

NATIONAL INSTITUTE OF HYDROLOGY
(A Govt. of India Society under Ministry of Water Resources, River Development &
Ganga Rejuvenation)
JALVIGYAN BHAWAN, ROORKEE – 247 667 (UTTARAKHAND)

NOTICE INVITING QUOTATION

File No. 5(XXVII)/2018-Pur-1

Dated: 03.05.2018

Registered post/Speed Post

From:

The Director,

National Institute of Hydrology,

Jalvigyan Bhawan,

Roorkee – 247 667 (Uttarakhand)

To:

As per attached list of firms (Annexure-II)

Dear Sir(s)

Sealed Quotations are invited from the registered firms/contractors for the following works mentioned below, so as to reach by 15.05.2018 at 15.00 Hours in the Office of Purchase Officer, National Institute of Hydrology, Jalvigyan Bhawan, Roorkee – 247 667. The quotations received after due date and time will not be considered, and no correspondence in this regarding will be entertained:

Sl. No.	Particular of works	Quantity	EMD Rs.
1	River Cross Section Survey work in Kali River and Kadra reservoir in Karwar district, Karnataka	Cross sections survey in portion of Kali River and Kadra reservoir, details for the reach of Kali River is given in Annexure-I	6,000/-

2. The quotations complete in all respect with telephone number, etc. be sent to “The Purchase Officer, National Institute of Hydrology, Jalvigyan Bhawan, Roorkee – 247 667 (Uttarakhand) in sealed envelope.
3. The firm should clearly mention on the top of the sealed envelope “Quotations for River cross section Survey work in Kali River” and “to be opened on 16.05.2018 at 1100 hours”.

TERMS AND CONDITIONS:

1. The tender document containing specifications of work, terms and conditions, etc. can be obtained from the Purchase Section (Admn.), National Institute of Hydrology, Roorkee on payment of Rs. 590/- (Rs. Five hundred ninety only) (non-refundable) in the form of crossed Demand Draft/Pay order in favour of National Institute of Hydrology, payable at Roorkee, which has to be attached along with the Bid.
2. The tender document can also be downloaded from our website www.nihroorkee.gov.in However, the demand draft towards the cost of tender document as prescribed above will have to be enclosed along with the tender document while submitting the same. In case the offer is not accompanied with the valid demand draft for the cost of tender document as detailed above, the tender will be rejected.
3. In case the date of opening is declared holiday on any account the said date shall be substituted by the next working day.
4. Tender complete in all respect should be deposited in the Tender Box kept in the Purchase Section (Admn), National Institute of Hydrology, Jalvigyan Bhawan, Roorkee – 247 667.

LAST DATE & TIME FOR SUBMISSION OF BID WILL BE	15.05.2018 at 15.00 Hours
DATE/TIME OF OPENING OF BIDS WILL BE	16.05.2018 at 11.00 Hours
VENUE OF BID OPENING AT NIH, ROORKEE	OFFICE ROOM OF CHAIRMAN, TENDER OPENING COMMITTEE, NIH, ROORKEE

PLEASE NOTE: Please strictly adhere to the dates/times mentioned in this document.

5. The Tender/Bid will be opened in the presence of representatives of tenderers, if any. Request for postponement will not be entertained. Fax/e-mail bids may not be accepted. Late/Delayed tenders shall not be opened. The Bids will be opened on 16.05.2018 at 1100 hours in the office room of the Chairman of the Tender Opening Committee in presence of such of the tenderers/or their authorized agents, who are interested to be present at the spot at the time of opening the quotations.
6. The Director, NIH, reserve the right to accept or reject all or any of the quotations in part or full at any time prior to award the work order, without assigning any reasons, whatsoever, and without incurring any liability or obligation, whatsoever, to the effected bidders.
7. The work has to be completed within 30 days from the date of award of contract work for river cross section survey work in Kali River. The quotation shall remain valid for acceptance for a period of not less than 90 days after the specific date of opening of the quotation.

8. If the firm does not mention percentage of GST etc., it would be assumed that the rates include all these, and subsequently no request for charging them as extra will be entertained in this regard.

