



GOVERNMENT OF WEST BENGAL
IRRIGATION & WATERWAYS DIRECTORATE
RIVER RESEARCH INSTITUTE,
OFFICE OF THE DIRECTOR
RIVER RESEARCH SUB-DIVISION NO- I

(Mohonpur, Nadia, Pin: 741246, Email id- rrisdoone@gmail.com)

Memo No: 270^E/SDO-I//RRI/I&W (NIO)

Date: 17.11.2023

Notice Inviting Quotation No.: - WBIW/SDO-I/R.R.I/HCL/NIO-06/2023-24

Sealed Quotation in plain paper in the prescribed proforma are hereby invited by the Sub-Divisional Officer, River Research Institute, Sub-Division No-I, Haringhata Central Laboratory, Mohanpur, Nadia from the bonafide and resourceful owners / suppliers / willing bonafide agencies / outsiders according to the enclosed terms & conditions and Schedule of Rate for the works.

On behalf of the Governor of West Bengal for the works/ supply as per list attached herewith from the Bonafide Outsiders having credential of similar nature of work/supply.

Before submitting quotation, the quotationers are to satisfy themselves of the terms & conditions, specification etc. and accordingly a certificate should also be furnished at the end of the Quotation that, "I/We hereby declare to abide by all the terms & condition, specification etc. as laid down in the notice."

NAME OF THE WORK: -

"Collection of rates for preparation of estimates in connection with different type of survey related work at River Research Institute, Haringhata Central Laboratory, Mohanpur, Nadia."

IMPORTANT DATES & TIMES:

| <u>Sl. No.</u> | <u>Particulars</u> | <u>Date</u> | <u>Time</u> |
|-----------------------|---|--------------------|--------------------|
| 1. | Last date & time for submission of prayer or application for issue of quotation paper | 27.11.2023 | Up to 17.15Hrs. |
| 2. | Last date and time of issuing of quotation papers | 27.11.2023 | Up to 17.15 Hrs. |
| 3. | Last date of receiving quotation papers | 28.11.2023 | Up to 15:00 Hrs. |
| 4. | Date and time for opening quotation | 28.11.2023 | At 15:30 Hrs. |

PLACE OF DROPPING OF QUOTATION DOCUMENTS:


At the chamber of the Sub-Divisional Officer, Sub-Division No.-I, R.R.I., H.C.L., Mohanpur, Nadia under office of the Director, RRI.

QUOTATION ACCEPTING AUTHORITY:

The Director, RRI, I & W Dte., Govt. of West Bengal.

- The supplier should quote their rates strictly as per prescribed form which will be available in the office of undersigned free of cost, along with terms and conditions.
- The rate should be quoted both in figure as well as in words. The quotation will be received up to 15:00 pm on prescribed date and will be opened by the Undersigned at 15:30 pm. on 28.11.2023 in presence of quotationers who may be present at this time.
- Acceptance of quotation will be rest with the Executive Engineer, Sundarban Delta Project, R.R.I., Haringhata Central Laboratory, Mohanpur, Nadia who does not bind himself to accept the lowest quotations & reserves the right to reject any or all the quotations without assigning any reason thereof.
- The quotation papers will be available from the office of the undersigned from 10.15 pam to 5:15 pm on all working day excluding holiday on free of cost after receiving application. The last date and time for receiving of application for issuing of quotation paper is 27.11.2023 and 05:15 P.M.
- Quotationer /Bidder have to apply on his Letter Head Pad with credential along with NIQ, for evaluation. All information consisting of NIQ and related documents, WB Form 2911/2911(i)/2911(ii), Bill of Quantities (BOQ), corrigenda / addenda, etc. if any, shall form the part of quotation document.

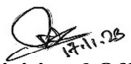
Encl: Schedule with terms and conditions.


