MoD.	Tender Condition shall remain unaltered.
11	Page no. 48	SECTION V TERMS OF REFERENCE	Clause 3.9, SN 3	Processing of satellite images procured for map generation, and submission of the report thereof Key Dates: D + 50	We understand that the procurement of 0.5 m satellite imageries from NRSC will take considerable amount of time which might delay the key dates. Hence, request to kindly consider and amend Schedule as "3. Processing of satellite images procured for map generation, and submission of the report thereof - D1+50" where D1 is the date of supply of satellite data / DEM/DTM/DSM by NHSRCL	Please Refer Addendum No. 01, Item no 22.
12	Page no. 48	SECTION V TERMS OF REFERENCE	Clause 3.9, SN 5	Submission of Alignment Report Stage-II (Final Submission) as per clause 3.4.5 (Key Dates: D+170	We understand that obtaining DGCA / MoD permission for aerial survey will take considerable amount of time which might delay the key dates. Hence, request to kindly consider and amend Schedule as "3. Submission of Alignment Report Stage-II (Final Submission) as per clause 3.4.5 - D2 +110" where D2 is the date of obtaining permission from DGCA / MoD.	Please Refer Addendum No. 01, Item no 22.
13	Page no. 56	SECTION V TERMS OF REFERENCE Annexure -3(TOR)	Clause 4.3 i. Survey Control SN 2	The primary ground control and check point surveys must be referenced to the survey of India local vertical datum specified above comprising Survey of India Bench marks.	We understand that Successful bidder has to carry out Leveling with reference to Survey of India GTS Benchmark to establish height control in the Project Area. Please confirm.	Clause No 3.3.1.2 of TOR is clearly defined regarding methodology of the Ground Control Survey .Hence, Tender condition shall remain unaltered.
14	Page no. 56	SECTION V TERMS OF REFERENCE Annexure -3(TOR)	Clause 4.3 i. Survey Control SN 4	Any systematic bias in elevation data will be corrected and must be reported to client.	We understand that Ortho metric heights of elevation data derived using EGM2008 will be compared with respect to height control to be established from Survey of India GTS Benchmark and the bias will be estimated and then the correction will be applied to the elevation data. Please confirm.	Clause No 3.3.1.2 of TOR clearly defines how to bidder will undertake the Ground Control Survey .hence, Tender condition shall remain unaltered.
15		General			We understand that the bidder need not submit any Work Methodology and Work Plan with the bid. Please confirm.	Bidder must submit the bid according to ITB clause no 11 & 13 of Bid Document.
16		General			We understand that all six corridors will be awarded to one single successful bidder. Please confirm.	Bidding document is self explanatory.Hence, Tender condition shall remain unaltered.
17		General			The Bid requirements are exhaustive and involves lot of external agency certification for the data / document to be submitted. Hence, to enable prepare a comprehensive document involving participation of bidders' consortium with Foreign Partners / international experts, NHSRCL is requested to kindly consider and extend the Bid submission date by at least 15 days' to 25 Mar 2020 or 15 days with effect from the date of issue of clarifications requested, whichever is later. NHSRCL is requested to kindly consider and extend bid submission date to facilitate better participation.	Please Refer Addendum No. 02, Item no 1.
18		General			Whether NHSRCL will provide the Topo sheets of SOI if not cost of the same is to be reimbursed on actual basis. NHSRCL will have write to SoI and assist us procuring these topo sheets. It will also take time which needs to consider in the deliverable of project.	Annexure-2 (TOR) of Bidding Document mentions that which data will be provided by NHSRCL.Further, in case of collecting any other essentioal information/document, NHSRCL may write to GOVT bodies for providing assistance.Nothing will be paid extra to the contractor on this account.
19	Page no. 51	SECTION V TERMS OF REFERENCE Annexure -2(TOR)	Clause 3	kmz file of tentative alignment of HSR corridor derived from desktop study done by NHSRCL. kmz file for Delhi-Varanasi corridor shall be provided at the issue of LOA. NHSRCL shall provide the kmz file of subsequent corridors at the interval of approximately 2 months. The sequences of corridors shall be decided after the award of contract.	Can we get a copy of Standard documents mentioned on Page 51 of 128 for all items other than item under S.NO. 3 which will be given with LOA.	Tender Condition shall remain unaltered.
