



**Government of West Bengal**  
**Irrigation & Waterways Directorate**  
**Office of the Executive Engineer-I**  
**Damodar Canal Division, Court Compound, Purba Bardhaman, Pin- 713101**  
**PHONE NO. – 0342-2662496, FAX NO. -0342-2550166 , Email:-eedcdiwdwb@gmail.com**

**Notice Inviting Expression of Interest (EoI) No.: 01(EoI)/ EE-I/D.C.D / 2024-25**

**Memo No. 2181**

**Date – 13/11/2024**

Sealed EoI in prescribed proforma are hereby invited by the **Executive Engineer-I, Damodar Canal Division, Court Compound, Purba Bardhaman** on behalf of the Governor of West Bengal for the “LIST OF WORKS” given in the Last page from Bonafied Agencies / Organization, Contractors & General order suppliers having credential (from the Govt. Of West Bengal/ Central Govt / PSU /Other State Govt. Departments / Engineering Wings of GoI / Ircon / RVNL / NHPC, Autonomous body & other similar organizations) of execution of similar nature of work during the current year and the last 5 years from the date of publishing of EoI.

The intending bidders having valid licenses, PTPC& ITR, PAN, GST registration etc. should possess adequate experiences in the field of detail topographical survey for enabling the requirement of Engineering Department and other related Departments who deal with details information of the areas in respect of political, geographical, topographical, demarcation of boundary, water bodies, roads, railways buildings, hutments, rivers, canals, drainage channels, bridge, culverts and all other requisite information to have detail idea of the areas. Any additional input, if felt necessary by the department, is to be surveyed, incorporated and shown in the survey map to be handed over by the agency to the department. No additional expenditure in this connection will be borne by the department.

Prior to furnishing the Survey details i.e. cross sectional & long sectional drawing (Both in Excel & Auto Cad) along with Level Book in Excel (all are in Hard & Soft copy), the lowest bidder should get well acquainted with his assignment in details discussions with the **Executive Engineer-I, Damodar Canal Division, Court Compound, Purba Bardhaman** or his authorized representative to avoid submission of any incomplete survey details, which is liable to be rejected. The Engineer-in-charge reserves the right in this regard to reject any/all incomplete (in terms of requirement of the department) survey drawing without assigning any reason thereof. The lowest bidder is liable to rectify any error/omission detected by the department at his own cost. No claim what so ever in this regard from the bidders will be entertained. The documents to be supplied both in hard. The decision of the Engineer-in-charge is final and binding.

### **Scope of Work:-**

1. Cross sectional & long sectional sheet @ 30mtr interval or less respectively, considering @ 3m to 5m interval level for Devkhal in block –Khandaghosh, Raina-I, Raina-II within the District, Purba Bardhaman and block Patrasayer, Indas within district -Bankura having river course section 20mtr to 120 mtr. Details of DevKhal are annexed with this EoI.
  2. Topographic survey of the catchment for at least 10 spots including calculation of discharge in the catchment is to be done.
  - 2) Two sets of cross sectional & long sectional drawings (Both in Excel & Auto Cad) along with Level Book in Excel (all are in Hard & Soft copy).
  - 3) Calculation Sheet of Earth work in excel sheet. (All are in hard & soft Copy.)
- The EoI should meet the following terms & condition which are given below:-

### **TERMS & CONDITIONS :-**

- 1) Intending bidders should apply for EoI papers in their respective Letter Heads enclosing with self attested copies of latest Income Tax, valid PAN / GST / Trade License and P. Tax Challan issued by the appropriate authority, failing which the EoI will be liable to be rejected.
  - 2) EoI should be submitted for the work in sealed cover super scribing the name of the work on the envelope and addressed to the proper authority. Submission of EoI by post is not allowed.
  - 3) Any suppression/ misrepresentation of fact will automatically debar the application from participation in any Tender/ EoI.
  - 4) No EoI paper will be supplied by Post.
  - 5) No EoI paper will be issued after expiry of date and time mentioned in the notice.
  - 6) The bidders should quote their rate both in figures and in words on each item of work within the issued format which should be duly signed with stamp.
  - 7) All corrections are to be attested under the dated signature of the Bidders.
  - 8) All the pages of the EoI paper and the documents (Submitted as EoI documents) including schedule must be signed by authorized representative on the body of the documents with date and seal.
  - 9) Conditional EoI, which does not fulfill any of the above conditions, and is incomplete in any respect, is liable to summary rejection.
  - 10) Any letter or other instrument submitted separately in modification of sealed Bid may not be entertained.
  - 11) The EoI accepting authority does not bind himself to accept the lowest Bid and reserves the right to reject any or all of the Bids received, with valid reason whatsoever to the intending Bidder .
  - 12) The **Executive Engineer-I, Damodar Canal Division, Court Compound, Purba Bardhaman** shall be the Engineer-In-Charge in respect of the above EoI & all correspondence should be made with the Engineer-In-Charge regarding the above survey work.
  - 13) Superintending Engineer, Damodar Irrigation Circle, I&WD, Kanainatsal, Purba Bardhaman / **Executive Engineer-I, Damodar Canal Division, Court Compound, Purba Bardhaman**, reserves the right to accept or reject the lowest or any other EoI without assigning any reason thereof.
  - 14) **This EOI is only for collection of rate over different items of work as prescribed in schedule & not for issuance of any work order in this regard.**
  - 15) The total survey work including submission of requisite Drawings in duplicate both in hard and soft copies separately which is mentioned in the scope of the work of the EoI.
- The EoI is to be submitted in the prescribe proforma. Any incomplete EoI is liable to be rejected. The EoI in the prescribe proforma as above will be received in the office of the **Executive Engineer-I, Damodar Canal Division, Court Compound, Purba Bardhaman** as per following time schedule:

