TENDER CALL NOTICE

FOR

CONSULTANCY SERVICES FOR GEOTECHNICAL INVESTIGATION, TOPOGRAPHICAL SURVEY. COLLECTION OF HYDRAULIC DATA AND PREPARATION OF DRAWINGS INCLUDING DETAILED PROJECT REPORT

FOR THE CONSTRUCTION OF HIGH-LEVEL BRIDGE OVER
BASUNDHARA RIVER FOR THE UPCOMING ROAD FROM DUDKA
TO LAIKERA SIDING AT BASUNDHARA AREA OF MCL IN ODISHA



OFFICE OF THE HEAD OF DEPARTMENT, CIVIL ENGINEERING VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA

VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, ODISHA

No. VSSUT/CIVILI 620

Dated-29/04/2023

Notice Inviting Tender

Sub: Tender (two bid system) for providing consultancy services for Geotechnical Investigation, Topographical Survey. Collection of Hydraulic Data and Preparation of Drawings including Detailed Project Report for the construction of High-Level Bridgs over Basundhara River for the upcoming road from Dudka to Laikera Siding at Basundhara Area of MCL in Odisha.

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Bid system	Two Part bid system – Technical bid and Financial bid
Mode of submission of bid	By speed post/ registered post/ Courier
Place of receipt and opening of tender Portal for tender document	The Head of Department, Civil Engineering, Veer Surendra Sai University of Technology, Burla P.O Engineering College, Burla, Dist – Sambalpur- 768018 Tel No – 0663-2430211, Email – head_civil@vssut.ac.in www.vssut.ac.in
Date of commencement for downloading bid document	01/05/2023
Last date of bid submission	12/05/2023 at 2.00 P.M.
Time and date of opening	13/05/2023 at 11.30 A.M.
of tender & Technical bid	
Tender paper cost	Rs 5000/- (Rupees five thousand only) plus GST as applicable which can be paid in the form of demand draft drawn in favour of "VSSUT CONSULTANCY FUND" from any nationalized bank, payable at Burla
Earnest Money Deposit	Rs 50,000/- (Rupees fifty thousand only) which can be paid in the form of demand draft drawn in favour of "VSSUT CONSULTANCY FUND" from any nationalized bank, payable at Burla
Time and date of opening	13/05/2023 at 11.30 A.M.
of Financial bid	

Head, Civil Engineering Department

Department of Civil Engineering

VSSUT, Burka

DETAILED TENDER CALL NOTICE

FOR CONSULTANCY SERVICES FOR GEOTECHNICAL INVESTIGATION, TOPOGRAPHICAL SURVEY. COLLECTION OF HYDRAULIC DATA AND PREPARATION OF DRAWINGS INCLUDING DETAILED PROJECT REPORT FOR THE CONSTRUCTION OF HIGH-LEVEL BRIDGE OVER BASUNDHARA RIVER FOR THE UPCOMING ROAD FROM DUDKA TO LAIKERA SIDING AT BASUNDHARA AREA OF MCL IN ODISHA

A. GENERAL INFORMATION:

- 1. The tender documents can be downloaded from our website: www.vssut.ac.in and the tenderer has to submit a separate draft of Rs 5000/- (Non refundable) drawn in the favour of "VSSUT CONSULTANCY FUND" from any nationalized bank, payable at Burla along with tender documents (technical Bid and financial Bid), otherwise the offer submitted by the tenderer shall be rejected.
- "University" means "Veer Surendra Sai University of Technology" located at Burla, P.O.- Engineering College, Burla, Dist – Sambalpur-768018
- 3. Consultant or service provider means Agency whose tender has been accepted and work order issued.

B. BID PARTICULARS

- 1. Sealed tenders (Two-part Bid) are invited from proprietor, firm, company, partnership firm for carrying out the said consultancy services.
- The tenders shall be submitted under two-part bid system i.e. "Technical Bid" and "Financial bid" clearly super scribing the same on two separate sealed envelopes. The "Financial Bid" must contain the rate for providing the consultancy services.
- 3. Bidders are advised to go through the bid documents carefully before submitting the tender. It will be presumed that the bidder has considered and accepted all the terms and conditions of this bid. Bid must be unconditional.
- 4. The bid form is non-transferable
- 5. The bid documents must be filled in completely and signed by the authorized signatory of the bidder on all pages as acceptance of all the guidelines, terms and conditions laid in the bid document.