20		General			Could you share with us the route proposal for all the six corridors done by NHSRCL as deskwork.	Tender Condition shall remain unaltered.
21					There is huge cash flow required for LIDAR survey and other activities in the beginning of the project, therefore we would request for the provision of 20% mobilization advance against the BG.	Tender Condition shall remain unaltered.



Sr. No	Page. No	Section No.	Refer Clause No.	Existing Clause	Bidder Query	Employer's Reply
22	Page no.33	SECTION V TERMS OF REFERENCE	Clause 3.2.4	DEM/DTM correction and referencing to MSL: The contractor shall undertake detailed ground control using DGPS to reference the generated/supplied satellite based DEM/DSM to Mean Sea Level using Survey of India benchmarks through creation of a local geoid model through standard methods with the prior approval of NHSRCL. Minimum one ground control point shall be established in an area of up to 50 sq km for Satellite DEM creation/correction. Extra Check GCPs (not less than 20 no.) shall be established as per the direction of NHSRCL for checking the accuracy of the final DEM developed. The same control network shall be further used for Aerial LiDAR survey after appropriate densification.	As per clause 3.2.4 of Terms of Reference, the Ground Control Points (GCP) to be established are about 21 nos. per 50 sq. Km. Kindly clarification as to whether these are 51 nos. for 3 options.	The Terms of Reference (TOR) of Bidding Document is clearly defined that, with reference to satellite data analysis done by contractor, the route of Final alignment will be decided by NHSRCL.Affer finalization, GCP shall be established for finalized alignment. Hence, tender condition shall remain unaltered.
23		General			A Lump Sum bid has been asked for. It is also mentioned that fixed payments for items will be considered for release in stages as per Payment terms. We need clarifications as to whether additional payments will be considered for increase in quantities as per actuals.	Contract will be delt according to condition of contract mentioned in the Bidding Document.
24		General			Also as requested earlier order to make a very competitive proposal & understand the bid well, we would like to make a kind request for Pre-bid meeting & also to EXTEND the date of bid submission till 25th March 2020.	For Pre-bid Meeting: Tender Condition shall remain unaltered. For Extend the date of Bid Submission: Please Refer Addendum No. 02, Item no 1.
25		General			We request you to clarify if participating in the above tender would impose any restrictions on the company participating in the construction related works/tenders at a later stage for any of six high speed rail corridors under consideration.	The clause no 20: Conflict of Interest,ITB, Section III of Bidding document cannot cover the futuristics issues of contratual obligation. However, your requested query is related to participating in future tenders. Your query is futuristic and participation in future HSR Tenders will be governeed by the prevailing standard contractual conditions of specific lending agency of HSR Projects/ Govt. of India.
26	Page no. 24	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY		I. Bidder must have satisfactorily completed atleast One single contract of "Aerial ILDAR survey work including data processing for at least 100 km for any linear project in India carried out for Railways, NHAI, CPWD, MES, DOT, State PWD or any other Central / State Government Undertaking" during the last seven years prior to Closing date of submission of present tender (Refer Note-3). Form 4 & 6 to be filled and submitted.	The clause should be changed to Libdre and the contract of "Aerial Photography/Aerial LIDAR survey work including data processing for at least 1000 sq.km for any linear/area based project in India or abroad carried out for Railways, NHAI, CPWD, MES, DDT, State PWD or any other Central / State Government Undertaking" during the last seven years prior to Closing date of submission of present tender.	Tender Condition shall remain unaltered.
27	Page no. 24	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	no. d	ii. Bidder must have satisfactorily completed atleast One single contract of "Final alignment design work for at least 100 km for Railway! Highway! Road/ Metro project in India carried out for Railways, NHAI, CPWD, MES, D	The clause should be changed to ii. Bidder must have satisfactorily completed atleast One single contract of "Final alignment design work for at least 700 km for Railway / Metro project in India carried out for Railways or any other Central / State Government Undertaking* during the last seven years prior to Closing date of submission of present tender.	Tender Condition shall remain unaltered.
28	Page no. 23	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	no.3	Aircraft (excluding Drones & Unmanned Aerial Vehicles) / Helicopte. Nos. 1 Own/Lease: Own/Lease Documents (Form 15 to be filled and submitted): 1. Ownership documents/ Lease Copy 2. NSOP copy of Aircraft operator	Aircraft / Helicopte. Nos. 1 Own/Lease: Own	Please Refer Addendum No. 02, Item no 03.