- 1) **Last date of receiving application for EoI paper:** 18.11.2024 at 12.00 am
- 2) **Last date of issuing EoI paper:** 18.11.2024 at 17.00 pm
- 3) **Last date of receiving EoI paper:** 21.11.2024 at 14.00 pm
- 4) **Date of opening EoI paper:** 21.11.2024 after 15.00 pm

Sd/-  
**Executive Engineer-I,  
Damodar Canal Division,  
Court Compound,  
PurbaBardhaman**

**Memo No. – 2181/1(25)**

Date: - 13/11/2024

**Copy forwarded for information and circulation to the:-**

1. Chief Engineer (West), Irrigation & Waterways Dte. Kanainatsal, Purba Bardhaman.
2. Superintending Engineer, Damodar Irrigation Circle, Kanainatsal, Purba Bardhaman
3. Additional project Director-III, DPMU-I, WBMIFMP I & WD, Kanainatshal Purba Bardhaman.
4. Executive Engineer, Damodar Head Works Division
5. Executive Engineer I , Lower Damodar Irrigation Division
6. Executive Engineer II, Lower Damodar Irrigation Division.
7. Executive Engineer, R.B.I Division
8. Executive Engineer, B.I Division
9. Executive Engineer, Asansol Irrigation Division
10. District Information Officer, Purba Bardhaman.
11. Deputy Secretary Vigilance Commission, Kolkata-91.
12. -21.All Sub Division Office of D.C. Division.
22. Estimating Section of D.C. Division.
23. Accounts Section of D.C. Division
24. Office Notice Board, D.C. Division
25. Office Notice Board, Damodar Irrigation Circle.

Sd/-  
**Executive Engineer-I,  
Damodar Canal Division,  
Court Compound,  
PurbaBardhaman**

**Details of Deb Khals under Seharabazar Irrigation Sub Division under Damodar Canal Division**

<b>Sl No.</b>	<b>Name of Deb khal</b>	<b>Marking</b>	<b>Length (Km)</b>
<b>1</b>	<b>Debkhal 1 Main stream</b>	<b>D1</b>	<b>59.2</b>
2	Branch 1 of Debkhal 1	D1_B1	4.1
<b>3</b>	Branch 2 of Debkhal 1	D1_B2	4.5
4	Branch 3 of Debkhal 1	D1_B3	1.7
<b>5</b>	Branch 4 of Debkhal 1	D1_B4	1
6	Branch 5 of Debkhal 1	D1_B5	1.41
<b>7</b>	Branch 6 of Debkhal 1	D1_B6	0.62
8	Branch 7 of Debkhal 1	D1_B7	3.37
<b>9</b>	Branch 8 of Debkhal 1	D1_B8	5.31
10	Branch 9 of Debkhal 1	D1_B9	20.2
<b>11</b>	Branch 10 of Debkhal 1	D1_B10	5.73
12	Branch 11 of Debkhal 1	D1_B11	1.9
<b>13</b>	Branch 12 of Debkhal 1	D1_B12	20
14	Branch1 of Branch 12 of Debkhal 1	D1_B12/1	1.38
<b>15</b>	Branch2 of Branch 12 of Debkhal 1	D1_B12/2	3.36
16	Branch 13 of Debkhal 1	D1_B13	1.15
<b>17</b>	Branch 14 of Debkhal 1	D1_B14	1.34
18	Branch 15 of Debkhal 1	D1_B15	1.33
<b>19</b>	Branch 16 of Debkhal 1	D1_B16	16
	Total length of Deb Khal-1 including it's branches (A)=		153.6
20	Debkhal 2 Main stream	D2	17.7
21	Branch 1 of Debkhal 2	D2_B1	2.86
	Total length of Deb Khal-2 including it's branches (B)=		20.56
22	Debkhal 3 Main stream	D3	34.8
23	Branch 1 of Debkhal 3	D3_B1	21.4
24	Branch 2 of Debkhal 3	D3_B2	1.85
	Total length of Deb Khal-3 including it's branches (C)=		58.05
	<b>Total length of Deb Khal including branches (A=B+C)=</b>		<b>232.21</b>
<b>Details of Deb Khals under Amarkanan Irrigation Sub Division under Damodar Canal Division</b>			
<b>1</b>	<b>Deb Khal 1 under Patrasayer Block</b>	<b>d1</b>	<b>6.5</b>
<b>2</b>	<b>Branch of Deb Khal 1 under Patrasayer Block</b>	<b>d1_b1</b>	<b>9.0</b>
<b>3</b>	<b>Deb Khal 2 under Patrasayer &amp; Indas Block</b>	<b>d2</b>	<b>15.00</b>
<b>4</b>	<b>Branch of Deb Khal 2 under Patrasayer Block</b>	<b>d2_b1</b>	<b>2.4</b>