**Sub Divisional Officer
Sub-Division No-I
River Research Institute,
I & W Dte., Govt. of West Bengal
HCL, Mohanpur, Nadia.**

TERMS AND CONDITIONS

1. Separate quotation should be submitted for work/ supply, as per attached list, in sealed cover super scribing the name of the work on the envelope and addressed to the Sub Divisional Officer, R.R Sub Division No-I, RRI, Nadia.
2. Submission of quotation by post is not allowed.
3. All quotationers will submit their quotations in printed schedule attached.
4. The Bidder should quote the rate clearly both in figures and in words for each item but evaluation will be done on a whole basis (Total Value). Any bidder containing over writing is liable to be rejected. All corrections are to be attested under the dated signature of the Bidders.
5. Intending quotationers should apply for quotation papers in their respective letter heads enclosing self-attested copies of the documents, originals of which and other documents are to be produced on demand.
6. Quotation paper can be taken from the office of the Sub Divisional Officer, R.R. Sub Division No-I, RRI, Nadia, within the specified date and time as per attached list by the intending bidders or by their duly authorized representatives.
 - a. No Quotation paper will be supplied by post.
 - b. No quotation paper will be issued on the date of opening of bidders after expiry of date and time mentioned in the notice.
7. The undersigned reserves the right to accept or reject any or all the quotations without assigning any reason whatsoever.
8. The rate should be inclusive all taxes, installation & also delivery charges including fitting & fixing proper position wherever applicable.
9. Any material not up to standard quality & satisfaction shall be replaced.
10. Before submitting any quotation, the intending bidder should make themselves acquainted thoroughly with the local conditions prevailing, by actual inspection of the site and take in to considerations all factors and difficulties likely to be involved in the execution of work/supply of materials in all respects including transportations of materials, communication facilities, climate conditions and market rate prevailing in the locality etc. as no claim whatsoever will be entertained on these accounts afterwards.
11. The quotationers may remain present at the time of the opening of the quotation.
12. The lowest quotationer shall have to execute a formal agreement within 7 working days from the date receipt of work order.


13. The quotationers are requested to submit all the requisite documents such as Tax Clearance, Valid 15-digit Goods & Service Tax payer Identification Number (GSTIN), Trade License, Valid IT, PAN etc. at time of submission of the application.
14. No conditional Offer/Proposal shall be accepted and deemed as informal.
15. After acceptance of quotation the quotationers has to execute a formal agreement in proper W.B Form No. 2911(i) with the Department.
16. The supplier can apply only for one of the works listed above and quote their rates on the basis of above terms and conditions. No new terms and conditions will be entertained from the supplier. They also have to mention the serial no. of the work on the sealed envelope before dropping in the box.
17. The successful Bidders will have to abide by the provision of the West Bengal Contract Labour (Regulation and Abolition) Rules, 1970 and such other Acts as may be applicable, as will be in force from time to time.
18. If any Bidder withdraws his quotation before its acceptance or refuses/ fails to convert it into a contract within a reasonable time, without giving any satisfactory explanation for such withdrawal/ refusal / failure, he shall be disqualified for submitting any Bidder in this Division / Circle for a minimum period of one year and his case will be referred to the Government for order as to what further action will be taken against him.
19. In case of tie bid Memorandum, No-2320-F(Y) Dated: -7th June,2022 of Finance Department, Government of West Bengal shall be applicable.
20. Any suppression / misrepresentation of fact will automatically debar the applicant from participating in any bidder under the Division / Circle for at least 3 (three) years from the date of detection, in addition to such other panel action as the Government may deem proper.
21. Conditional Bidder, which does not fulfil any of the above conditions, and is incomplete in any respect, is liable to summary rejection.
22. In case of violation of the above terms and conditions the quotation will be liable to be rejected.


Sub-Divisional Officer
Sub-Division No-I
River Research Institute,
I & W Dte., Govt. of West Bengal
HCL, Mohanpur, Nadia.

Copy Submitted for favour of information & wide circulation to the: -

1. Director, River Research Institute, I & W Dte., H.C.L, Mohanpur, Nadia, WB.
2. Executive Engineer (SDP), RRI, H.C.L, Mohanpur, Nadia, WB.
3. Deputy Director (Hyd.), R.R.I, I & W Dte., H.C.L., Mohanpur, Nadia, WB.
4. Deputy Director (Engg.), R.R.I, I & W Dte., H.C.L., Mohanpur, Nadia, WB.