9. The quotations should be submitted on your letter head for the work as per the specifications/ requirements given in enquiry letter. GST number and Tax related papers may also be attached with quotation.

10. All the disputes/litigation, if any will be subjected to Roorkee/Haridwar jurisdiction only.

11. IMPORTANT NOTE: Please provide the following information in your quotation, otherwise your quotation is liable to be rejected:

- (a) GST, if any
- (b) Payment terms
- (c) Delivery/work conditions for providing data report
- (d) Validity of data
- (e) Instruments to be used in the Contract work.

Yours faithfully,

Purchase Officer

Copy to:

1. P.I. of the Project.
2. OIC, Computer Centre
3. Finance Officer

Purchase Officer

TENDER DOCUMENT

No. Dated 3/5/2018

**NAME OF THE PROJECT: FLOOD STUDIES FOR KAIGA NPP
SITE (STAGE 5 & 6) AT KAIGA**

**NAME OF THE WORK : RIVER CROSS SECTION SURVEY
WORK IN KALI RIVER AS PER SITE.**



**NATIONAL INSTITUTE OF HYDROLOGY
ROORKEE – 247 667
UTTARAKHAND
MAY, 2018**

TERMS OF REFERENCE AND INSTRUCTION TO BIDDERS

1.0 INTRODUCTION

The consultancy project “Studies for estimation of design basis flood and safe grade elevation for the inland nuclear power plant site at Kaiga in Karwar district of Karnataka state (near Kadra dam)”, has been awarded to NIH by NPCIL, Mumbai. This study requires the river cross sections of Kali river and Kadra reservoir in the study reach as given in Annexure-I. This work has to be outsourced as no expertise and infrastructure are available in NIH for the work. Thus, National Institute of Hydrology intend to undertake the work of river cross sections survey in Kali River and Kadra reservoir at selected locations in Karwar district of Karnataka.

DESCRIPTION OF WORK.

RIVER CROSS SECTION SURVEY WORK IN KALI RIVER AND KADRA RESERVOIR AS PER SITE DETAILS

SITE CONDITIONS

River Cross-section survey in Kali river downstream of Supa dam and primarily below the kodasali dam in the water spread area of Kadra reservoir. The mountainous river valley is in general V-shaped in study reach with series of reservoir. The details of river system is shown in Annexure I.

General Information about Site

The proposed location for river cross section survey work and for reaches of Kali River is given in Annexure –I. The width of river in valley portion is in general less than 1 km while in water spread area of Kadra reservoir is less than 4 km.

Responsibilities of National Institute of Hydrology Roorkee.

- To provided site plan of the proposed location of cross section for Kali River.
- Other drawings available with NIH.

INSTRUCTIONS TO BIDDERS

1. The bidder shall submit cost including all taxes as applicable in the financial bid. The cost for survey of each cross-section should also be quoted as the number of cross-section to be surveyed in the river portion and Kadra reservoir portion are limited to 8 and 20, respectively.
2. The bidders are advised to undertake at their discretion a reconnaissance of The site at their cost, to familiarize themselves with the site conditions before Preparing the bid
3. Your tender should reach us at our NIH office by 15.05.2018 by 1500 hrs. in the office of purchase officer, NIH shall not be responsible for any delay in receipt of the tender. Late tenders shall not be considered. NIH reserves the right to reject any or all the tenders, without assigning any reasons thereof. The financial bids shall be opened on the 16.05.2018 at 1100 hrs.

GENERAL TERMS AND CONDITIONS

1. The bidder shall make their own arrangement for boarding, lodging, travel, transportation of survey equipment, boat/launch, labourers, local transport etc. required for this work and shall include cost in their offer.
2. Time period for the work – Thirty days from the date of award of the work.
3. Permission/authorization: It shall be the responsibility of the contractor to seek and obtain, well in time, necessary permission of authorization from concerned local or other offices and/or individual property owners etc. to approach, enter, measure, level, place instruments and equipment etc. as may be required to carry out the survey work. However, necessary authorization and assistance in getting permission may be extended by NIH at its discretion.
4. Supervision: The contractor shall provide at all times access to and facilitate inspection and supervision of the works and records for the authorized personnel/scientist of NIH.
5. Responsibilities of the bidder: The bidders shall be solely responsible for following sound technical and other methods and practices of river cross section work, accuracy of the equipment, and field work. River cross-section survey work will be conducted as per the site plans and will have to perform as per directions of the scientist of NIH.
6. Incomplete tender or tender received after the last date shall not be considered under any circumstances.

