

Government of India Archaeological Survey of India Central Region BHOPAL

REQUEST FOR PROPOSAL

Preparation of Photogrammetric Survey Plan of The Centrally Protected Monuments / Sites Covering Protected, Prohibited and Regulated areas

Archaeological Survey of India
Central Region
Bhopal

REQUEST FOR PROPOSAL

Preparation of Photogrammetric Survey Plan of The Centrally Protected Monuments / Sites Covering Protected, Prohibited and Regulated areas

Ref.: 1/12019/Sur. Map/Tender-966 Date: 07.02.2019

The Regional Director, Archaeological Survey of India, Central Region, Bhopal on behalf of the President of India, invites the Proposals in two bid formats (the technical bid and the financial bid) for preparation of Photogrammetric" Survey Plans' covering protected, prohibited and regulated area of centrally protected monuments/sits through interested agencies having expertise in the field.

The interested bidder should submit the on-line technical Bid and the financial bid in two envelop indicating technical bid and financial bid complete in all respects.

For detail information please log on to http://asi.nic.in & www.eprocure.gov.in & CPP
Portal

Deputy Superintending Archaeologist Archaeological Survey of India Central Region, Bhopal

REQUEST FOR PROPOSAL

Preparation of Photogrammetric Survey Plan of The Centrally Protected Monuments / Sites Covering Protected, Prohibited and Regulated areas

IMPORTANT DATES

1.	Cost of application DD should be submitted	25.02.2019 at 15.00
	before	
2.	EMD DD should be submitted before	25.02.2019 at 15.00
3.	Estimated Cost	43,80,533/-
4.	Performance security	3,28,540/-
5.	Tender System (Technical bid and Financial bid) on line in hard copy envelop with tender cost/EMD, FDR (Physically) submitted by Office the Regional Director, ASI, Central Region, Bhopal	25.02.2019 at 15.00
6.	Date of uploading in web site	07.02.2019 at 18.00
7.	Date of downloading in web site	08.02.2019 at 11.00
8.	Date of Publication in Press	09.02.2019
9.	Last date for issue of tender	25.02.2019
10.	Date and time of submission of tender	25.02.2019 at 15.00
11.	Date and time of opening of tender	26.02.2019 at 15.00

Instructions to the bidder Chapter 1: Background and Scope

1.1 Introductions

Archaeological Survey of India (ASI) intends to prepare Photogrammetric survey maps of centrally protected monuments and sites covering the Protected, Prohibited and Regulated areas around the centrally protected monuments in phased manner under the jurisdiction of Central Region, which are located at Bhopal Circle, Sarnath Circle, Lucknow Circle and Raipur Circle respectively.

List of the monuments / sites for which Survey Maps are to be prepared are given as under:

	Nome of management	Loostian/District	Dueteeted
Sr.	Name of monument	Location/ District	Protected,
No.			Prohibited and
			Regulated areas
			in Acres
			(Approximately)
1.	Chitragupta or Bharatji's Temple	Khajuraho District, Chhattarpur (M.P.)	
2.	Chopra or Square Tank	Khajuraho District, Chhattarpur (M.P.)	
3.	Lalguan Mahadeva Temple	Khajuraho District, Chhattarpur (M.P.)	225.37 Area
4	Nandi Temple	Khajuraho District, Chhattarpur (M.P.)	(in Acres)
5	Parvati Temple	Khajuraho District, Chhattarpur (M.P.)	
6	Varaha Temple	Khajuraho District, Chhattarpur (M.P.)	
7	Fort	Rahatgarh, District Sagar	284.88 Area
		(M.P.)	(in Acres)
8	Gulab Bari	Faizabad	148.29 Area
		Tehsil- Faizabad District Faizabad (U.P.)	(in Acres)
9	Ancient mound	Tilmapur District Varanasi	90.60 Area
		(U.P.)	(in Acres)
10	Closed Cemetery	Rajghat, District Varanasi	101.64 Area
		(U.P.)	(in Acres)
11	Remains of a fine massive brick fort	Chandrauti, District Varanasi	117.57 Area
		(U.P.)	(in Acres)
12	Ruins of a large Chandella Temple.	Ramnagar Tehasil-Mau,	124.736 Area
		District Chitrakut (U.P.)	(in Acres)
13	Emperor Aurangzeb's Pavilion	Bagh Badshahi (Khajua), District Fatehpur (U.P.)	246.575 Area
14	Entire compound known as Bagh Badshahi.	Bagh Badshahi (Khajua), District Fatehpur (U.P.)	(in Acres)
15	Maqbara of Nawab Diler Khan.	Shahabad Tehsil-Shahabad	132.409 Area
		District Hardoi (U.P.)	(in Acres)
16	Chaurasi Tomb of Lodhi Shah Badshah.	Kalpi Tehsil-Kalpi, District	140.064 Area
		Jalaun (U.P.)	(in Acres)
17	Ancient brick temple. Built on the same plan as	Kanchilipur Tehsil-	140.077 Area
	Bhitargaon Temple.	Ghatampur Distrcit Kanpur Dehat (U.P.)	(in Acres)

1.2 Scope of the Work

- I. Undertaking field survey of monuments and sites, studying/understanding their protected, prohibited and regulated areas for the purpose of preparation of Photogrammetric Survey Plans.
- II. Mapping/ recording all structures on as per the parameters stipulated under clause 1.3 on the Survey Plan,
- III. Fixing Benchmark at one or more locations as per the site requirement.
- IV. Fixing reference survey points at one or more location.
- V. Delivering Survey Plan in Hard copy as well in soft copy.