- 6. The envelope containing the bid must be super scribed as "Bid for providing Consultancy Services for preparation of Detailed Project Report for construction of major high-level bridge over Basundhara river for the upcoming road from dudka to laikera siding at basundhara area of mcl in odisha"
- 7. The following documents should be placed with the envelope containing technical bid:
 - a. Self attested copy of PAN card
 - b. Self attested copy of incorporation certificate/ registration certificate
 - c. Self attested GST certificate
 - d. EMD of Rs 50,000/- in the form of demand draft and tender cost of Rs 5000/- in the shape of demand draft drawin in favour of "VSSUT CONSULTANCY FUND" payable at Burla (Separately) in any Nationalized bank.
 - e. Eligibility certificates
 - f. The tender document with the terms and conditions duly signed by the Authorized person of the agency with seal in each page
 - g. CA certified turnover certificate for the last 5 years, profit loss statement and Income Tax returns for the last 5 years
 - h. Valid EPF and ESI Registration/ License
 - i. Authorization letter in favour of the signatory
 - j. Undertaking to the effect that the agency has not been blacklisted by the Government or any other organization.

C. PROCEDURE FOR SUBMISSION OF BIDS

- 1. As this is two-part bid, the technical bid along with the requisite documents should be packed in one packet of sealed envelope which will be superscribed as "Technical Bid". The Financial bid should be in another sealed envelope superscribed as "Financial Bid". These two separate sealed envelopes should be kept in a third single sealed envelope superscribed as "Bid for providing Consultancy Services for preparation of Detailed Project Report for construction of major high-level bridge over Basundhara river for the upcoming road from Dudka to Laikera siding at Basundhara area of MCL in Odisha"
- 2. The bid should be submitted by registered post/ Speed post/ courier addressing to "Head, Civil Engineering Department, VSSUT, Burla, P.O.-Engineering College, Burla, Dist Sambalpur- 768018" which should reach within the scheduled date and time. Bids received beyond the

- scheduled date and time will be summarily rejected. The bidder should mention his exact postal address on all the envelopes in order to facilitate return of the bids, if necessary. Bids once submitted cannot be withdrawn.
- 3. The bid shall remain as valid for 120 days from the date of opening of the financial bid.

D. ELIGIBILITY OF BIDDER AND GENERAL CONDITIONS

Those who fulfill the following criteria are eligible to participate in the bid:

- i. The Firm must have been rendering consultancy services for at least 5 years and carrying out major infrastructure project assignments.
- ii. The firm should have minimum experience of preparation of detailed project report for 2 lane/ 4 lane Bridge with individual span of more than 30 m and minimum bridge length of 1000 m with deep foundations
- iii. The Firm shall have a minimum turnover of Rs.20 crores annually for the last 5 financial years. For the purpose of evaluation, Applicants having comparatively larger revenues from professional fees shall be given added weightage. For the avoidance of doubt, professional fees here under refers to fees received by the Applicant for providing advisory or consultancy services to its clients
- **iv.** The firm should have fully furnished office in Odisha with computers, plotters, printers with software like MX Roads, STAAD, etc for preparation of DPR
- v. Availability of Key Personnel: The Applicant shall offer and make available all Key Personnel meeting the requirements specified.
- vi. Conditions of Eligibility for Key Personnel: Each of the Key Personnel must fulfill the Conditions of Eligibility specified below.

Key Personnel	Educational Qualification	Length of experience	Experience on Eligible assignments
Team Leader cum Senior	Graduate in Civil	15 Yrs	Should have the feasibility study
Bridge Engineer	Engineering		/DPR teams for two Eligible Assignments
Sr. Structural Engineer	Graduate in Civil	10 Yrs	Should have worked as a Sr. Structural Engineer for two