Sr. No	Page. No	Section No.	Refer	Existing Clause	Bidder Query	Employer's Reply
	Page no. 25 & 26	INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION		Manpower: Sr. Photo-grammetry Expert (A) Minimum Number: 1 Credential (Form 7 to be duly filled and submitted by the bidder): i. Graduate in Civil Engineering/ M Sc Geomatics/ M Sc Geology/Surveying and Mapping with minimum of 5 experience in Photogrammetry related works Maximum Marks (*): Max 7	Manpower: Sr. Photo-grammetry Expert (A) Minimum Number: 1 Ciredential (Form 7 to be duly filled and submitted by the bidder): iii. Relevant experience in Linear/ Area project Maximum Marks (*): Max 3	Tender Condition shall remain unaltered.
29		METHODOLOGY		Ii. Relevant experience in Linear project Maximum Marks (*): Max 3 Alignment Design Expert (B) Minimum Number: 1 i. Graduate in Civil Engineering) 5-year professional experience in the field of alignment design of Raliway/Highway/ Metro/ Road project using Autodesk 3D Civil/ Bertley Rali Track or Similar software Maximum Marks (*): Max 7 ii. Relevant experience in Railway/ Highway/ Metro project Maximum Marks (*): Max 3 Sr. LiDAR Professional (C) Minimum Number: 1 ii. Graduate in Civil Engineering/M Sc Geomatics/M Sc	Alignment Design Expert (B) Minimum Number: 1 ii. Relevant experience in Linear/ Area project Maximum Marks (*): Max 3	
					Sr. LiDAR Professional (C) Minimum Number: 1 iii. Relevant experience in Linear/ Area project Maximum Marks (*): Max 3	
30	Page No. 22	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY		The tenderer's bid will first qualify the minimum required criteria and thereafter shall be evaluated based on Combined Qualify and Cost Based Selection (CQCBS) and procedures described in this tender document. Overall final evaluation of the bidder will be done on the basis of technical as well as financial scores achieved by the bidder. The weightage of technical and financial scores will be 70% and 30% respectively. The minimum technical score required to qualify is 70%. The financial bids of unsuccessful bidders will not be opened and will be returned un-opened. In case of one or no bidder scoring less than 70%, Employer may relax this requirement at its discretion to 60%.	Selection criteria shall be based on 70:30 QCBS mode. No CQCBS criteria shall be applied for selection.	Please Refer Addendum No. 01, Item no 7.
31	Page No. 26	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY		S.N (A) Credentials: Average Annual Turnover in Last 3 Financial years Maximum Marks: 10 Forms: Form 2	S.N (A) Credentials: Average Annual Turnover in Last 3 Financial years Maximum Marks: 10 Forms: Form 2 Credentials: Average Annual Turnover in Last 3 Financial years Up to a maximum of 70 Crore Maximum Marks: 7 Forms: Form 2 Credentials: Average Annual Turnover in Last 3 Financial years Up to a maximum of 45 Crore Maximum Marks: 5 Forms: Form 2	Tender Condition shall remain unaftered.
32	Page No. 26	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY		S.N (B) Credentials: Work Experience: Total length of Aerial LiDAR Survey for a linear project (km) along with data processing Maximum Marks: 30 Forms: Form 4 & 6	S.N (B) Credentials: Work Experience: Total length of Aerial LiDAR Survey for a linear project (km) along with data processing Maximum Marks: 30 Forms: Form 4 & 6 Credentials: Work Experience: Total length of Aerial Photogrammetry/Aerial LiDAR Survey for a linear/area project with minimum of 2000 (km/sq.km) along with data processing Maximum Marks: 20 Forms: Form 4 & 6 Credentials: Work Experience: Total length of Aerial Photogrammetry/Aerial LiDAR Survey for a linear/area project with minimum of 1000 (km/sq.km) along with data processing Maximum Marks: 10 Forms: Form 4 & 6	Tender Condition shall remain unaltered.