Financial Conditions

1. The bill of quantities is only indicative in order to arrive at the total contract value. The payment shall be made as per actual quantities at the rates accepted by NIH.
2. The Payment towards carrying out various items of works as detailed shall be made to the successful bidder in the following manner:
 - (a) 100% of contract value on completion of the field works in all respects and submission of report along with data, drawing etc. and acceptance by NIH.
3. In the event of any dispute, the decision of the DIRECTOR, NIH shall be final & binding. The venue of the arbitration shall be at local court, Roorkee.
4. NIH reserves the right to reject any one or all the tenders without assigning any reason thereof.
5. The bidder will have to quote the rates for aforesaid for river cross section work as per their respective sites inclusive of all taxes/service tax. No extra payment will be entertained by NIH in respect of any claim whatsoever in the same case.
6. The bidder shall comply with proper and legal orders and directions of the local or public authority or municipality and abide by their rules and regulations and pay all fees and charges, which may be liable. The bidder shall bear all incidental charges carriages, storage and safe custody of materials to be used for conducting the cross section works of respective rivers.

SPECIAL CONDITIONS OF CONTRACT

1. The firm should carryout works of Land Survey/ Datum transfer using total station with accuracy of < 1 mm and within water survey using GPS/DGPS enables dual frequency echosounder with accuracy of 0-2.5 cm in depth range of 0-40 m.
2. The survey details for reach of Kali river is attached as Annexure I.
3. The bidder shall nominate one person for liaisoning with NIH personnel in connection with the work.
4. NIH may, at its discretion, award total or part of the work depending upon their technical capabilities and financial offers and fund availability with NIH.
5. The bidder shall be solely responsible for the safety; loss, theft, and breakdown etc. of their equipment and safety of the manpower and shall get the same appropriately insured.
6. NIH shall deduct taxes at source, demand draft charges etc. as may be applicable and shall provide a certificate to this effect.

7. The survey details/data collected shall not be passed on to any other person or organization or used anywhere else by the contractor without the prior permission of NIH.

SCOPE OF WORK AND SPECIFICATIONS

Work of river Cross-sections for Kali river.

Brief Scope of Work

1. The scope of work has been described in Annexure I of survey details of the Kali river.
2. Preparation and supply of charts and survey reports in hard copies as well in digital form in excel spread sheet and Autocad drawings. The excel sheet would contain X (distance from left/right bank) and Z (bottom elevation MSL) and the geographical/ UTM-43N coordinates of both banks.
3. To provide any clarifications/justification required by client during the acceptance of report for the work carried out by the bidders.

Technical Specifications

Establishment of Bench Mark

The levels shall be on the basis of GTS benchmarks in the vicinity. The contractor shall transfer the benchmark to the site. All levels shall be related to MSL. New Benchmark on river bank shall be established as per site requirement for various river cross sections to be surveyed either on existing abutments, jetties or other monoliths, which shall meet the stability requirement for benchmarks specified by Survey of India. Alternatively new benchmark of suitable type shall be built to survey of India standards. Value of benchmarks shall be established to accuracy better than +/-5 millimeters.

Establishment of Horizontal control and marking the selected points

Horizontal control established shall be properly connected to nearby G.T.S. or other points approved by scientist.

Establishment of Vertical Control

The vertical control shall be established with suitable water level gauges and/or GTS Bench Marks within or near the survey area to reduce the soundings to a recoverable or approved Chart Datum (C.D.).

Carrying out Soundings

The sounding data shall be recorded and reported at an interval of 10 m interval at the marked cross section site across the river. Soundings shall be carried out using suitable

equipment, which yield accuracy of +0.025 m or better. Relevant environmental parameters, which effect accuracy of echo sounding, shall be measured regularly and appropriate correction shall be applied. 'Bar Checks' shall be carried out daily before commencement and after completion of days work. Bar Check equipment/tackle and its calibration shall be got approved from scientist.