1.3 Preparation of Survey Plan: following parameters shall be adhered to and incorporated in photogrammetric survey plan:

- (i) Contouring, preferably at one meter interval. It can vary depending of landscape if it is hilly plain terrain with cliffs then contour intervals can be increased. If the landscape is plain then it can be reduced to 0.5 meter.
- (ii) Fixing of Bench Mark on ground at one or more locations.
- (iii) Fixing reference survey points on ground at one or more locations,
- (iv) Protected area of monument or site needs to be mapped in such a manner that all structures and features present within the area can be easily identified.
- (v) Mapping of all structures within the area of the survey on the plan,
- (vi) Mapping other features like tank, embankment, mud fortifications, remains of ancient structures, important land marks, building, etc. on the plan
- (vii) Indicating roads and pathways on the plan,
- (viii) Indicating, garden area, green area, open areas, water bodies on the plan,
- (ix) Indicating trees,
- (x) Indicating sewer lines, open drains and water supply lines, rivers, streams, rivulets, etc.
- (xi) Indicating portion of sea, if falls within the area of Survey plan.
- (xii) The Survey Plan shall be gridded suitably considering size of the area covered under survey plan.
- (xiii) Any other feature that is required to be incorporated in consultation with the Regional Director ASI Central Region
- (xiv) Additional 10/20 meter area beyond the exterior limit of regulated area shall be included in the survey plan for better understanding.
- (xv) Apart from the above parameters, other information to be furnished in the photogrammetric map are specified as; height of the highest building present in the prohibited, first regulated (100-200 m) and second regulated (200-300 m) areas direction wise; height of the monument; précised G.P.S coordinates of the monument; close 3D model / photography covering the protected, prohibited and regulated area of the monument; close 3D photography, showing the condition of the monument and its premises; the common land use in the prohibited and regulated area of the monument direction wise; naming and demarcation of

existing government, public, religious, and other buildings; demarcation of Vernacular architecture if present; area calculation in square meters / acres, of the land present under the protected, prohibited and regulated boundaries of the monument; demarcation of natural elements such as – water bodies, rivers, mountains, forest lands etc. if present; the forms of open spaces present; types of roads present – metalled, bitumen, cement concrete, earthen, paved etc.; total area in square meters covered under the roads and pathways present in the prohibited and the regulated area of the monument; total area of the land covered under the circulation pathways inside the protected limit of the monument.

1.4. Conditions to be observed during survey:

- i. Establishing precise and adequately timed Ground Control Points (GCP) using Total station with DGPS. OR The ROAV should be enabled with RTK kit for precise geographic location.
- ii. Aerial Photography capture High Resolution ≤10 cm or less GSD aerial imagery should be captured for the entire region. The photography shall be collected utilizing a direct digital aerial mapping.
- iii. The digital aerial camera system must be equipped with GPS and inertial measurement unit (IMU) systems. As ASI envisages completing the Project with as soon as possible, the preference shell be given to Aerial Photography with modern sensors and thereby minimizing the Ground control without affecting quality of deliverables.
- iv. Photography shall not be taken when the ground is obscured by snow, haze, fog, dust, or when cloud shadows shall appear on more than five percent (5%) of the area in any one photo.
- v. The proposed approach to aerial photography acquisition should outline the respondent's intended flight plan including proposed date and time of photography, flight height, scale, flight lines, end lap and side lap, planned aerial equipment, materials, and relevant quality control procedures.
- vi. <u>Crab</u> must not exceed five-degrees between any two consecutive flights, nor more than three degrees on anyone flight line. The aerial acquisition shall extend two exposures beyond the mapping limits to obtain full or the photo images and to reach pre-targeted ground control points, as necessary.
- vii. Full Analytical Aerial Triangulation (FAAT) techniques shall be used in conjunction with ground control to establish a consistent horizontal datum for the entire project area. The bidder should satisfy himself regarding:
 - a) Gaps in stereo coverage
 - b) Differentially corrected GNSS/GPS and IMU data of exposure stations.
 - c) Imaging of pre-pointed targets on aerial digital photographs.
 - d) Differentially corrected GNSS/GPS data of pre-pointed controls.
 - e) Image characteristics including ground sampling distance of aerial digital photography data

- viii. Geo referencing & Creation of Ortho Photo, DEM Contours, for the entire project area should be created to support the generation ≤10 cm GSD ortho photos. The contour intervals of the area surveyed should be at least 0.5 m. Apart from the topographic, features captured during feature extraction in Stereo mode stage (streams, drainage, embankments, raised field bunds, roads, railways, water-bodies etc.),
- ix. Break lines shall also be captured comprehensively wherever slope changes are visible in stereo model due to complicated terrains or man-made structures. Proper use of hard and soft break lines shall be made in DTM editing.
- x. DTM points shall be captured automatically, semi-automatically or manually, as per the condition of the terrain and land use / land cover. It is required to produce digital colour orthophoto images for the entire Area of Interest in exactly < 10 CM GSD native pixel resolutions.
- xi. Orthophoto files must have no overlap and must be precisely edge matched and contrast and tone balanced so as to appear to be a continuous photographic image over the entire AOI. Upon completion of the aerial photography, and as soon as possible afterwards, the bidder shall provide with one or more sample digital image(s) in raw tiff format for overall image quality verification.
- xii. The images procured shall be Tonal balanced, mosaic ked and feature enhanced for achieving the best result for the vectorization. All ground positions determined shall be in the common reference system that is WGS84 Datum and UTM Projection. Final values shall be in meter and 2 places of decimal.
- xiii. As far as possible Differential Global Positioning System (DGPS) instruments shall be used for collection of Ground Control Planning (GCP), and all DGPS equipment must be set-in to GCS -World Geodetic System 1984 (WGS84) Datum uniformly.
- xiv. RAW and post-processed DGPS readings along with original source file for each location shall be submitted. As soon as the work is completed, in case to TS, original downloaded file and a CSV file must be submitted along with raw data clearly depicting the occupies station, back station and the co-ordinates in NEZ format.
- xv. Within 20 days the firm should communicate the work.
- xvi. Before finalizing it will show to the Regional Director, Central Region, Bhopal.

1.5 Derivable:

1.5.1 Hard Copy Maps:

i. The bidder shall submit key plan of the site in 1:1000 scale in Hard Copy. All plans, indicating the contour lines, demarcating all permanent features as

- mentioned above. Contour Plan with contour drawn at 0.5m interval for specific feature.
- ii. All the maps and drawings should be prepared in digitized forms using Inkjet/ Pen plotter and standard computer software like Auto Cad (latest version) on standard A0 size polyester base film.
- iii. Contour maps at site- The grids for the survey work shall be established in N-S & E-W direction (Corresponding to magnetic North) and the survey reference shall be spheroid WGS 84
- iv. The bidder shall submit three hard copies and two soft copies in CD/DVD of all draft reports for review and approval.
- v. After approval, specified prints of all the maps on polyester base film/high quality paper along with two sets in soft format in a CD/DVD shall be submitted.

