# PROCUREMENT OF NON-CONSULTANCY SERVICES UNDER NATIONAL **COMPETITIVE BIDDING**



### **GOVT. OF WEST BENGAL**

### **Irrigation & Waterways Directorate**

NATIONAL HYDROLOGY PROJECT NH-2, Purta Bhawan, 3<sup>rd</sup> Floor, Purba Burdwan-713103 <u>Tel:+91342-2646799</u>, Fax:+9/342-2646799 Email: eebipd2022@gmail.com / <u>bengalsw@gmail.com</u>

### REQUEST FOR BIDS RFB No.- WBIW/NHP/RFB-02/2023-24

Procurement of Non-Consulting Services under National competitive Bidding E-Procurement Notice

Name of Work	"Survey of embankment & corresponding mapping and health checking under i) Howrah Irrigation Division in the districts of Howrah and Hooghly, ii) Contai Irrigation Division (Ph-II) in the districts of Purba Medinipur, iii) West Midnapore Division (Ph-II) in the districts of Paschim Medinipur & iv) Canals Division in the districts of North and South 24 Parganas under NHP of I&W Department GoWB."	
Tender documents	Can be downloaded from website https://wbtenders.gov.in	
Document Publish Date	29.09.2023;17:00 HRS (System Server Time)	
Pre-bid Meeting Date and Time	11.10.2023; 13:30 HRS	
Online Bid Submission Closing Date and Time	08.11.2023; 15:00 HRS (System Server Time)	
Date, Time and Venue of opening of Technical Bid	08.11.2023; 16:00 HRS (System Server Time)	
The Financial Bids of only the Technical qualified firms would be opened and the Date would be		

The Financial Bids of only the Technical qualified firms would be opened and the Date would be notified subsequently.

### **OFFICERINVITINGBIDS**:

The Executive Engineer Burdwan Investigation & Planning Division, I&W Dte., Govt. of West Bengal. Purta Bhawan, 3rd Floor, Purba Burdwan-713103, West Bengal Tel. No: 0342- 2646799, 90643 78729 e-mail: <u>eebipd2022(@gmail.com</u> / <u>bengalsw(@gmail.com</u>



### GOVT. OF WEST BENGAL Irrigation & Waterways Directorate

NATIONAL HYDROLOGY PROJECT NH-2, Purta Bhawan, 3<sup>rd</sup> Floor, Purba Burdwan-713103 <u>Tel:+91342-2646799</u>, Fax:+91342-2646799 Email: eebipd2022@gmail.com / bengalsw@gmail.com

### <u>REQUEST FOR BIDS</u> <u>RFB No.- WBIW/NHP/RFB-02/2023-24</u> Procurement of Non-Consulting Services under National competitive Bidding E-PROCUREMENT NOTICE

MemoNo: 720/NHP-02/02

Date:29.09.2023

Loan No: 8725-IN

Ref No:NHP-2023-2024-WBSW-732192

NAME OF WORK: "Survey of embankment & corresponding mapping and health checking under i) Howrah Irrigation Division in the districts of Howrah and Hooghly, ii) Contai Irrigation Division (Ph-II) in the districts of Purba Medinipur, iii) West Midnapore Division (Ph-II) in the districts of Paschim Medinipur & iv) Canals Division in the districts of North and South 24 Parganas under NHP of I&W Department GoWB."

Invitation for Bid (IFB) follows the General Procurement Notice for this Project that appeared in Development Business on 9th May, 2017.

1. The Government of India has received financing from the World Bank in various currencies towards the cost of the National Hydrology Project and intends to apply part of the proceeds towards eligible payments under the contract for Procurement of Non-Consulting Services as detailed below. Bidding will be conducted through National Competitive Bidding procedures agreed with the World Bank. Bidding is open to all eligible bidders as defined in the Guidelines: Procurement of Goods, Works and Non-Consultancy Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers, January, 2011 revised in July 2014. Bidders from India should, however, be registered with the Government of India or other State Governments, or State/Central Government Undertakings. Bidders from India, who are not registered as above, on the date of bidding, can also participate provided they get themselves registered by the time of contract signing, if they become successful

bidders. Bidders are advised to note the clauses on eligibility (Section I Clause 4 and minimum qualification criteria (Section I Clause 5) of the Instructions to Bidders to qualify for the award of the contract. In addition, please refer to paragraphs 1.6 and 1.7 of the World Bank's Guidelines setting forth the World Bank's policy on conflict of interest.

2. The Executive Engineer, Burdwan Investigation & Planning Division, Irrigation & Waterways Directorate, Govt. of West Bengal, Purta Bhawan, 3rd Floor, Purba Burdwan-713103, West Bengal (for and on behalf of Irrigation & Waterways Department, Govt. of West Bengal invites item rates bid electronically from eligible service providers (bidders) for the following nonconsulting services.