Key Personnel	Educational Qualification	Length of experience	Experience on Eligible assignments
	Engineering		Eligible assignments
Sr. Quantity Surveyor	Graduate in Civil Engineering	10 Yrs	Should have worked as a Sr. Quantity Surveyor for two Eligible assignments
Highway Engineer	Post Graduate in Traffic and/ or Transportation Engineering/ Planning	7 Yrs	Should have worked as a Highway Engineer for two Eligible assignments
Sr. Surveyor	Diploma in Surveying or Graduate/Diplo ma in Civil Engineering	7 Yrs	Should have worked as a Sr. Surveyor for two Eligible assignments
Sr. Geotechnical Expert	Graduate in Civil Engineering / Post Graduate in Soil Mechanics	7 Yrs	Should have worked as a Sr. Geotechnical Expert for two Eligible assignments

E. EARNEST MONEY DEPOSIT

- The bidder has to submit a Demand Draft of Rs 50,000 (Rupees fifty thousand) drawn in favour of "VSSUT CONSULTANCY FUND" payable at Burla of any Nationalized Bank towards EMD. Without EMD, the bid shall be summarily rejected. No interest is payable to the bidder towards EMD money.
- 2. In no case, the EMD money in cash or other forms will be accepted at the time of opening of the bid. EMD will be returned to unsuccessful bidder within 120 days of finalization of bid.
- 3. No request for adjustment, if any shall be accepted
- 4. EMD is liable of forfeiture if bid is withdrawn before it is finalized or bid withdrawn from participation

F. PRICE

Price should be quoted lumpsum. The above terms and conditions shall form part of the agreement.

The university is not bound to accept the lowest bidder. The authority has all rights to accept/reject any or all bids without assigning any reason thereof.

G. BID EVALUATION

- 1. The Department Purchase Committee (DPC) of Civil Engineering Department shall evaluate the Bid.
- 2. The DPC shall first evaluate the technical bid keeping in mind the eligibility criteria and other qualifying criteria
- 3. A list of bidders whose technical bid is found to be in order shall be prepared by the committee and disqualified bidder shall be returned within 120 days of issue of work order to successful bidder
- 4. **Technical Evaluation-** The evaluation of the bid shall be quality and cost-based system.

The points given to evaluation criteria are:

SI no	Parameter	Maximum marks	Evaluation Criteria		
1	Firm's Relevant Experience	20	Five numbers of eligible assignments	20 marks	
			Less number of eligible assignments	Prorated marks	
2	Methodology and Work Plan for the assignment	30	Evaluation will be based on methodolog proposed and Consultant's own work plan for the DPR activity		
3	Relevant Experience of the Key Personnel	50	Team Leader cum Senior Bridge Engineer	15 Marks	
			Sr. Structural Engineer	10 Marks	
			Sr. Quantity Surveyor	5 Marks	
			Highway Engineer	5 Marks	
			Sr. Surveyor	5 Marks	
			Sr. Geotechnical Expert	10 Marks	
	Grand Total	100			

Evaluation criteria for key personnel is as follows:

Educational Qualification - 20%

Minimum Total experience - 30%

• Relevant sector experience - 50%

In the first stage, the technical proposal will be evaluated based on the parameters stated above. For each Technical Proposal, the total points that can be awarded for each bidder are 100, and the minimum technical score (T) that a bidder requires to qualify for opening of the financial proposal is 75.

The highest evaluated Technical proposal (Th) shall be given maximum Technical score (St) of 100. The formula for determining the Technical Scores (St) of all other proposals is calculated as following:

 $St = 100 \times T/Th$

- 5. Eligible projects comprise of major HL bridge of 1000 m length.
- 6. The financial proposals of the bidders qualifying the technical evaluation (2nd Stage) only shall be opened at this stage in the presence of the bidder's representative who wishes to attend the meeting with proper authorization letter. The name of the bidder along with the quoted financial price will be announced during the meeting. The lowest evaluated financial proposal (Fm) will be given a maximum financial score of 100 points. The formula for determining the financial scores of other proposals will be computed as follows:

Sf = 100 x Fm/F, in which "Sf" is the financial score, "Fm" is the lowest price, and "F" the price of the Proposal under consideration.