1.5.2 Drawings

- (i) All drawing shall be prepared on Auto CAD. The Auto CAD drawings shall have different layers for different features as mentioned above and in consultation with the officer-In-Charge.
- (ii) X, Y, Z co-ordinates of all spot/ground points shall be provided in CSV file as directed by Engineer in-charge with point numbers and feature coding as per list of codes given by Engineer In-Charge.
- (iii) The drawings should contain the features as given in B.4.

1.5.3 Softcopy Maps:

- (i) All the raw data generated through Differential Global Positioning System (DGPS)/ Total Station Survey (TSS) should be processed to provide the output.
- (ii) All the raw and processed data in forms becomes the property of ASI and must be handed over to ASI. All electronic data should be copied in a hard disc and given to ASI.

Chapter 2: Tendering Process:

- **2.1. Eligibility Criteria**: The bidder should fulfill the following eligibility criteria (proof of each to be submitted).
 - (i) The Bidder should be a registered company/Partnerships/Proprietor.
 - (ii) Bidder should have valid PAN Number.
 - (iii) The Bidder should also have Goods and Service Tax (GST) Number.
 - (iv) The Bidder shall possess necessary survey equipments for Photogrammetric survey to be executed
 - (v) The bidder must possess the necessary licensed Photogrammetric software for processing of data and a valid drafting software which is licensed for a

- minimum of 1 year. Proof of the same to be submitted for both software platforms.
- (vi) The bidder must have undertaken at least five projects of Photogrammetric survey for topography, for Government/reputed public sector companies or similar bodies. The area should be covered 200 acre and above individually. At least three work completed as per AMASR Act.
- (vii) The bidder must have executed at least two types of Photogrammetric survey projects such as internal mapping and external mapping for ASI.
- (viii) The bidder should ensure that no relative of him or his relatives are staff of ASI in any capacity.
- (ix) Documentary evidence must be submitted in the form of Work Orders and Experience Certificates in support of above claims. Any statements with regards to above qualification criteria without proof will be assumed to be invalid and agency will be disqualified on that ground. The only agencies fulfilling all the above criteria will be shortlisted technically.
- (x) The bidder on qualification in the technical bid shall have to submit data and/or give a demonstration on the completed projects done covering parameters specified in chapter 1, above.

2.2. Site Visit:

- i. Any site information given in this tender document is for reference only. The bidder is advised to visit and examine the site of works and its surroundings and obtain ground information for himself at his own responsibility and cost. All information that may be necessary for preparing the tender and for the execution of the assignment. The bidder shall be deemed to have inspected the site and its surroundings beforehand and taken into account all relevant factors pertaining to the site in the preparation and submission of the tender.
- ii. All cost/ expenditure for visiting the monument or site and other contingencies involved for the purpose of preparing Survey Plans shall be borne by the bidder.
- iii. The bidder and any of his personnel or agents may contact the In-Charge of Sub Circles for the purpose of such inspection, but only upon the express condition that, the bidder, his personnel and agents, will release and indemnify the Engineer or his representatives from and against all liability in respect of such inspection and will also be responsible for death or personal injury, loss or damage to property and any other loss, damage, costs and expenses incurred as a result of the inspection.
- iv. It is the responsibility of bidders to visit the site and obtain all information necessary for the purpose of preparing Tenders. The bidders must inspect and fully satisfy themselves as to the requirements and extent of the assignments.
- v. The bidder should inform about schedule of site visit well in advance for better communication

2.3. Tender Document / proposal:

- i. The tender documents can only be downloaded from the departmental website i.e. http://asi.nic.in/and Central Public Procurement Portal http://eprocure.gov.in/. The tender documents contain the schedules stated below and should be read in conjunction with any Addenda/Amendments issued subsequently.
 - a) Instruction to bidders
 - b) Annexure-I, Details of the Bidder
 - c) Annexure-II, Price Bid
 - d) Annexure-III, Terms of Reference
- ii. The bidder shall examine carefully all the contents of the tender documents including instructions, conditions, terms, specifications and drawings and take them fully into account before submitting his offer. Failure to comply with the requirements as detailed in these documents shall be at the renderer's own risk and tender submission will render the tender liable for rejection. Pursuant to clause 3 above, tenders which are not responsive to the requirements of the tender conditions will be rejected.

2.4. Clarification on Tender Document / Proposal:

- i. At any time prior to the deadline for submission of tenders, the Regional Director, ASI Central Region, may for any reason, whether on his own Initiative or in response to a clarification by a prospective bidder, modify the tender documents by issuing addenda.
- ii. A bidder requiring any clarification regarding the tender documents contact the Regional Director, ASI, Central Region (at www.rdcentralasi.gov.in) through e-mail only. The queries will be responded which were received 3 days prior to the deadline for submission of tenders. The queries will be uploaded in the web site www.rdcentralasi.gov.in & CPP Portal only including a description of the enquiry, but without mentioning the source of the enquiry. It is to be noted that no queries, clarifications will be received after the period stipulated above.
- iii. All prospective bidders are requested to browse the web site for information. It is deemed that they are fully aware of the corrigendum so issued once they bid for the work.
- iv. Any amendments thus issued will be hosted on the website up to two days prior to the dates specified for submission of the bids. All the bidders who have downloaded the bid document shall verify if any such amendment/modifications have been issued before submitting their bid and shall take cognizance of and include such amendment(s) in their submission. In any case, the amendment(s)/ modification(s) if any shall be binding on the

- bidder. No separate notice/intimation of amendments/modifications will be sent to those who have downloaded the document from the web.
- v. If any addendum is issued, reasonable time will be given to bidders to take the corrigendum into account in preparing their tenders, in which case, the authorities may extend the deadline for submission offenders.
- vi. While all efforts have been made to avoid errors in the drafting of the tender documents, the tenderer is advised to check the same carefully. No claim on account of any errors detected in the tender documents shall be entertained.