Government of West Bengal

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**Notice Inviting Expression of Interest (Eoi) No.: 01(Eoi)/ EE-I/D.C.D / 2024-25**

Sealed quotation is hereby invited by the Executive Engineer-I, Damodar Canal Division, Court Compound, Purba Bardhaman, Pin- 713101 Irrigation & Waterways Directorate from the bonafide, reliable and resourceful agencies to ascertain unit rates [**budget quote**] as per below mentioned schedule of items in connection to the work "**Assessment of present capacities of drainage channels Devkhal in block –Khandaghosh, Raina-I, Raina-II within the District, Purba Bardhaman and block Patrasayer, Indas within district -Bankura & surrounding areas to draw a comprehensive plan for maintenance and upkeep of the drainage channels under Irrigation & Waterways Department, GoWB**".

**Schedule of items**

Sl. No	Description & specification of items	Quantity	Unit	Quoted rate in Rs. including all taxes as applicable and all incidental charges (in figure & in words)
1	Detailed topographic & hydrographic survey of various channels/khals etc by using instruments like total station, RTK-DGPS, Eco-sounder/ADCP etc by taking total alignment with geo-referencing and plotting on Google map including cross sections of drainage channels/khals @120 m c/c (extending each cross section 10 m from end point of both side banks) w.r.t. G.T.S. Bench Mark (including flying of G.T.S. Bench Mark from nearest available locations upto present working locations) along with additional cross sections ( both u/s & d/s) at the points of bridges, regulators, cross overs, inlets, tributaries , branch channels, drains , out channels from pump houses, important obstructions etc. along these drainage channels/ khals , cross sections of river [at outfall point of channel/khal into river, 50 mtr u/s & d/s of that outfall point] and submission of report comprising detail drawings, volume calculation of silt deposited [both soft copy (in .DWG & .KMZ/KML format & must be geo-referenced) & hard copy [six sets] in the form of index map, topographic site plan showing all important features, type of buildings , nature of land , structures [vantage area of structures, sill level, invert level etc.], cross sections & long sections of channels/khals, with min suitable scale , true north and relevant photographs etc. as per direction & satisfaction of E.I.C. complete. <b>Note:</b> 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. [The rate is inclusive of all taxes as applicable]	01 km	per km	
2.	Detailed field survey for a defined area by recording spot levels (G.I.S based) by using instruments like total station, RTK-DGPS etc. connecting nearest G.T.S. Bench Mark, plotting & developing G.I.S based site map, grid map [ 25 m x 25 m ], contour map at suitable interval, showing true north, location of existing drainage channels with spot levels & sections at suitable intervals, locations of river, drainage channel/khal, water body, roads, rail, structures, buildings, any other important features etc. with preparation & submission of report comprising detail drawings and Index maps of Deb khals/drainage			