- 7. No negotiation is permissible except with lowest bidder
- 8. Successful bidder will be selected with the combined score

Proposals shall be ranked according to their combined technical (St) and financial (Sf) scores using the weights (Tw = the weight given to the Technical Proposal (0.7); Pw = the weight given to the Financial Proposal (0.3); T + P = 1) as following:

 $S = St \times Tw + Sf \times Pw$

The Selected Applicant shall be the First Ranked Applicant (having the highest combined score). The Second and third Ranked Applicant shall be kept in reserve and may be invited for negotiations in case the first ranked Applicant withdraws or fails to comply with the requirements specified in the Tender document.

9. Work order shall be issued to highest scorer. In case more than one bidder has the same highest score, then work shall be issued to the bidder having highest technical score. However, if more than more bidder has the same technical score, then work shall be issued to the bidder having highest total turnover during the last five financial years.

H. EVALUATION PROCESS AND SELECTION

- Bidders will be technically qualified based on information/ document provided by the Bidder
- Decision of VSSUT will be final for the evaluation of technical bids.

I. TERMS OF REFERENCE

1. BACKGROUND

MCL owns the Basundhara block in Sundergarh district for which road and bridges require to be constructed. Therefore, MCL has planned for High-level bridge over River Basundhara on road from Dudka to Likera siding at Basundhara area of MCL. The tentative length of the bridge is 22 m.

VSSUT takes up various infrastructure design and consultancy job as and when assigned. The consultant awarded shall be assigned with these jobs with the same terms and conditions as this agreement till 3 years from the date of signing of agreement. The rates shall be calculated on prorate basis of bridge length. Any extension is required shall be done on this if both parties agree.

2. OBJECTIVES

The objectives of this consultancy services would be to carry out all the works **under direct supervision of the technical experts of VSSUT, Burla,** such as planning of the bridge, carry out surveys and geotechnical investigations, preparation of GAD, bid documents for execution and detailed engineering drawings as per the design including preparation of Detailed Estimate, Specification & Bill of Quantities for construction of bridges including approaches and junctions. The Consultant shall suitably phase the project estimate in consultation with the client.

3. SCOPE OF SERVICES

General scope of services shall cover but not be limited to the following major tasks

• Mobilization and demobilization of survey equipment, engineers and surveyors to site for carrying out Topographical survey by using Differential Global Positioning system, Electronic Total station with required software, carrying out survey with capturing all above ground features like roads, rail, trees, water bodies, poles, huts, sheds, buildings etc. and capturing of spot levels at 10 m c/c grid for plotting the contour of suitable intervals. Collection of hydraulic data of bridges like HFL, LWL, OFL and bed level along center line for 300 m upstream and downstream with cross sections at bridge location, upstream and downstream. Preparation and submission of all drawings in suitable scale with 10m interval spot levels and 1 m interval contours, preparation of land plan & land detail of proposed row and submission of 3 sets hard copy drawing & 1set soft copy all complete **under direct supervision of the Technical Experts of VSSUT, Burla.**

- Mobilization & demobilization of Geotechnical investigation equipment with its accessories, staff etc. from office to the site and Making of 150/100mm diameter borehole in soil strata, collection of soil samples such as SPT,UDS & DS at 1.5m depth intervals or change in strata at tentative pier locations, transportation of samples to laboratory from site & carrying out laboratory test such as sieve analysis, Atterberg's limit, specific gravity, swelling index test, field moisture content, bulk density, shear test, including calculation of safe bearing capacity and other parameters along with recommendation for type of foundation etc. and submission of report as per IS:1892-1979.(Total Depth = 2x20 = 40 m) under direct supervision of the Technical Experts of VSSUT, Burla.
- Preparation and submission of the following under direct supervision of the Technical Experts of VSSUT, Burla:
 - a) alignment plan with details of cross section details, geometric design of alignment with horizontal and vertical details, preparation of plan, profile, TCS, detailed cross sections, identification of protection works required for construction of.
 - b) Preparation of hydraulic particulars for finalizing the span configuration of the proposed bridge, foundation type, scour depth and the required formation level for the proposed bridge.
 - c) Preparation of general arrangement drawing for the proposed bridge.
- Preparation of detailed structural and working drawings of the proposed bridges as per the Design based on IRC codes under direct supervision of the Technical Experts of VSSUT, Burla.