2.5. Submission of Bids/E-Tender:

- i. The bid in hard copy only shall be submitted separately in two envelopes System as follows.
- ii. The tender and all correspondence and documents related to the tender, exchanged between the bidder and the Regional Director, ASI, for Central Region shall be written in the English Language only.
- iii. Any litigation arising out of this assignment shall only adjudicate before the competent court of law within the jurisdiction of the Hon'ble High Court of M.P. Jabalpur Bench. Bids in open condition or through e-mail or in any other form will not be accepted.
- iv. The completed bid must be uploaded through online system on www.rdcentralasi.gov.in before <u>15.00 hrs</u> on <u>25/02/ 2019</u>. The bids will be opened and processed thereafter as per the schedule given above.
- v. The Tender EMD Cost in D.D. may be sent by courier/speed post/dropped at the tender box in person as per the convenience of the bidder. However ASI will not be responsible for the non-receipt or delayed receipt of the tender. Any tender received beyond the closing hours through courier or post will not be accepted and will be returned to the sender.
- vi. In the event of the date for the submission of tender is declared a holiday, the bids will be received up to the appointed time on the next working day. Other schedules will be changed accordingly.
- vii. The bidders shall bear all costs associated with the preparation and submission of its bid, including cost of technical presentation, preparation of the samples etc. ASI will in no case be responsible or liable for those costs, regardless of the outcome of the tendering process.
- viii. No bid may be modified subsequent to the submission of bids.

2.6. General Instructions:

2.6.1. Submission of Technical Bid:

i. The sealed envelope should superscripted "Technical Bid for Preparation of Survey Plans covering Protected, Prohibited and Regulated area of centrally protected monuments and sites around falling within Central Region".

- ii. The name and the address of the firm should be clearly stamped/printed on this cover.
- iii. DD of EMD Should be given in separate envelope. Its cover should inscribed
 - a) D.D in favour of the Superintending Archaeologist, ASI, Bhopal Circle, Bhopal and payable at Bhopal for Rs.1,09,513./- towards EMD. Submit before 25/02/2018 at 15.00 pm to Regional Director of Central Region;
 - b) Separate DD in favour Superintending Archaeologist, ASI, Bhopal Circle against cost of the tender.
- iv. DD of EMD Duly filled **Annexure-I** giving the eligibility details supported by documents as listed there in.
- v. Duly signed terms and conditions **Annexure-III uploaded on the website.**

2.6.2. Submission of Financial BID:

- i. The cover shall have the Memorandum providing the price bid, the price bid should be unconditional.
- ii. The cover should be superscripted "Financial Bid for preparation of Survey maps covering protected prohibited and regulated area of centrally protected monuments and sites within the Central Region of ASI".
- iii. The name and the address of the firm also should be clearly Stamped/printed on this cover.
- iv. This cover should contain the duly filled in price bid **Annexure-II** supported by the documents requested there in.

2.6.3. Bid Opening

- (i) The bids will be opened <u>at 15.00 on 26/02/2019</u> in the O/o the Regional Director, Archaeological Survey of India, Central Region, Office Hall, 1st Floor, Inner court Building, GTB Complex, TT Nagar, Bhopal.
- (ii) Prior to the opening the names of bidders, who have given advance notice for modification or for withdrawal of their bids from the tendering process well before the deadline for the submission of bids. Bid envelopes of the bidders who wish to withdraw from the tendering process, shall be returned to their representatives, if present or sent by post unopened to their addresses.
- (iii) Technical bid will be opened thereafter for verification of EMD, application money, qualification to participate in the technical evaluation.
- (iv) On satisfying the qualification, the bidder's background and previous work will be evaluated by the Technical Evaluation Committee.
- (v) Technical evaluation
- (vi) The bidder shall make a presentation before the Technical Evaluation Committee (TEC) about his technical resources and the survey work performed before. He may also show the outputs to the Technical Evaluation Committee along with the photographs of the site. The firm may also highlight the difficult or significant work done by them.

- (vii) TEC may at its discretion call for additional information/clarifications from the bidders. Such information has to be supplied within the time frame set out by the TEC, otherwise TEC shall make its own reasonable assumptions at the risk and cost of the bidders and the bid is liable to be rejected.
- (viii) For verification of information submitted by the bidders, the TEC may visit their sites/premises of the firm to verify the facilities, if required at its own cost. The TEC may verify confidentially the credentials and performance with their previous clients.
- (ix) The bidders shall provide all the necessary documents, samples and reference information as desired by the TEC. The bidders shall also assist the TEC in getting relevant information from the bidders' references. Seeking clarifications cannot be treated as acceptance of the instrument/bid'
- (x) After due evaluation of Technical capabilities of the bidders, through a marking system, the TEC would submit its recommendation clearly bringing out the technically accepted bids.
- (xi) After evaluation by the committee, the financial bids of short listed bidders will be opened either on the same day or on the subsequent day.

2.6.4. Earnest Money Deposit and Performance Security

A. Earnest Money Deposit

- (i) The bid must be accompanied by one D.D. drawn in favour of the Superintending Archaeologist, ASI, Bhopal Circle, Bhopal and payable at Bhopal for **Rs**. 1,09,513/-(**Rs**. One Lakh Nine Thousand Five Hundred Thirteen Only) towards **EMD**.
- (ii) No interest will be payable on the amount of the EMD. The EMD of unsuccessful bidders shall be returned without any interest on finalization of tender, through Speed Post/ Registered post with letter clearly indicating that the D.D. is released. If the unsuccessful bidder desires to collect the same through some other means he may inform in writing and in advance.
- (iii) EMD of the successful bidder shall be returned on submission of performance Security deposit as per rule of the value of the price quoted in the form of FDR $7^{\frac{1}{2}}$ on the Rs. 3,28,540/- only.
- (iv) If the successful bidder withdraws his bid in writing or fail to undertake the works within the stipulated time as mentioned in the supply order or did not submit the performance security, his EMD will be forfeited.

B. Performance Security Deposit:-

(i) The successful bidder should give an undertaking that the data observed and submitted are genuine, accurate and are not interpolated. High level of accuracy of data, which should only be empirical and not interpolated, is expected, binding on the bidder and he should ensure the same.