Encl: *Schedule with terms & Conditions.*


**Sub Divisional Officer
Sub-Division No-I
River Research Institute,
I & W Dte., Govt. of West Bengal
HCL, Mohanpur, Nadia**

Copy forwarded for information & wide circulation to the: -

1. Sub-Divisional Officer, Sub-Division No.-II, RRI, I & W Dte., HCL, Nadia, W.B.
2. Assistant Engineer (SDP), RRI, I & W Dte., HCL, Nadia, W.B.
3. Divisional Accountant, RRI, I & W Dte., HCL, Nadia, W.B.
4. Divisional Estimator, RRI, I & W Dte., HCL, Nadia, W.B.
5. Notice Board, RRI, I & W Dte., HCL, Nadia, W.B.
6. Office Copy.

Encl: *Schedule with terms & Conditions.*


**Sub Divisional Officer
Sub-Division No-I
River Research Institute,
I & W Dte., Govt. of West Bengal
HCL, Mohanpur, Nadia**

NAME OF THE WORK: -

“Collection of rates for preparation of estimates in connection with different type of survey related work at River Research Institute, Haringhata Central Laboratory, Mohanpur, Nadia.”

LIST OF WORK FOR NIQ NO: - **WBIW/SDO-I/R.R.I/HCL/NIQ-06/2023-24**

Circulated vide this office memo no: - **270^E/SDO-I//RRI/I&W^(NIQ)**, dated: 17.11.2023

Declaration by the Applicant

As per clause 1.c of standard Form for Notice Inviting Quotation for Public Works

I/We do hereby declared that there is no other application for quotation paper for work in this NIQ (NIQ No. **WBIW/SDO-I/R.R.I/HCL/NIQ-06/2023-24**) in which I/We have common interests.

(Signature of the Quotationer)

NAME OF THE WORK: -

“Collection of rates for preparation of estimates in connection with different type of survey related work at River Research Institute, Haringhata Central Laboratory, Mohanpur, Nadia.”

Circulated vide this office memo no: - 270^E/SDO-I//RRI/I&W ^(NIQ), dated: 17.11.2023

PRESCRIBED PROFORMA TO BE FILLED BY THE QUOTATIONER

NIQ NO.-**WBIW/SDO-I/R.R.I/HCL/NIQ-06/2023-24**

1. Name of the Quotationer:

2. Address:

3. Phone No.:

4. E-mail ID:

5. PAN No.:

6. GST NO:

7. Bank A/C Details:

I/We hereby declare to abide by all the terms & condition, specification etc. as laid down in the notice.

Signature of the Quotationer



GOVERNMENT OF WEST BENGAL
IRRIGATION & WATERWAYS DIRECTORATE
RIVER RESEARCH INSTITUTE,
OFFICE OF THE DIRECTOR
RIVER RESEARCH SUB-DIVISION NO- I

OFFICIAL USE ONLY

(Mohonpur, Nadia, Pin: 741246, Email id- rrisdoone@gmail.com)

Name of Work: Collection of rates for preparation of estimates in connection with different type of survey related work at River Research Institute, Haringhata Central Laboratory, Mohanpur, Nadia.

LIST OF WORK FOR NIQ NO: - WBIW/SDO-I/R.R.I/HCL/NIQ-06/2023-24

Circulated vide this office memo no: - 270^E/SDO-I/RR/I&W^(NIQ), dated: 17.11.2023