Position Fixing

The contractor would use the DGPS enabled sounding instrument to determine the position of points to be surveyed. While taking soundings vessel shall be moved at a slow speed (not greater than 3 knots).

Derivable

1. Survey report along with excel sheet containing geographical/ UTM-43N coordinate of permanent marks for river banks. The X, Z coordinates for river cross-sections.
2. The AutoCAD drawings for river cross sections.
3. Photographs and videos are to be made during the survey work and to be submitted in soft copy (DVD). Photographs of important locations in and around the project site are also to be included in the survey reports.

Schedule - 'A'

NAME OF WORK: Carrying out cross sectional survey works at about 28 section in Kali river in Karwar district of Karnataka state.

Sl No.	Detail of Works	No of Cross-section	Rate		Total Amount Rs.
			In Figures	In words	
1.	Annexure-I Survey Details for a reach of Kali River (i) Cross-section survey (one time)	8 20			

We agree to execute the above work in accordance with the technical specifications and terms and conditions mentioned in this tender documents for a total contract price of Rs.....(Rupees.....) within the period specified in the invitation for tender.

Date
Signatory

Name & Signature of the Authorized

Annexure - I

Cross-section Survey Details for Kali River

River Cross-section survey in Kali river downstream of Supa dam and primarily below the kodasali dam to water spread area of Kadra reservoir (aprox. 25 km) shown in Figure 1 (one time river cross section, extended beyond banks) at about 20 sections. The width of river is varying from 0.5 km to 1 km in general while the within reservoir spread area it varies from 2 km to 3.5 km. Further, few river cross sections are also needed in the upstream river reach. The tentative location of the section where survey would be needed is shown in Figure-2.

The elevation data of river bed along with the latitude and longitude (X-Y in UTM43N) of observation point would be required. The levels shall be on the basis of GTS benchmarks in the vicinity. The contractor shall transfer the benchmark (available at nearest dam site) to the site. All levels shall be related to MSL based on GTS benchmark. The spacing between two surveyed points along the river cross sections should not be more than 1/10 of waterway width and should be placed when there is change in slope.

Along the river cross section, survey on land is to be carried out by Total Station/DGPS while the survey in waterway is to be carried out using echo-sounder. The horizontal coordinates of surveyed points should be in geographical/UTM coordinates while the vertical coordinate should be as above Mean Sea Level (MSL). The accuracy / least count of the instruments used in the survey should be clearly mentioned in the NIQ.

Survey report along with excel sheet containing geographical/ UTM-43N coordinate of permanent marks for river banks, The X, Z coordinates for river cross-sections and AutoCAD drawings for river cross sections are to be submitted after completion of work. Photographs and videos are to be made during the survey work and to be submitted in soft copy (DVD). The surveying agency is required to inform NIH regarding initiation of the work, so that officials from NIH may visit the surveying sites to monitor the survey work.

You are requested to quote your price for the above survey works including the applicable taxes. The number of cross-sections to be awarded for surveyed may vary from 10 to 15 depending on the availability of fund.



Figure 1: The stretch of Kali river downstream of Kodalasi dam for detailed river cross sections survey (red lines shows the location for survey within Kadra reservoir).