- (ii) The successful bidder must deploy the instruments and manpower to initiate the work within the stipulated time.
- (iii) The performance will be evaluated by an Experts Committee constituted for this purpose in a given schedule of time. If the Experts Committee is of the opinion that the standard of data generated by the bidder is below standard or inaccurate or arbitrary, the work order will be cancelled and the performance security will be forfeited.
- (iv) The Experts Committee will devise its own method of verification of data submitted by the firm and the decision of the Committee is final and binding on the firm. The data generated may also be checked and verified by an officer deputed by this office on day to day basis.
- (v) The successful bidder shall be required to submit performance security equivalent to as per above said rule of the order value for the satisfactory performance/completion of the complete order in the form of FDR drawn in favour of the Regional Director, ASI, Central Region and payable at Bhopal seven days before the initiation of the work. On the production of performance security the D.D. of EMD will be returned to the bidder.
- (vi) If the performance security amount is not placed, the EMD will be forfeited.
- (vii) Performance security may be invoked if the firm did not initiate or complete the work within the stipulated time or their work is not up to the standards in the periodic evaluation by Experts Committee.

C. Other Conditions

- (i) Any bid received by ASI after the deadline for submission of bids prescribed above will be summarily rejected and returned unopened to the bidder at the address mentioned on the outer cover by Speed Post/Registered post.
- (ii) ASI will not be responsible for any postal delay or non-receipt/non-delivery of the bid. No further correspondence will be entertained on the subject.
- (iii) All the necessary data required for completing the Photogrammetric survey such as DEVELOPMENT PLAN ,CTS SURVEY ETC to be provided / or permission to acquire the same from the relevant department will be provided by ASI.
- (iv) A bidder cannot modify the bid to after the submission. Bidder may withdraw his bid through written submission to the opening authority before the expiration of deadline prescribed for submission of bids.
- (v) Bids shall be valid for 90 days from the date of opening. ASI holds the right to reject a bid valid for a period shorter than 60 days as nonresponsive without any correspondence.
- (vi) ASI reserves the right to accept any bid, and to cancel / abort the Tender process and reject all bids at any time prior to award of contract, without thereby the incurring any liability to the affected agency or agencies, of any obligation to inform the affected agency of the grounds for ASI action and without assigning any reason.

- (vii) The bid shall be submitted in the form of printed document. Bids submitted other modes or in unsealed envelopes shall not be entertained.
- (viii) Any effort by a bidder to influence ASI in its decisions on bid evaluation, bid comparison or award of the contract may result in the bid rejection.
- (ix) Queries will be answered through email/telephone only.
- (x) No bid less than 10% of the estimated tender value will be entertained and shall be considered INVALID.

3. Delivery Schedule and Penalty

- (i) The successful bidder shall initiate and complete the work within the stipulated time. Any delay in initiation or completion will be allowed at the sole discretion of the Regional Director, ASI, Central Region. If the request is rejected, the work order may be cancelled or penalty may be levied.
- (ii) At the discretion of the ASI, any delay beyond the approved time limit, will invite penalty @ 0.2% of the order value per day of default. This amount will be deducted from the invoice.
- (iii) The work will be checked at the field condition by ASI officials and Expert Committee for accurate performance.

4. Payment

- 1. The payment will be made through a FDR or remitted to the bidders account through NEFT / RTGES on production of a mandate form from the Bank within reasonable time.
- 2. All statuary deductions like TDS will be done as per rules.

Calculation of Surveyed Area:

- 1. Since the areas of the above said centrally protected monuments/sites are not well defined and highly irregular, the payment will be made on the basis area calculated from the final drawing.
- 2. The area calculated by the successful bidder may be submitted to experts from an external agency for verification. The decision arrived at by the independent expert will be final and binding on either side.
- 3. The payment will be released after the completion of the work in all respects. Part payment will be considered on the recommendations of the Experts Committee/evaluation of the data generated by the Department officials. The quantum will be decided by the ASI and there will be no negotiations on this aspect.

5. Arbitration:

GOVERNMENT OF INDIA Archaeological Survey of India Office of the Regional Director, Central Region, Bhopal

Name of the Work: Preparation of Photogrammetric Survey Plan of the Centrally Protected Monuments/ Sites covering Protected, Prohibited and Regulate areas.

Qualification Details of the Bidder (ALL ENCLOSURES ARE TO BE SIGNED WITH SEAL ON EACH PAGE)

SI.	Description	D.D. and date	Name of Bank	Amount Rs.
No.				
1	EMD			
2	Cost of application			

Note: All the enclosures should be signed by the authorized signatory with seal of the firm

360	ii oi tiie iiiiii			
1	Name of the firm participating in the bid			
2	Details of incorporation (Year and Place)			
	(State Sole Proprietor, Partnership, Private Limited or			
	Limited Firm) Attach Certificate of Incorporation			
3	Whether any Legal/Arbitration proceedings are instituted			
	against the agency or the Agency has lodged any claim in			
	connection with works carried out by them if yes, please			
	give details			
4	Address			
5	Name of the top executive with designation			
6	Telephone No: Mobile No.			
7	E-mail address			
8	Service Tax No:			
9	TIN			
10	PAN			
11	Total number of Photogrammetric survey executed for			
	Government departments / agencies (Attach copies of work			
	orders / performance certificate)			
12	List of Engineers/Surveyors employed	Attach separate		
	(along with their CV as separate attachment)	sheet, if required		
13	List of owned Equipments in possession with make, model,	Attach separate		
	year of manufacture, accuracy/specifications	sheet, if required		
14	List of Documents in support of the above			

Certificate that no relatives of any members of my firm are employees of Archaeological Survey of India in any capacity.

Signature and seal of Authorized Signature

GOVERNMENT OF INDIA Archaeological Survey of India Office of the Regional Director, Central Region, Bhopal

Name of the Work: Preparation of Survey Plan of the Centrally Protected Monuments / Sites covering Protected, Prohibited and Regulated areas.

I/We hereby tender for execution of work according for the President of India described in the under mentioned memorandum according to specification within the time specified and the rates specified therein subject to the conditions of the contract.

MEMORANDUM

SI. No.	Description of Work	Estimated Quantities	Rate (In INC) In figure and words	Unit	Amount (in INC) In figures and words exclusive of taxes	Remarks if any indicate the tax to be paid by ASI
1.	Preparation of Survey Plan of centrally protected monuments and sites covering protected, Prohibited and regulated areas.	Acres		Per Acre		

(i) Earnest Money: Rs.1,09,513. /-

(ii) Security: Deposit: Rs. 7.5% of the bill Amount 3,28,540/-

(iii) Time Allowed: 60 days

*Note: Areas of the above said centrally protected monuments/sites are indicative. The actual area should be calculated after the mapping and abased on map as per clause 1 .12 of Terms and conditions.