### Table-1: Details of Critical Dates, Details of Work, Bid Security, Bid Submission Fee

Name of Work	"Survey of embankment & corresponding mapping and health checking under i) Howrah Irrigation Division in the districts of Howrah and Hooghly, ii) Contai Irrigation Division (Ph-II) in the districts of Purba Medinipur, iii) West Midnapore Division (Ph-II) in the districts of Paschim Medinipur & iv) Canals Division in the districts of North and South 24 Parganas under NHP of I&W Department GoWB."	
Tender documents	Can be downloaded from website https://wbtenders.gov.in	
Document Publish Date	29.09.2023;17:00 HRS (System Server Time)	
Document Download Starting Date and Time	30.09.2023; 10:00 HRS (System Server Time)	
Pre-bid Meeting Date and Time	11.10.2023; 13:30 HRS	
Online Bid Submission Starting Date and Time	31.10.2023; 15:00 HRS (System Server Time)	
Online Bid Submission Closing Date and Time	08.11.2023; 15:00 HRS (System Server Time)	
Last Date and time of Receipt of relevant document as mentioned (IFB) by speed post/Courier/by hand	08.11.2023; 15:00 HRS (System Server Time)	
Date, Time and Venue of opening of Technical Bid	08.11.2023; 16:00 HRS (System Server Time)	
The Financial Bids of only the Technical qualified firms would be opened and the Date would be notified subsequently.		

**3.** The bid document is available online and bids are to be submitted online, in two parts, through e-tendering portal https: //wbtenders. gov.in. Digital Signature is mandatory to participate in the e-tendering. Bidders already possessing the digital signature (signing and encryption) issued from the authorized CCAs can use the same in this tender.

The Bid shall be processed through e-procurement system of NIC. For this the Bidders, having Class-III Digital Signature are required to be registered at <u>https://wbtenders.gov.in</u>. Bidders not having the Digital Signature, have to obtain digital signature (Class-III) (signing and encryption) for participating in NIC e-procurement portal at their own cost from any of the authorized agencies of CCA (Controller of Certifying Authorities)

- 4. A pre-bid meeting will be held at office of the Superintending Engineer, Investigation & Planning Circle-II, Irrigation & Waterways Directorate, Jalasampad Bhawan, 5<sup>th</sup> floor, Salt Lake, Kolkata-700091 to clarify the issues and to answer questions on any matter that may be raised at that stage. Bidders may also participate in virtual mode. Link will be provided to interested bidders who need to send their request by mail.
- 5. Bids must be submitted online on https://eprocure.gov.in/eprocure/app.on or before the date and time for receipt of bids, and will be opened online on the specified time and date for opening of bids, as given above. Any bid or modifications to bid (including discount) received outside e-procurement system will not be considered. If the office happens to be closed on the date of opening of the bids as specified, the bids will be opened on the next working day at the same time. The electronic bidding system would not allow any late submission of bids.
- **6.** The bids for the work shall remain valid for acceptance for a period not less than 90 days after the deadline date for bid submission.
- 7. The bidders are required to submit (a) legally valid affidavit in original regarding correctness of information furnished (b) Bid Security in approved form with bid document to The Executive Engineer, Burdwan Investigation & Planning Division, I&W Dte., Govt. of West Bengal, Purta Bhawan, 3rd Floor, Purba Burdwan-713103, West Bengal before the opening of the Bid given above, either by registered post/speed post/courier or by hand, failing which the bids will be declared non-responsive and will not be opened.
- 8. Other details can be had from the bidding documents. The Employer shall not be held liable for any delays due to system failure beyond its control. Even though the system will attempt to notify the bidders of any bid updates, the Employer shall not be liable for any information not received by the bidder. It is the bidder's responsibility to verify the website for the latest information/corrigendum related to the bid.

### TABLE SHOWING DETAILS OF THE WORK

Name of the Services for the work "Survey of embankment & corresponding mapping and health checking under i) Howrah Irrigation Division in the districts of Howrah and Hooghly, ii) Contai Irrigation Division (Ph-II) in the districts of Purba Medinipur, iii) West Midnapore Division (Ph-II) in the districts of Paschim Medinipur & iv) Canals Division in the districts of North and South 24 Parganas under NHP of I&W Department GoWB."	Unit	Quantity	Bid Security in INR	Completion Period
1) Survey of embankments under Howrah Irrigation Division in the districts of Howrah and Hooghly and corresponding mapping and health checking.	Km	90		
2) Survey of embankments under Contai Irrigation Division (Ph II) in the districts of Purba Medinipur and corresponding mapping and health checking.	Km	180	1,72,000	4 (Four) Months
3) Survey of embankments under West Midnapore Division (Ph - II) in the districts of Paschim Medinipur and corresponding mapping and health checking.	Km	210		
4) Survey of embankments under Canals Division in the districts of North & South 24 Parganas and corresponding mapping and health checking.	Km	225		