	<p><b>systems</b> [both soft copy (in.DWG &amp; .KMZ/KML format &amp; must be geo-referenced )&amp; hard copy] of the same [six sets] as per direction of E.I.C.</p> <p><b>Note:</b>The rate is inclusive of all incidental charges like all type carriage,engagement of manpower &amp; instruments/equipment, software etc. as applicable to complete to work in all respect. [The rate is inclusive of all taxes as applicable]</p>	01 sq.km	per sq. km	
3.	<p>Erection of Benchmark pillar at defined location with following specification :Cast-in Situ/Precast RCC made benchmark pillar of size 0.3 m x 0.30 m x 1.5 m (0.60 m above G.L. &amp; buried 0.90 m below&amp; suitable P.C.C base finish) with cement concrete grade of 1:1.5:3 ,4 nos of vertical bars of 10 mm dia&amp; stirrups of 8 mm dia@ 150 mm c/c ,including one 6 mm thick 50 mm dia GI pipe inserted within concrete with 100 mm x100 mm x6 mm mild steel fixed plate atop , painting ,lettering as per enclosed drawing including fixing on P.C.C. base [ 2ftx2ft] one reflective aluminium sign board [size 1ft x 2 ft] attached with suitable M.S.angle frame &amp;stand [min 6 ftht. from base] including lettering, colouring and as per direction of EIC.---complete.</p> <p><b>Note:</b>The rate is inclusive of all charges like all materials, all type carriage upto site, all labours, all concrete related items, sign board items ,painting, lettering etc as applicable to complete to work in all respect. [The rate should be inclusive of all taxes as applicable]</p>	01 no.	each	
4.	<p>Gauge fixing by Anti-Corrosive fluorescent painting(using white, yellow, black &amp; red colour) on bridge pier or abutment in G.T.S. <b>Meter</b> [up to 5(five) meter height and 0.30meter to 0.50meter width] from minimum level to maximum level with HFL/HTL marking with at least <b>1m</b> free board above maximum level complete as desired by the Engineer in Charge.</p> <p><b>Note:</b> The rate is inclusive of all charges like all materials, all type carriage upto site, all labours, all concrete related items, sign board items ,painting, lettering etc as applicable to complete to work in all respect. [The rate should be inclusive of all taxes as applicable]</p>	01 no	each	
5.	<p>Mathematical Model study for a defined area based upon different concerned /corresponding data from different authorities like rainfall ,runoff, water level &amp; discharge through channels, tide lockage at outfall point etc. ,setting up one dimensional model for existing channels &amp; calibration/validation of same based on available observed data, setting up two dimensional flood inundation model &amp; calibration/validation of model based on observed inundation information, coupling of 1D &amp; 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 &amp; 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 &amp; hard copy : 06 nos] as per direction of E.I.C.</p> <p><b>Note:</b> The rate is inclusive of all incidental charges like all type carriage, engagement of manpower &amp; instruments/equipment, software etc. as applicable to complete to work in all respect. [The rate is inclusive of all taxes as applicable]</p> <p><b>Objectives</b>  <b>Scope of work for Mathematical Modelling</b></p> <ol style="list-style-type: none"> <li>1. Rainfall intensity analysis and generation of Intensity-duration-frequency (IDF) curve based on available rainfall data of at least 50 years.</li> <li>2. Hydrologic model (Rainfall-runoff) Set-up for runoff/ estimating discharge from different sub-catchments of the contributing to Channels/Canals.</li> <li>3. One dimensional hydrodynamic model for existing Channels/Canals based on surveyed cross-section with ZYZ format (using ADCP/Echo-sounder &amp; RTK survey instruments).</li> <li>4. Set-up 2D model for flood plain area on the available DEM and coupling of 1D-2D model.</li> <li>5. Calibration/validation of 1D-2D model based on available observed data [water levels (gauge) /Discharges and Cross sections].</li> <li>6. Simulation of different scenarios for existing conditions and post-</li> </ol>	01 sq.km.	Per sq.k m	

<p>project/ flood management (dredging, inclusion of pumps) conditions.</p> <p>7. Plot of inundation map for different return periods of rainfall.</p> <p>8. PPT presentation (off line mode) of the mathematical model study before the officers concerned of the I&amp;WD, Govt. of West Bengal after validation &amp; calibration; after prospective findings and before &amp; after final submission of the said model study.</p> <p>9. The mathematical model study report should be addressed on Introduction, Objectives, Scope of work, Data sources, 1D&amp;2D models formulations methodology, Calibration and validation, results of the model runs in different scenario, graphical representations of the findings, conclusion and recommendations.</p> <p>10. Six hard copies of the mathematical model study report with live model including all data (raw &amp; process) on pen drive with suitable storage (one number) and DVD (five numbers) to the officer concerned of the I&amp;WD, Govt. of WB.</p> <p><i>Data like rainfall, discharge from different catchments contributing to main canal/channels, discharge through pumps to the canals/channels from KMC/Municipality area , water level /discharge at canals as required for calibration/validation of model etc. will be supplied.</i></p>			
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**NOTES :-**

i)The rates is only to ascertain unit rate for official purpose.

ii) No work order will be issued against this Budget Quote.

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**Signature of Quotationer**

**Sd/-**

**Executive Engineer-I**

**Damodar Canal Division,**

**Court Compound, Purba Bardhaman, Pin- 713101**

**(With Stamp).**