The deviation(s), if any, by the Consultants from the scheme presented above should be got approved by University. However, where a study of geo-technical reports and information available from adjacent crossings over the same waterway (existing highway and railway bridges) indicates that subsurface variability is such that boring at the suggested spacing will be insufficient to adequately define the conditions for design purposes, the Consultants shall review and finalize the bore hole locations in consultation with the Authority officers.

4. OUTLINE AND DURATION OF SERVICES

Time period envisaged for the study of the project **should not be more than 2 months.** The final reports, drawings and documentation shall be completed within this time schedule.

Standards and Codes of Practices

All activities related to field studies, design and documentation shall be done as per the latest guidelines/ circulars of MORTH and relevant publications of the Indian Roads Congress (IRC), and Bureau of Indian Standards (BIS). The Consultants, upon award of the Contract, may finalize this in consultation with the Client. All notations, abbreviations and symbols used in the reports, documents and drawings shall be as per IRC: 71. All codes and specifications referred to in this ToR shall be the latest published versions only at the time of finalization of design.

REPORTS

The consultant shall submit the following submissions in the following time frames:

SI. No.	Description of activity	Time limit
1.	Inception report	within 1 week of agreement
2.	Preliminary Investigation Report	within 2 weeks of agreement
	including geotechnical, alignment,	
	topographical and hydraulic	
	reports	
3.	Draft Detailed Project Report with	Within 1.5 months of agreement
	reference to the investigations to	
	be approved by the technical	
	expert of VSSUT, Burla	
4.	Detailed Project Report approved	Within 2 months of agreement
	by the technical expert of VSSUT,	
	Burla.	

6. PAYMENT SCHEDULE

The consultant will be paid consultancy fee as a percentage of the contract value as per the schedule below

SI no	Description of Activity	Payment		
1.	1. On furnishing Draft Detailed Project report			
2.	2. On furnishing Final Detailed Project report			
	Total			
	GST will be added extra on total billing amount	18%		

ANNEXURE-I

BID/TENDER SUBMISSION

To,

The Head, Civil Engineering Department Veer Surendra Sai University of Technology, Burla Dist.- Sambalpur, Odisha, 768018

Sub: Providing consultancy services for Geotechnical Investigation, Topographical Survey. Collection of Hydraulic Data and Preparation of Drawings including Detailed Project Report for the construction of High-Level Bridges over Basundhara River for the upcoming road from Dudka to Laikera Siding at Basundhara Area of MCL in Odisha.

Sir/ Madam.

In response to the NIT No: - dated: - for providing consultancy services for construction of HL bridges in Odisha, we would like to submit our Bid as enclosed. We attach herewith the relevant documents as per the tender document.

Place: Sincerely Yours.

Name of the Tenderer

Date: Name of the Signatory

Signature with seal

Mobile No: -

Encl: As above.

Note: This is to be furnished on the letterhead of the Tenderer.

ANNEXURE - II

AFFIDAVIT (To be made in appropriate stamp paper)

- 1. The undersigned do hereby certify that all the statements made in the required attachments are true and correct.
- The undersigned also hereby certifies that neither my/ our firm / company / individuals

_____nor any of its constituent partners have abandoned any road/ bridge / irrigation / Buildings or other project work in India nor any contract awarded to us for such works have been rescinded during the last five years prior to the date of this bid.

- 3. The undersigned hereby authorize(s) and request(s) any bank, person, firm or Corporation to furnish pertinent information as deemed necessary and as requested by the Department to verify this statement or regarding my (our) competency and general reputation.
- 4. The undersigned understands and agrees that further qualifying information may be requested and agree to furnish any such information at the request of the Department.

Signature of consultant Name of Firm: -Date: -

ANNEXURE-III

SUMMARY OF TECHNICAL BID

S/L	Description	To be filled in by the supplier
1	Name of the Consultant	
2	Address with phone No./e-Mail	
3	Contact Person(s) Phone No.	
	/Mobile No.	
4	Details of Bank Draft towards the	
	cost of quotation documents	
5	Details of EMD	
6	GST No.	
7	Provident fund A/C No.	
8	ESI Details	
9	Experience Details (Add separate	
	sheets, if required)	
10	Financial Turn Over (Annual) for	
	last five years	

This is to certify that, I have carefully gone through all the above contents of the tender document, thereby fully understood the terms & conditions therein and undertake myself/ourselves to abide by the same.

