



Government of West Bengal
Irrigation & Waterways Directorate
Office of the Executive Engineer
Purulia Investigation & Planning Division
Bhatbandh Irrigation Colony
P.O.& DIST.-PURULIA
E-mail-pipd.irrigation@gmail.com

Memo No. - 593

Dated - 28/6/18

Notice Inviting Quotation
NIQ No -02/EE/P.I& P.D OF 2018-19

Sealed quotations are hereby invited on prescribed format by the undersigned on behalf of the Governor of West Bengal from reputed agencies for "Topographical Survey by DGPS and Total Station including preparation of topographical map showing contours at required intervals showing important topographical features for Pipe Irrigation in C/W Tatko (I) Scheme at Mouza Ankro in Manbazar-II Block, Purulia"

LIST OF WORK

Sl.No.	Description of item	Quantity	Unit	Rate (Rs.)	Total Amount. (Rs.)
1	Carry out detailed Topographical survey at Mouza Ankro in Manbazar-II Block in District Purulia and preparation of Contour Plans(Map) of 0.50 mt. contour interval locating all topographical features like rivers/ streams / nallas, villages, road/ railway line, important monuments, building, important boundaries, agricultural land, forests if any, irrigation channel and bridge as specified during the field survey by the E.I.C or his representative by connecting the Bench marks(GTS\any other reference bench mark approved by Engineer in charge) to site/sites under survey by DGPS/Total Station and submission of detailed drawing of the same both in hard and soft copies as desired by the E.I.C. in C/W the Tatko Irrigation Scheme.	400	Acre		

Time schedule of quotation

- i) Last date & time of receiving application: 04.07.2018 up to 5:00 P.M.
- ii) Last date & time of collecting quotation paper: 05.07.2018 up to 5:00 P.M.
- iii) Last date & time of receiving quotation: 06.07.2018 up to 2:00 P.M.
- iv) Date & time of opening quotation: 06.07.2018 at to 3:30 P.M.

1. The intending quotationer should apply for quotation papers in respective Letter Heads enclosing self-attested photocopies of valid PAN Card, P.T.P.C/ P.T. Payment Challan, G.S.T. Identification number (GSTIN) document under relevant GST Acts & Rules of state Govt., Trade License and credential papers in support of past experience for executing similar nature of work, if any before issuing quotation papers from this end.

2. The quotationer should quote their rate both in words and figure including of all taxes, G.S.T and any other incidental charges.

3. Last date & time of receiving quotation will be on **06.07.2018** up to **2.00P.M** and same will be opened on the same day i.e. on **06.07.2018 at 3.30 P.M** in presence of the participating quotationers at the office chamber of the Executive Engineer/Purulia Investigation & Planning Division.
4. The lowest successful quotationer will have to deposit initial Earnest Money @ **2.00% of the contract value of the work as earnest money** in the form of BankDraft (B.D) of any Scheduled Bank of India in favour of the **Executive Engineer, Purulia Investigation & Planning Division, payable at Purulia** during execution of formal agreement in W.B.F 2911/2911(i).
5. The quotation will be accepted by the Appropriate Authority, I& W. Dte. The undersigned reserves all the rights to reject any or all of the quotations without showing any reasons thereto.
6. Time allowed for total survey work including submission of map/drawing both in hard and soft copies is 15 days from the date of issue of work order.
7. The payment will be made subject to availability of fund.