Sr. No	Page. No	Section No.	Refer	Existing Clause	Bidder Query	Employer's Reply
33	Page No. 26	SECTION-III INSTRUCTIONS TO BIDDERS (ITB) ANNEXURE I BID QUALIFYING CRITERIA AND EVALUATION METHODOLOGY	Clause No. 24.2	S.N (C) Credentlals: Work Experience: Work Experience: Total Linear length (km) of Alignment design of Railways/ Highways/ Road/ Metro. Maximum Marks: 30 Forms: Form 5 & 6	S.N (C) Credentials: Work Experience: Total Linear length of 1200 (km) & above of Alignment design of Railways/ Metro. Maximum Marks: 30 Forms: Form 5 & 6 Credentials: Work Experience: Total Linear length of 900 (km) & above of Alignment design of Railways/ Metro. Maximum Marks: 20 Forms: Form 5 & 6 Credentials:Work Experience: Total Linear length of 700 (km) & above of Alignment design of Railways/ Metro. Maximum Marks: 10 Forms: Form 5 & 6	Tender Condition shall remain unaltered.
34	Page No. 4	NOTICE INVITING TENDER (NIT)	5	No pre-bid meeting is planned for this tender.	A prebid meeting to be conducted for open discussion and clarifications.	Tender Condition shall remain unaltered.
35	Addendum No. 01	Section I, NIT, Sub Clause 6, Page 4 of 128 Page 1 of 23 of Addendum No. 01	Item No.1	6. Date of Receipt and opening of Technical Bids: The completed Bids must be dropped in the nominated tender box or delivered to the address below during office hours from 10.02.2020 onwards but not later than 15:00 on 20.03.2020. Technical Bids will be opened at 15:30 hrs on 20.03.2020 in the presence of Bidders who choose to be present. NHSRCL will not be responsible for any delays in Bidder obtaining the Bidding documents from NHSRCL/Website or receipt of the submitted bid by NHSRCL. However, NHSRCL reserves the right to postpone/defer the opening, if it deems fit.	We kindly request you to extend the bid submission date so that at least 3 weeks' time period allowed for the submission of bids from the date of publishing of the clarifications/amendments to the above-mentioned queries.	Please Refer Addendum No. 02, Item no 1.
36	Addendum No. 01	Section I, NIT, Sub Clause 6, Page 4 of 128 Page 1 of 23 of Addendum No. 01	Item No.1	6. Date of Receipt and opening of Technical Bids: The completed Bids must be dropped in the nominated tender box or delivered to the address below during office hours from 10.02.2020 onwards but not later than 15.00 on 20.03.2020. Technical Bids will be opened at 15:30 hrs on 20.03.2020 in the presence of Bidders who choose to be present. NHSRCL will not be responsible for any delays in Bidder obtaining the Bidding documents from NHSRCL/Website or receipt of the submitted bid by NHSRCL. However, NHSRCL reserves the right to postpone/defer the opening, if it deems fit.	We are working closely with our associates for preparation of all requisite documents for bid submission as per the bid requirements and believe that the provided timelines for the preparation and submission of such a strategic and important bid needs a suitable extension. In view of this, we sincerely request an extension of the bid submission timeline by 3 weeks ie. till 31st March 2020. This will enable us to prepare a comprehensive bid document for successful submission.	Please Refer Addendum No. 02, Item no 1.
37	Addendum No. 01	Section I, NIT, Sub Clause 6, Page 4 of 128 Page 1 of 23 of Addendum No. 01	Item No.1	B. Date of Receipt and opening of Technical Bids: The completed Bids must be dropped in the nominated tender box or delivered to the address below during office hours from 10.02.2020 onwards but not later than 15.00 on 20.03.2020. Technical Bids will be opened at 15:30 hrs on 20.03.2020 in the presence of Bidders who choose to be present. NHSRCL will not be responsible for any delays in Bidder obtaining the Bidding documents from NHSRCL/Website or receipt of the submitted bid by NHSRCL. However, NHSRCL reserves the right to postpone/defer the opening, if it deems fit.	With reference to the above-mentioned tender, we are in the process of finalization of the bid response along with qualified OEMs as our partner for comprehensive response. This activity is anticipated to take considerable time to respond responsibility and we would like to submit that we need an extension of due date for bid submission. Our request would be to extend the submission date till 31st March 2020.	Please Refer Addendum No. 02, Item no 1.

Place : New Delhi Date : 13th March 2020 S/d General Manager (Contract) NHSRCL