Place:	Name of the Service Provider
Date:	Name of the Signatory
	Signature with seal

ANNEXURE - IV

CERTIFICATE OF NO RELATIONSHIP

I / We hereby certify that I/We* am/are* related/not related* to any officer of VSSUT of any rank. I/We* am/are* aware that, if the facts subsequently proved to be false, my/our* contract will be rescinded with forfeiture of E.M.D. and I/We* shall be liable make good the loss or damage resulting from such cancellation.

Signature of the Bidder Date: -

(*)- Strike out which is not applicable

ANNEXURE-V

UNDERTAKING

Tender Call Notice No.:	Date: -
	Date.

1) This is to certify that my firm/agency/company named Address has never been black listed by any of the Government or other organization and no criminal case is pending against the said firm/agency/company or persons to be deployed.

2) We declare and undertake that in the event any of our employee, worker, deployed in VSSUT is found indulging in unscrupulous activity or acting against the interest of VSSUT or his work/activity found detrimental to VSSUT, there is no impediment for VSSUT to blacklist /Ban business dealing with our company/firm establishment.

Place: Name of the Service Provider Date: Name of the Signatory

Signature with seal

FINANCIAL PROPOSAL (COVER - II)

Name of the Work: -

LUMPSUM OFFER

SI.			Rate		Amount
No.	Descriptions	Qty.	(Rs)	Unit	(Rs)
1.	Mobilization and demobilization of survey equipment engineers and surveyors to site for carrying out Topographical survey by using differential Global Positioning System, electronic Total station with required software, carrying out survey with capturing all above ground features like roads, rail, trees, water bodies, poles, huts, sheds, buildings etc. and capturing of spot levels at 10 m c/c grid for plotting the contour of suitable intervals. Collection of Hydraulic data bridges like AFL, LWL, OFL and bed level along center line for 300m upstream and downstream with cross sections at bridge location, upstream and downstream. Preparation and submission of all drawings in suitable scale with 10 m interval spot levels and 1 m interval contours, preparation of land plan and land detail of proposed row and submission of 3 sets hard copy drawing and 1 set soft copy all complete under the supervision of the Technical Experts of VSSUT, Burla.	1 job		Per job	
2	Mobilization and demobilization of Geotechnical investigation equipment with its accessories staff etc. from office to the site and making of 150/100 mm diameter bore hole in soil strata, collection of soil samples such as SPT, UDS and DS at 1.5 m depth intervals or change in strata at tentative pier locations, transportation of samples to laboratory from site and carrying out laboratory test such as sieve analysis, Atterberg's limit, specific gravity, swelling index test, field moisture content, Bulk density, Shear test, including calculation of Safe Bearing Capacity and other parameters along with recommendation for type of foundation etc, and submission of report as per IS 1892-1979(Total Depth=2x20=40m) under the supervision of the Technical Experts of VSSUT, Burla.	40 m		Per m	

SI.	Descriptions	Qty.	Rate	Unit	Amount
No.			(Rs)		(Rs)
3	Preparation and submission of the				
	following under the supervision of the				
	Technical Experts of VSSUT, Burla.				
	 a) Alignment plan with details of cross section details, geometric design of alignment with horizontal and vertical details, preparation of plan, profile, TCS, detailed cross sections, identification of protection works required for construction of road. b) Preparation of hydraulic particulars for finalizing the span configuration of the proposed bridge, foundation type, scour depth and the required formation level for the proposed bridge. c) Preparation of General Arrangement drawing for the proposed bridge. Approx length of bridge – 22 m 	1 Job		Per Job	
4	Preparation of detailed drawing and working drawing as per design of the proposed bridges based on IRC codes under the supervision of the Technical Experts of VSSUT, Burla. Approx length of bridge – 22 m	1 Job		Per Job	
5	Preparation of Detailed project report with cost estimates, Analysis, BOQ, specifications and bid documents. Approx length of bridge – 22 m	1 Job		Per Job	
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CGS	Γ@9%				
SGS1	Γ@9%				
Gran	Grand Total				

No. of Corrections: -No. of Overwriting: -No. of Interpolation: -