SCHEDULE OF ITEM

| Sl. No. | Description of Item | Quantity | Unit | Unit Rate Excluding of all taxes |
|---------|--|----------|--------|----------------------------------|
| 1 | <p>Detailed topographical & hydrographical survey of various Rivers/Khals/Drainage Channels/Canals/Dam/Reservoirs/Beels etc using higher precision instruments like DGPS/RTK/TOTAL STATION for land survey, ADCP/ECO-SOUNDER for water body survey etc alongwith total geo-referencing alignment and plotting on google earth/arcGIS based map for taking cross sections, Long section of Drainage Channels/ Khals/Rivers (extending each cross section upto 50 m from toe of country side at both side banks) w.r.t. nearest known G.C.P/G.T.S. Bench Mark,including additional cross sections (both U/S & D/S) at the points of bridges, regulators, cross drain, inlets, tributaries, branch channels, drains, out channels from pump houses, important structures etc., including additional cross sections at adjacent outfall point of these Drainage Channels/Khals/Rivers into other river for 250 mtr U/S & 250m D/S of that outfall point and showing detailed topography plan of all permanent & temporarily features like roads, canal, bridges, park, culvert, boundary wall, Electric post, transformer etc. as available within the area, also including preparation of survey plan showing the location of topo point of G.L/Bed level/Berm Level/HFL/LWL/Free-board/Pond/depressions/road etc. with appropriate R.L. and open area/green area/total ground coverage/nature of land for mentioning in the drawing with suitable scale, true north & relevant photographs etc. as per direction & satisfaction of E.I.C. complete in all respect. The cross section interval shall be fixed as & when required as per direction of E.I.C. Raw data (in specified format as per direction of concerned) of survey work will also be submitted in time to time during working day.</p> <p>Note: [i] The rate is inclusive of all incidental charges like all type carriage, engagement of manpower & instruments/equipment, Motor boat/Power driven boat with manpower if required, Data processing integrated software etc. as applicable to complete to work in all respect but the rate is exclusive of all taxes]</p> | | | |
| | <i>i) Cross-Section Width 0.0 m to 250.0 m and Cross-section interval of 30m to 120m C/C along river//khal/drainage channel etc.</i> | | | |
| | a) Upto 5.00 Km | 1 | Per KM | |
| | b) 5.00 Km to 10.0 Km | 1 | Per KM | |
| | c) 10.00 Km to 20.0 Km | 1 | Per KM | |
| | d) 20.00 Km to 50.0 Km | 1 | Per KM | |
| | e) 50.00 Km to 100.0 Km | 1 | Per KM | |
| | f) Above 100.0 Km | 1 | Per KM | |
| | <i>ii) Cross-Section Width 250.0 m to 1000.0 m and Cross-Section interval of 30m to 120m C/C along river//khal/drainage channel etc.</i> | | | |
| | a) Upto 5.00 Km | 1 | Per KM | |
| | b) 5.00 Km to 10.0 Km | 1 | Per KM | |
| | c) 10.00 Km to 20.0 Km | 1 | Per KM | |
| | d) 20.00 Km to 50.0 Km | 1 | Per KM | |
| | e) 50.00 Km to 100.0 Km | 1 | Per KM | |
| | f) Above 100.0 Km | 1 | Per KM | |
| | <i>iii) Beyond 1000.0 m of Cross-Section Width along same interval ,additional 10% rate on item I(i)&(ii) will be added per 500m.</i> | | | |