IMPORTANT POINTS FOR PREPARATION AND SUBMISSION OF SURVEY MAPS

- (i) Contour Plan of survey must be provided separately in 1: 10000 scale indicating contour lines at 0.50m interval demarcating all permanent features as taken from the field. Location of all survey controls shall be shown on the map with its identification number/mark.
- (ii) The major contour and minor contours shall be differentiated by colour or thickness as approved by the E.I.C. All major contours should show the contour value at appropriate interval on the map.
- (iii) All the maps/drawings should be prepared in digitized form having adequate separate layers for features using standard computer software like Autocad (latest version) on standard A-0 and A-3 size.
- (iv) Spot level survey of the entire area at 50m or less grid intervals and developments of the contour and 10m or less grid interval in river /stream/nallahs portions for contouring the area.
- (v) Prior to furnishing survey map, the lowest bidder should get well acquainted with the assignment in details discussions with the E.I.C or his authorized representative to avoid submission of any incomplete survey map which is liable to be rejected. The E.I.C reserves the right in this regard to reject any/all incomplete drawing without assigning any reason thereof. The lowest bidder is liable to rectify any error/omission detected by the department at his own cost.

SPECIAL TERMS & CONDITION FOR SURVEY WORK.

The Quotation paper will be issued to the bidder only when he is the actual service provider and meets the required norms as specified below and all original evidences or valid supporting documents to be produced in due course of time as & when asked by the Quotation Inviting Authority :-

1.	Should have experienced manpower in survey and equipment for the required of the job.
2.	Should have the following equipment required for the job, as explained in the specifications:-
2a	Automatic Total Station /Robotic Total Station (Leica, Spectra Precision, Trimble or equivalent)
2b	Differential GPS with at least 12 channel receiver for Off shore positioning. (Leica, Spectra Precision, Trimble or Equivalent)
2c	Digital Auto Level with an accuracy of 0.3mm (Leica, Spectra Precision, Trimble or equivalent)



Technical Specification

Enumerated below are the categorized tasks to be completed to the full satisfaction for the job concerned within the area (as described above) -

Ground Control Points (GCP) are to be established as required to the project area; one pair at both ends and two in between. The GCPs should be established with Dual Frequency DGPS having the following specification of worldwide reputed brand (Like Leica, Trimble, Sokkia, Topcon).

	Horizontal	Vertical
Static (LI + L2) GPS & GLONASS	3mm + 0.5 ppm	5mm + 0.5 ppm

The GCPs should be established with respect to UTM WGS 84 over. The GCPs should be connected with GTS Bench Mark by using **Auto Level** (Having accuracy of 1 mm or better for 1 km double run levelling) or **Digital Level** (Having electronic & visual height accuracy of 1 mm or better) by Double Fly Levelling. Efforts should be employed exclusively from the consultant's part to obtain the necessary details regarding the value of the GTS Bench Mark from concern authority. Adjustment of the R.L. values thus obtained at different stations / change points should be done depending upon the accuracy achieved considering a vertical closure limit of $12\sqrt{L}$ (in mm), where L=Length in km.

Layout of the approved alignment at site with Dual Frequency DGPS in RTK mode and ATS (as applicable), having the accuracy specified in the topographical survey, with all cardinal points along with a feedback report regarding the layout.

Topographical within the area using the ATS and Dual Frequency DGPS in RTK mode having the following specification of worldwide reputed brand (Like Leica, Trimble, Sokkia, Topcon) -

Dual Frequency DGPS in RTK mode:

	Horizontal	Vertical
RTK (LI + L2)	10 mm + 1 ppm	15 mm + 1 ppm

Automatic Total Station	Specification
Operating System	Microsoft Windows CE
Accuracy	1"
Measuring Range in Reflector-less Mode	0.3 - 500 m

Sd/- S. Nag

Executive Engineer
Purulia Investigation & Planning Division

Memo No 593/1 (6)
Copy forward to:-

Date 28/6/18

- 1) The Officer- On- Special Duty (SE), I & W Dte, Bhatbandh Irrigation Colony, Purulia.
- 2) The Executive Engineer, Purulia Construction Division (Irrigation).
- 3) The Executive Engineer, Purulia Irrigation Division.
- 4) Estimating Branch / Accounts Branch of this Division.
- 5) Departmental Website.
- 6) Office Notice Board.

Executive Engineer
Purulia Investigation & Planning Division

28/06/18