Signature of Bidder/Firm/Company

I/We have perused the complete proposal document and am / are willing to undertake and complete the assignments as per terms and conditions stipulated in the proposal document.

- a. Our offer is inclusive of all taxes, incidentals, and overheads, travelling and lodging expenses of deployed persons, printing and binding of reports all sundries and all other expenditure for execution of this services / assignment, but excluding Service Tax to complete the work as per terms and conditions and scope of work including deliverables.
- b. We undertake, if our Bid is accepted, to achieve completion of the various sections of the assignments within the period specified in this schedule.
- c. If our Bid is accepted we will furnish a performance security deposit of 10% of the order value within 7 days of receipt of assignment order in the form of FDR in favour of the Regional Director, Archaeological Survey of India, Central Region, Bhopal drawn from only scheduled Bank in India as security for the due performance of the work assigned.
- d. We agree to abide by this Bid for the period of 60 days from the date fixed for receiving the same or such further period as may be mutually agreed upon and it shall remain binding upon us and maybe accepted at any time before the expiration of that period. Should we fail to abide by our Bids during the above said period of 90 days or such extended period as mutually agreed to ASI shall be at liberty to forfeit the Earnest Money deposited by us.
- e. This Bid, together with your written acceptance thereof, shall constitute a binding contract between us.
- f. We understand that the ASI, Central Region reserves the right to amend the scope of Bid and value of contract under this assignment and reject or accept any bid including the lowest or cancel the Bid process and reject all Bids.
- g. We agree that the ASI, Central Region will not be liable for any such action and will be under no obligation to inform the Bidder of the grounds for such action.
- h. If our Bid is accepted we understand that we are held fully responsible for the due performance of the contract. Should this tender be accepted.

i.

I/We hereby agree to abide by and fulfil all the terms and provisions of the said conditions annexed here to so for as applicable, and/or in default thereof to forfeit and pay to the President of India or his successor in office the sum of money mentioned in the said conditions. A sum of Rs....../- is herewith forwarded in FDR as earnest money. If I/We fail to commence the work to specify in the above memorandum or if I/We fail to deposit the amount of security deposit specified in the above memorandum. I/We agree that the said President or his successors in office shall, without prejudice to any other right or remedy, shall be retained by him towards such security deposit. I/We further agree that the said President or his successors in office shall also be at liberty

to cancel the acceptance of the tender i	f I/We fail to deposit security a	amount to
aforesaid.		

	Signature of authorized signatory
Date	

The above tender is hereby accepted by me on behalf of the President of India.

Signature of the officer by whom the tender is accepted.

GENERAL TERMS AND CONDITIONS of the contract

- 1.1 In the contract (as hereinafter defined) the following words and expressions shall have the meanings hereby assigned to them except where the context otherwise requires.
 - a. WORK means "Preparation of Survey plans of Centrally Protected monuments and sites covering of protected, prohibited and regulated areas within the jurisdiction of Central Region of ASI as defined in the scope of work in Chapter 1 Instructions of Bidders".
 - b. "ASI/DEPARTMENT" means the Archaeological Survey of India, represented by the Regional Director, Central Region, Bhopal.
 - c. 'TENDER/ BID means the price offer to the Department for the execution and completion of the valuation assignment works and the remedying of any defects therein in all accordance with the provisions of the contract, as accepted by the Letter of Acceptance-Award letter.
 - d. "BIDDER/S" means the person or persons, firm, corporation, consortium or company who submits the BID for the subject services/assignment.
 - e. "CONTRACTOR / SURVEYOR" means the persons or firm or company whose tender has been accepted by ASI and the legal personnel, representatives or the successors of such firm or company and the permitted assigns of such persons or firm company
 - f. "LETTER OF ACCEPTANCE", "Award letter" refers to the letter communicating the formal acceptance of the bid by the Employer.
 - g. "AWARD PRICE' means the sum named in the Bid/proposal submitted by the successful Bidder with any modification thereof or addition thereto or deduction there from as may be made under the provisions contained in the proposal document.
 - h. "OFFICER IN CHARGE" means any official of the ASI deputed by the Regional Director, ASI, Central Region.
 - i. "Consultancy services/Services/Assignment" means the services to be provided by the Valour's as detailed in this bid document and under Terms of Reference brought out in Section III of this document.

Note:

- a. **Singular and Plural:** Words importing the singular also include the plural and vice versa where the context so requires.
- b. **Headings:** The marginal headings or notes in these General conditions shall not be deemed to be part thereof or be taken into consideration in the interpretation or construction thereof of the contract.
- c. **Protected Area:** Notified area of the monument or site or as specified by ASI.

- d. **Prohibited Area:** Every area, beginning at the limit of the protected area of the protected monument or site, as the case may be and extending to a distance of 100 meters in all directions.
- e. I. Regulated Area: Every area, beginning at the limit of prohibited area in respect of every protected monument or site and extending to a distance of 200 meters in all directions.

1.2 Commencement and Completion of Assignments

The successful bidder shall commence the work within 7 days from the date of issue of the award letter by the employer (i.e. intimation of the acceptance of the Bid and carry out the same expeditiously at whatever point or points and in such portion as employer may direct. The surveyor shall complete the works within 60 days from the date of commencement. During the assignment, the surveyor shall submit the Report as per the Terms of Reference.

1.3 Care and Diligence

The bidder shall exercise all reasonable care and diligence in the discharge of all technical, professional and contractual duties to be performed by them under this contract and shall be fully responsible to the Department for the proper, efficient and effective execution of their duties.

1.4 Taxes and Duties

The surveyors shall pay all taxes, levy, duty which they may be liable to pay to the State Governments and Government of India or other authorities under any law for the time being in force in respect of or in accordance with the execution of the work. The surveyors shall further be liable to pay such increase in the taxes, levy, duty, etc. under the existing law or which may become payables a result of introduction of any law. Increase in taxes, levy, duty, etc. and imposition of new taxes, levy, duty etc. shall not be ground or an excuse for claiming any extra or additional costs nor a ground or excuse for extension of time for completing the work. The surveyors are deemed to have included/ considered all payments to be made to them while quoting the proposal except Service Tax, which will be reimbursed as applicable over the quoted price.