| Sl. No. | Description of Item | Quantity | Unit | Unit Rate Excluding of all taxes |
|---------|--|----------|--------|----------------------------------|
| | <p>Detailed field survey of embankment/river bank at various Drainage Channels/Khals/Rivers etc consisting of topographical survey using higher precision instruments like DGPS/RTK/TOTAL STATION alongwith total geo-referencing alignment and plotting on google earth/arcGIS based map for cross sections, Long section, allignment of Drainage Channels/ Khals/Rivers (extending each cross section upto 50 m from toe of country side at both side banks) w.r.t. nearest known G.C.P/G.T.S. Bench Mark, including additional cross sections (both U/S & D/S) at the points of bridges, regulators, cross drain, inlets, tributaries, branch channels, drains, out channels from pump houses, important structures etc., also showing detailed topography plan of all permanent & temporarily features like roads, canal, bridges, park, culvert, boundary wall, Electric post, transformer etc. as available within the area indicating total land/plot area including preparation of survey plan showing the location of topo point of G.L/Bed level/Berm Level/HFL/LWL/Free board/Pond/depressions/road etc. with appropriate R.L. and open area/green area/total ground coverage/nature of land with suitable scale, true north & relavent photographs etc. as per direction & satisfaction of E.I.C. complete in all respect. The cross section interval shall be fixed as & when required as per direction of E.I.C. Raw data (in specified format as per direction of concerned) of survey work will also be submitted in time to time during working day.</p> <p>Note: [The rate is inclusive of all incidental charges like all type carriage, engagement of manpower & instruments/equipment, Data processing integrated software etc. as applicable to complete to work in all respect but the rate is exclusive of all taxes but the rate is exclusive of all taxes]</p> | | | |
| 2 | <p>i) Cross-Section Width 0.0 m to 250.0 m and Cross-section interval of 30m to 120m C/C along river/khal/drainage channel etc.</p> <p>a) Upto 5.00 Km</p> <p>b) 5.00 Km to 10.0 Km</p> <p>c) 10.00 Km to 20.0 Km</p> <p>d) 20.00 Km to 50.0 Km</p> <p>e) 50.00 Km to 100.0 Km</p> <p>f) Above 100.0 Km</p> | 1 | Per KM | |
| | <p>ii) Cross-Section Width 250.0 m to 1000.0 m and Cross-Section interval of 30m to 120m C/C along river/khal/drainage channel etc.</p> <p>a) Upto 5.00 Km</p> <p>b) 5.00 Km to 10.0 Km</p> <p>c) 10.00 Km to 20.0 Km</p> <p>d) 20.00 Km to 50.0 Km</p> <p>e) 50.00 Km to 100.0 Km</p> <p>f) Above 100.0 Km</p> | 1 | Per KM | |
| | <p>iii) Beyond 1000.0 m of Cross-Section Width along same interval ,additional 10% rate on item 1(i)&(ii) will be added per 500m.</p> | | | |
| 3 | <p>Detailed hydrographical survey of various Drainage Rivers/Khals/Drainage Channels/Canals/Dam/Reservoirs/Beels etc using higher precision instruments like ADCP/Eco-sounder etc alongwith total geo-referencing alignment and plotting on google earth/arcGIS based map for taking cross sections, Long section of Drainage Channels/ Khals/Rivers w.r.t. nearest known G.C.P/G.T.S. Bench Mark, including additional cross sections (both U/S & D/S) at the points of bridges, regulators, cross drain, inlets, tributaries, branch channels, drains, out channels from pump houses, important structures etc., including additional cross section at outfall point of these Drainage Channels/ Khals/Rivers into river for 250 mtr U/S & 250m D/S of that outfall point and including preparation of survey plan showing the location of topo point of BL/LWL/HFL/Free board/Pond/depressions etc. with appropriate R.L with suitable scale, true north & relavent photographs etc. as per direction & satisfaction of E.I.C. complete in all respect. The cross section interval shall be fixed as & when required as per direction of E.I.C. Raw data (in specified format as per direction of concerned) of survey work will also be submitted in time to time during working day.</p> <p>Note: [The rate is inclusive of all incidental charges like all type carriage, engagement of manpower & instruments/equipment, Motor boat/Power driven boat with manpower, Data processing integrated software etc. as applicable to complete to work in all respect but the rate is exclusive of all taxes]</p> | | | |
| | <p>i) Cross-Section Width 0.0 m to 250.0 m and Cross-Section interval of 30m to 120m C/C along river/khal/drainage channel etc.</p> <p>a) Upto 5.00 Km</p> <p>b) 5.00 Km to 10.0 Km</p> | 1 | Per KM | |
| | | 1 | Per KM | |