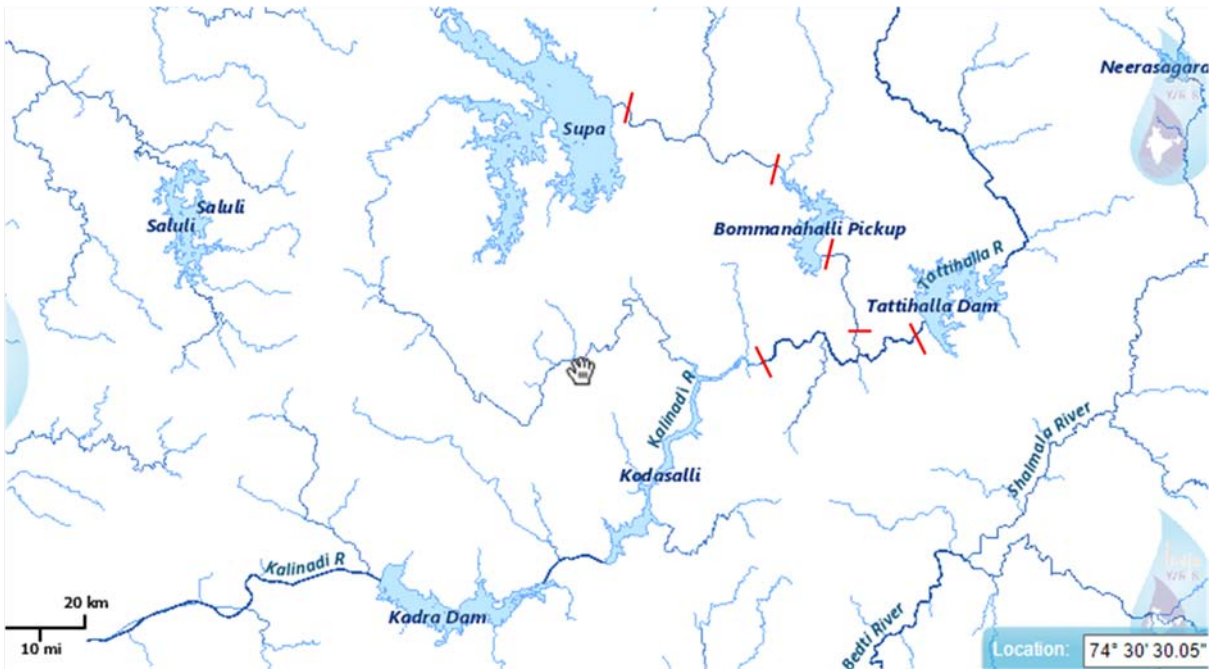







Figure 2: The upper stretch of kali river with tentative cross section location (red lines shows the location for survey within Kali river).

Annexure - II

List of Agency/ Firms

SL	Name	Address
1	Precision Survey Consultancy 	Precision Survey Consultancy ✓ Vichitra, SP-45 Kolkata west International City Salap,Bankra, Howrah-711403 West Bengal Email : info@precisionsurvey.co.in Phone: 07044064584
2	Excel Innova 	Plot No-23, 2 nd Floor ✓ Amberhai Extension Sector-19 Dwarka New Delhi South West Delhi 110075 Email: Info@excelinnova.com
3	Nirman A Group Of Civil Engineers 	NIRMAN ✓ 4/B. Surya Sen Nagar, Sarsuna, Kolkata - 700 061 West Bengal Phone: 2452-4945. Fax: 2838 0781, Mob: 9433310173, 9433310183 Email: nirman05@rediffmail.com
4	Advance Land & Hydrography Survey India Pvt. Ltd.	Advance Land & Hydrography Survey India Pvt. Ltd. Kolkata West International, NH-6 Crossing, P.O.-Bankra, P.S.- Howrah – 711 403 Email – advancesurveyindia@gmail.com Ph:- 9831302272
5	GLOBAL SURVEY SOLUTIONS	GLOBAL SURVEY SOLUTIONS Vill- Simulpur, P.O.-Thakurnagar, P.S. - Gaighata, Dist. North 24 Pgs. Pin – 743287, W.B. Phone:- 9831064260 Email:- arin.das@live.com
6	Navitech Solutions India Private Limited 	Head Office 407/B, Ganesh Krupa Apt, Rajbhar Nagar, Chinchpada Road, Katemanivali, Kalyan(E) Pin Code: 421306 MH Project Office: T-12, Haware Centurion Mall, Sector-19A, Opp. Seawoods Railway Station (E), Nerul, Navi-Mumbai 400706. MH Mobile: +91 9867810375 / +91 9820313935 Email: info@navitechsolutions.in
7	SECON Private Limited 	Corporate Office Plot No.147, 7B Road, Export Promotion Industrial Park (EPIP) Whitefield, Bangalore - 560066 Tel: +91-80-41197778 ; Fax: +91-80-41194277

Dr. K. S. Hans