1.5 Confidentiality

a. The surveyors shall treat all the documents and information received from the Department, submitted to Department and all other related documents /communications in confidence and shall ensure that all who have access to such material shall also treat them in confidence. The surveyors shall not divulge any such information without the prior shall written permission of Department. The surveyors shall return all the documents received from the Department from time to time after completion of the related works.

1.6 Suspension of the Contract

- a. If any of the following events shall have happened and be continuing, then Department may, by written notice to the surveyors, suspend in whole or in part, payment due thereafter to the surveyors under the contract.
- b. A default shall have occurred on the part of the surveyors in the execution of the contract.
- c. Any other condition which makes it unable for either party by reason of "Force Majeure" to successfully carry out the assignment/s or to accomplish the purpose of the contract.

1.7 Termination of Contract

a. Termination of Contract by Department during the period of contract, if the performance of the contractor not satisfactory or not up to the expectation of the Regional Director, ASI, Central Region or his representative or the expert committee, the contract will be terminated forthwith and the payment will be assessed by the Regional Director, ASI, Central Region on the recommendation of the expert committee for the value of work done. The decision of Regional Director, ASI, Central Region in this regard is final and binding.

1.8 Termination procedure:

- a. Upon and termination of the Contract under Clause-1.7, the surveyors shall take immediate steps to terminate the services in a prompt and orderly manner and reduce losses and to keep further expenditure to a minimum.
- b. Upon termination of the contract (unless such termination shall have been occasioned by the default of the surveyors), the surveyors shall be entitled to be reimbursed in full for such costs as shall have been duly incurred prior to the date of such termination.

1.9 Force Majeure:

- a. If either party is temporarily unable by a reason of Force Majeure or the laws or regulations of India to meet any of its obligations under the contract, and if such party gives to the other party written notice of the event within 7(Seven) days after its occurrence, such obligations of the party as it is unable to perform by reason of the event, shall be suspended for as long as the inability continues.
- b. Neither party shall be liable to the other party for loss or damage sustained by such other party arising from any event referred to in clause (a) above or delays arising from such events.
- c. The term "Force Majeure" as employed herein, shall mean "Act of God, Strike, Lockouts or other Industrial Disturbances, Insurrection, Riots,

- Epidemics, Landslides, Earthquakes, Storms, Lightning, Floods, Wash Outs, Civil Disturbances, Explosions and any other similar event not within the control of either party, and which, by the exercise of due diligence, neither party is able to overcome.
- d. Force Majeure shall not include any event which is caused by the negligence or intentional action of a party or such party's sub-valuers or agents or employees, nor any event which a diligent party could reasonably have been expected to both (A) take in to account at the time of the conclusion of this contract and (B) avoid or overcome in the carrying out of its obligations here under.

1.10 Responsibility of Surveyors during the assignment:

a. During the validity period of the surveyor services, the surveyors shall hold discussions with the Officer in Charge and/or the Experts Committee and make presentations on the Reports/findings.

1.11 Facility to be made available to Surveyors:

The Department shall provide the following resources and facilities to the surveyors:

- a. A limited space without affecting the day to day activities of the public visiting the monuments or living in the fort will be made available to the surveyor subject to availability at the discretion of the officer in charge. No rental charges will be levied for the working area spared to the surveyor during the tenure of the contract including extended period, if any granted.
- b. The Department may also provide a small space in a building, subject to availability and suitability of accommodation to keep his instruments and other wares. The safety of the material kept in the space provided will be at the risk of the surveyor.
- c. The Department may undertake to remove minimum vegetation whenever there is a problem of sighting. Such request should come well before to the officer in charge.

1.12 Terms of payment:

Procedure for Calculation of Surveyed Area

- a. Since the areas of the centrally protected monuments/sites of concerned circle under central region are not well defined and highly irregular, the payment will be made on the basis area calculated from the final by drawing.
- b. The area calculated by the successful bidder on the above basis may be submitted to expert from an external agency for verification. In that event, a

- representative from the successful bidder and ASI may present the method of calculation to the expert
- c. After hearing the sides, the decision arrived at by the independent expert will be final and binding on either side.
- d. The payment will be released after the completion of the work in all respects. The right to part payment is reserved with ASI. The quantum, if demanded, will be arrived on/at the recommendations of the Experts Committee/evolution of the data generated by the Department officials. The quantum thus arrived at may be accepted or reduced or rejected by the ASI and there will be no negotiations on this aspect.
- e. The payment will be made through a FDR or remitted to the bidders account through NEFT/ RTGES on production of a mandate form from the Bank within reasonable time.
- f. All statutory deductions like TDS will be done as per rules the surveyors shall be paid the lump sum fee/ charges (to be quoted by the bidder) for providing the services against the deliverables as stated in the Terms of Reference.

1.13 Extension of time for Completion

- a. In the event of The surveyor shall commence the assignment within the period named in the tender after the receipt by him of an order in writing to this effect from the ASI and shall proceed with the same with due expedition and without delay except as may be expressly sanctioned or ordered by the Department or be wholly beyond the control of the surveyor. The surveyor shall maintain the Total amount of progress required as per schedule. If the progress of assignment is held up owing to circumstances, which in the opinion of the engineer are beyond the control of the surveyor, such as war, stormy weather and for other reasonable causes in the opinion of the ASI, ASI may at his discretion grant to the surveyor such extension of time as he considers reasonable for the completion of assignment.
- b. The amount or nature of extra or additional work, or any cause of delay referred to in these conditions, or any delay, impediment or prevention by the Employer, or other special circumstances which may occur, other than through a default of or breach of contract by the surveyors or for which he is responsible, being such as fairly to entitle the surveyors to an extension of the Time for Completion of the Assignments, or any Section or part thereof, the ASI shall accord, after due consultation such extension and shall notify the surveyors accordingly.
- c. The execution of the assignments during the extended period also, shall be only under the conditions and at the Total amount specified in the contract. The grant of such extension of time will not bestow on them any right to claim compensation or extra payment at a future date whatsoever. No claim

shall be made by the surveyor on the grounds of executing the assignment beyond the completion period stipulated in the contract.