| <i>Sl. No.</i> | <i>Description of Item</i> | <i>Quantity</i> | <i>Unit</i> | <i>Unit Rate Excluding of all taxes</i> | |
|----------------|--|-----------------|-------------|---|--|
| 3 | c) 10.00 Km to 20.0 Km | 1 | Per KM | | |
| | d) 20.00 Km to 50.0 Km | 1 | Per KM | | |
| | e) 50.00 Km to 100.0 Km | 1 | Per KM | | |
| | f) Above 100.0 Km | 1 | Per KM | | |
| | ii) Cross-Section Width 250.0 m to 1000.0 m and Cross-Section interval of 30m to 120m C/C along river//khal/drainage channel etc. | | | | |
| | a) Upto 5.00 Km | 1 | Per KM | | |
| | b) 5.00 Km to 10.0 Km | 1 | Per KM | | |
| | c) 10.00 Km to 20.0 Km | 1 | Per KM | | |
| | d) 20.00 Km to 50.0 Km | 1 | Per KM | | |
| | e) 50.00 Km to 100.0 Km | 1 | Per KM | | |
| | f) Above 100.0 Km | 1 | Per KM | | |
| | iii) Beyond 1000.0 m of Cross-Section Width along same interval ,additional 10% rate on item I(i)&(ii) will be added per 500m. | | | | |
| 4 | <p>Countour and topographical survey on topographic area & hydrographic area to prepare plan of cross sections, long section, contour, topography, allignment etc for Rivers/Khals/Drainage Channels/Canals/Dam/Reservoirs/Beels a defined area by recording spot levels (Google earth/arcG.I.S based) using higher precision instruments like DGPS/RTK/TOTAL STATION for land survey, ADCP/ECO-SOUNDER for water body survey w.r.t nearest G.C.P/G.T.S. Bench Mark, plotting & developing arcG.I.S based site map, grid map (suitable size), contour map at suitable interval, showing true north, also showing details of latest position of River/Drainage Rivers/Khals/Drainage Channels/Canals/Dam/Reservoirs/Beels, dykes/guide bunds/spur/inlet-outlet/CD, water body, roads, rail, structures, buildings, any other important features etc., also including preparation of survey plan showing the location of G.L/Bed level/Berm Level/HFL/LWL/Free board/Pond/depressions/road etc. with appropriate R.L. and open area/green area/total ground/nature of land coverage for mentioning in the drawing with suitable scale, true north & relavent photographs etc. as per direction & satisfaction of E.I.C. complete in all respect. The cross section interval shall be fixed as & when required as per direction of E.I.C. Raw data (in specified format as per direction of concerned) of survey work will also be submitted in time to time during working day. Suitable contour interval & Gride size shall also be fixed as per direction of EIC.</p> <p><u>Note:</u> [The rate is inclusive of all incidental charges like all type carriage, engagement of manpower & instruments/equipment, Motor boat/Power driven boat with manpower if required, Data processing integrated software etc. as applicable to complete to work in all respect but the rate is exclusive of all taxes]</p> | 1 | Per Sq.Km. | | |
| 5 | <p>Countour and topographical survey on topographic area & hydrographic area to prepare plan of cross sections, long section, contour, topography, allignment etc for Rivers/Khals/Drainage Channels/Canals/Dam/Reservoirs/Beels a defined area by recording spot levels (Google earth/arcG.I.S based) using Photogrammetric technique by un manned aerial vehicle (UAV)/ Drone equipped with DGNSS/similar arrangement with LIDAR for surveying land part and water bodies part w.r.t nearest G.C.P/G.T.S. Bench Mark, plotting & developing Google earth/arcG.I.S based site map, grid map (suitable size), contour map at suitable interval, showing true north, also showing details of latest position of Rivers/Khals/Drainage Channels/Canals/Dam/Reservoirs/Beels, dykes/guide bunds/spur/inlet-outlet/CD, water body, roads, rail, structures, buildings, any other important features etc., also including preparation of survey plan showing the location of G.L/Bed level/Berm Level/HFL/LWL/Free board/Pond/depressions/road etc. with appropriate R.L. and open area/green area/total ground coverage for mentioning in the drawing ith suitable scale, true north & relavent photographs etc. as per direction & satisfaction of E.I.C. complete in all respect. The cross section interval shall be fixed as & when required as per direction of E.I.C. Raw data (in specified format as per direction of concerned) of survey work will also be submitted in time to time during working day. Suitable contour interval & Gride size shall also be fixed as per direction of EIC.</p> <p><u>Note:</u> [The rate is inclusive of all incidental charges like all type carriage, engagement of manpower & instruments/equipment, Motor boat/Power driven boat with manpower if required, Data processing integrated software etc. as applicable to complete to work in all respect but the rate is exclusive of all taxes]</p> | 1 | Per Sq.Km. | | |