1.14 Total amount of Progress

a. If or any reason, which does not entitle the surveyors to an extension of time, the Total amount of progress of the Assignments or any Section is at any time, in the opinion of the ASI, shall so notify the surveyors who shall thereupon take such steps as are necessary, subject to the consent of the Engineer, to expedite progress so as to comply with the Time for Completion. The surveyors shall not be entitled to any additional payment for taking such steps.

1.15 Compensation for delay

a. If the surveyor fails to complete the assignment in all respects within the time specified or within the extended time that may be allowed by the ASI as per clause 1.13, the surveyor shall pay or allow to ASI a sum equivalent to 0.5% (half percent) per day inclusive of holidays) or part thereof of the total value of the contract subject to a maximum of 5% of the total value of the contract as liquidated damages/late delivery charges and ascertained damages and not by way of penalty, for every day thereof beyond the said period or extended period as the case may be during which the assignment shall remain unfinished. Such damages will be deducted from any amount payable to or to be payable to the surveyor including any securities/ guarantees if any available with ASI. The payment of such damages does not relieve the surveyor of his obligations to complete the assignments or from any other of his obligations or liabilities under this contract.

1.16 Remedy on surveyor's failure to carry out the assignment required

a. The progress of the assignment at each stage will be subject to the approval of the ASI whose decision as to the Total amount of progress at each stage shall be final and binding on the surveyor. ASI reserves to itself, the right to cancel the contract for unsatisfactory progress in the assignment at any stage.

1.17 Completion certificate

a. Completion certificate shall be issued by the officer in charge on expiry of all the tasks and submission of all reports/Drawings/documents as indicated in Terms of Reference enclosed to this bid document, to the satisfaction of the ASI.

1.18 Release of Performance Security Deposit

The Amount deposited by the surveyor, as security Deposit under this Assignment will be refunded to the surveyor only after satisfactory completion of the assignment pursuant to sub clause 1.15 and 1.16. In case of non-completion of the surveying job within the specified period of 90 days or extended period of time for completion (as per clause 1.13) the Security deposit will be forfeited.

1.19 Special conditions of contract

1.19.1 Work Program

a. The bidder shall submit the program of work and inspection report including methodology to be adopted before the start of work.

1.19.2 Safety precautions during progress of works

- a. The bidder shall take precautions to ensure safety of the star, existing utility services, adjoining structures etc. during progress of the work. The bidder shall also make necessary arrangement for the safety office workers if any accident occurs the entire responsibility fall on the part of the bidder.
- b. The bidder shall take a note that some parts of fort may be structurally weak and dilapidated. While surveying the surveyors or his workers should take adequate care while climbing over them for taking reading. They should check very carefully the condition of the building ahead. At any point, if there is serious problem that may critically affect the survey, the same may be brought to the notice of the officer in charge.
- c. The surveyors and his workers should not cause any inconvenience to the visitors who visit the monuments or public residing inside the fort.

1.19.3 Damage to government property or private life & property

- a. The bidder shall be responsible for all risks to the works and for trespasses and shall make good at his own expense all loss or damage whether to the works themselves or to any other property of the government (including Utility Services).
- b. ASI is not responsible for the lives of persons or property of others whatsoever may be the cause in connection with or as a result of the execution of works even though all reasonable and proper precautions may have been taken by the bidder. Such cost, loss or damages or compensation (including that payable under the provisions of the Workmen's Compensation Act or any statutory amendments thereof) to any person or persons sustaining damage as omission on the part of the contractor, is to be borne by the bidder.
- c. The amount of any cost or charges (including cost and charges in connection with legal proceedings), which may incur in reference thereto, shall be charged to the or to defend or comprise any claim or threatened legal proceedings or in anticipation of legal proceedings been instituted consequent to the action or default of the bidder to

take such steps as may be considered necessary or desirable to ward off mitigate the effect of such proceedings, charging to the bidder as aforesaid any sum or sums of money which may be paid and any expenses whether for reinstatement or otherwise which may be incurred and the propriety of any such payment, defence or comprise and the incurring of any such expense shall not be called in question by the bidder.

1.19.4 Risks and Cost

a. In case bidder fails to complete work as per schedule, ASI has discretion to get the work done completed by any other agency at risk and cost of the agency to which the work has initially been awarded by giving 7 days' notice.

1.19.5 Alteration to scope of work

a. The department or representative shall have rights to make any alteration, omission, edition, substitution for the original work. No claim whatever on account of above shall be entertained except the payment for the actual work done.

1.19.6 Other conditions

- In case of premature termination, no extra compensation shall be payable. payment of remuneration in that case will be made to the extent the services rendered till that time can be made use of by ASI limited to the period for which the agency had actually rendered the service and subject to the intermediate targets being added to as per the work schedule mutually agreed to. No notice of termination or remuneration there off will be necessary and continuance shall be solely at the discretion of Regional Director, Central Region.
- II. The drawings, reports, data, etc., used for the survey work shall be the sole property of Archaeological Survey of India and the bidder will not reproduce or pass on this to any other person or firm etc.
- III. The format and titles of all the drawings to be submitted by the bidder shall be as per the guidelines and demand of ASI.
- IV. All field books, notebooks, floppies, drawings and other documents containing field data gathered during traverse survey shall be handed over to ASI.
- V. The bidder must impart the necessary training to the staff at ASI for processing and editing the final dataset of the photogrammetric survey and shall have no claim or use whatsoever.
- VI. The bidder shall not reproduce any data collected from the work in any form.
- VII. In case of any discrepancy in the description of work in the tender documents, the decision made by Archaeological Survey of India shall be final and binding on the bidder.
- VIII. Any error in description, quantity or rate in schedule of quantity or any omission there from shall not vitiate the contract or release the bidder from the execution of the whole or any part of the contract works comprised there in according to drawings and specifications or from any office obligations under the contract.
- IX. All the documents and drawings created out of the assigned work will become the sole property of ASI and ASI will be free to use the same in any manner deemed fit.

X. The agency will exercise all responsible skill, care and diligence in the performance of the service under this work and shall carry out all the responsibilities with recognized latest professional standards.

I, as authorised signatory, have read the above conditions fully, particularly the clause 1.12 Terms of payment and the procedure adopted for calculation of area. I have fully understood them and agree to abide by them.

(Signature of the authorized signatory and seal)