| <i>Sl. No.</i> | <i>Description of Item</i> | <i>Quantity</i> | <i>Unit</i> | <i>Unit Rate Excluding of all taxes</i> |
|----------------|---|-----------------|-------------|---|
| 6 | <p>Mathematical Model study for a defined area based upon different concerned /corresponding data from different authorities like rainfall ,runoff, water level & discharge through channels, tide lockage at outfall point etc. ,setting up one dimensional model for existing channels & calibration/validation of same based on available observed data, setting up two dimensional flood inundation model & calibration/validation of model based on observed inundation information, coupling of 1D & 2D models, simulate both one dimensional and two dimensional model considering different scenarios for existing condition as well as post project/flood management, plot inundation area & duration of inundation for return period rainfall of 5,10,15,25,50 yrs ,preparation of decision support system [DSS] to archive different scenarios for future use, submission of reports [both soft & hard copy : 06 nos] as per direction of E.I.C.</p> <p>Note: The rate is inclusive of all incidental charges like all type carriage, engagement of manpower & instruments/equipment, software etc. as applicable to complete to work in all respect but the rate is exclusive of all taxes as applicable.</p> | 1 | Per Sq.Km. | |
| 7 | <p>Measurement of discharge, velocity etc through ADCP during daylight hours (6:00AM-6:00PM) per day coinciding with the gauge point alongwith experienced technical manpower in similar nature of hydrological observation work at the time of HT,IT,LT etc including cross sections, long section of Drainage Channels/Khals/Rivers etc using higher precision instruments of ADCP/ECO SOUNDER etc by geo-referencing alignment and plotting on arcGIS based map of Drainage Channels/ Khals/Rivers etc w.r.t. nearest known G.C.P/G.T.S. Bench Mark. Discharge & Velocity data should be presented in the form of profile alongwith bed material and Suspended Sediment Concentration (SSC) to be collected during ADCP run. Everything mentioning in the drawing with suitable scale, true north & relevant photographs etc. as per direction & satisfaction of E.I.C. complete in all respect. The cross section interval shall be fixed as & when required as per direction of E.I.C. Raw data (in specified format as per direction of concerned) of survey work will also be submitted in time to time during working day.</p> <p>Note: The rate is inclusive of all incidental charges like all type carriage, engagement of manpower & instruments/equipment, Motor boat/Power driven boat with manpower if required, Data processing integrated software etc. as applicable to complete to work in all respect but the rate is exclusive of all taxes, bed materials sampler.</p> | 1 | Day | |
| 8 | <p>Construction of permanent Benchmark pillar at defined location w.r.t. G.C.P/G.T.S. Bench Mark (including flying of G.C.P/G.T.S. Bench Mark from nearest available locations up to different locations with the help of high precision instruments like DGPS/RTK/TOTAL STATION etc) as per following specification : Cast-in Situ/Precast RCC made benchmark pillar of size 0.30 m x 0.30 m x 1.5 m (0.60 m above G.L. & buried 0.90 m below & suitable P.C.C base finish) with cement concrete grade of 1:1.5:3 ,4 nos of vertical bars of 10 mm dia & stirrups of 8 mm dia @ 150 mm c/c ,including mild steel fixed plate a top (100 mm x100 mm x6 mm) inserted within concrete, including fixing on P.C.C. base (3ftx3ft) bounded with brick wall all side 300mm thick brick work for 0.6m height and inside portion fill up with sand including necessary painting ,lettering, colouring as per enclosed drawing as per direction of EIC complete in all respect.</p> <p>Note: The rate is inclusive of all charges like all materials, all type carriage upto site, all labours, all concrete related items, painting, lettering etc as applicable to complete to work in all respect but the rate is exclusive of all taxes as applicable.</p> | 1 | Each | |
| 9 | <p>Benchmark Connection for different location w.r.t known G.C.P/G.T.S. Bench Mark including flying of known G.C.P/G.T.S. Bench Mark from nearest available locations up to different locations with the help of high precision instruments like DGPS/RTK/TOTAL STATION etc. and also providing necessary painting ,lettering etc as per direction of EIC complete in all respect.</p> <p>Note: The rate is inclusive of all charges like all materials, all type carriage upto site, all labours, painting, lettering etc as applicable to complete to work in all respect but the rate is exclusive of all taxes as applicable.</p> | 1 | Each | |
| 10 | <p>Submission of report comprising detail drawings, volume calculation of silt deposited (If required) in both soft copy (in .DWG/AutoCAD, Microsoft excel, Pdf & .KMZ/KML format & must be geo-referenced) & hard copy (six sets) in the form of index map, topographic site plan,Contour plan,cross sections, long sections etc of Channels/ Khals/Rivers etc showing all important features with min suitable scale ,true north and relevant photographs etc as per direction of E.I.C. complete in all respect.</p> <p>Note: All Survey raw data and total report in the form of soft copy in pen driver will also be submitted as direction of EIC.</p> | 1 | Each | |

Sd/- N.R. DAS
Sub Divisional Officer
Sub-Division No-1
RRI, I & W Dte., Govt. of West Bengal
HCL, Mohanpur, Nadia.