9. For any query related to tender bidder may contact The Executive Engineer Burdwan Investigation & Planning Division, I&W Dte., Govt. of West Bengal. Purta Bhawan, 3rd Floor,Purba Burdwan-713103, West Bengal Tel. No: 0342- 2646799, 90643 78729 e-mail: eebipd2022@gmail.com / bengalsw@gmail.com

# **Part I – Bidding Procedures**

# **Section I - Instructions to Bidders**

## Contents

A. General	Pa	ge No.
1.	Scope of Bid	07
2.	Source of Funds	07
3.	Fraud and Corruption	08
4.	Eligible Bidders	08
5.	Qualification of the Bidder	09
B. Contents of	of Bidding Document	
6.	Sections of Bidding Document	11
7.	Site Visit	11
8.	Clarification of Bidding Document	12
9.	Amendment of Bidding Document	12
C. Preparati	ion of Bids	
10.	Cost of Bidding	12
11.	Language of Bid	12
12.	Documents Comprising the Bid	12
13.	Process of bid submission	13
14.	Alternative Bids	14
15.	Bid Prices and Discounts	14
16.	Currencies of Bid and Paymen	15
17.	Documents Establishing Conformity of Services	15
18.	Documents Establishing the Eligibility and Qualifications of the Bidder.	15
19.	Period of Validity of Bids	15
20.	Bid Security	16
21.	Format and Signing of Bid	17
D. Online Su	bmission of Bids	
22.	Preparation of Bid	18
23.	Deadline for Submission of Bids	18
24.	Late Bids	19
25.	Withdrawal, Substitution and Modification of Bids	19
E. Public ope	ening of Technical Parts of Bids	
26. Pu	blic opening of Technical Parts of Bids	19
	n of Bids- General Provisions	
27.	Confidentiality	20
28.	Clarification of Bids	20
29.	Deviations, Reservations, and Omissions	
30.	Nonconformities, Errors and Omissions	21
G.Evaluation of	f Technical Parts of Bids	
31.	Evaluation of Technical Parts	21
32.	Determination of Responsiveness	21

### H.Public Opening of Financial Parts of Bids

	33.	Public Opening of Financial Parts	22
I.Evalua	ation o	f Financial Parts of Bids	
	34.	Evaluation of Financial Parts	23
	35.	Correction of Arithmetical Errors	24
	36.	Conversion to Single Currency	24
	37.	Margin of Preferance	
	38.	Comparison of Financial Parts	24
	39.	Employer's Right to Accept Any Bid, and to Reject Any or All Bids	24
	40.	Standstill Period	25
	41.	Notice On Intention to Award	25
J. Awa	ard of	f Contract	
	42.	Award Criteria	25
	43.	Notification of Award	25
	44.	Debriefing	
	45.	Signing of Contract	
	46.	Performance Security	
	47.	Adjudicator	

### **Section I - Instructions to Bidders**

### A. General

- 1. Scope of Bid 1.1 In connection with the Specific Procurement Notice Request for Bids (RFB), specified in the Bid Data Sheet (BDS), the Employer, as specified in the BDS, issues this bidding document for the delivery of Non-Consulting Services, as specified in Section VII, Employer's Requirements. The name, identification and number of lots (contracts) of this RFB procurement are specified in the BDS.
  - 1.2 Throughout this bidding document:
    - (a) the term "in writing" means communicated in written form (e.g. by mail, e-mail, fax, including if specified in the BDS, distributed or received through the electronic-procurement system used by the Employer) with proof of receipt;
    - (b) if the context so requires, "singular" means "plural" and vice versa; and
    - (c) "Day" means calendar day, unless otherwise specified as "Business Day". A Business Day is any day that is an official working day of the Borrower. It excludes the Borrower's official public holidays.
  - 1.3 The successful Bidder will be expected to complete the performance of the Services by the Intended Completion Date provided in the BDS.
- 2. Source of Funds 2.1 The Borrower or Recipient (hereinafter called "Borrower") specified in the BDS has applied for or received financing (hereinafter called "funds") from the International Bank for Reconstruction and Development or the International Development Association (hereinafter called "the Bank") in an amount specified in the BDS, toward the project named in the BDS. The Borrower intends to apply a portion of the funds to eligible payments under the contract for which this bidding document is issued.
  - 2.2 Payment by the Bank will be made only at the request of the Borrower and upon approval by the Bank in accordance with the terms and conditions of the Loan (or other financing) Agreement. The Loan (or other financing) Agreement prohibits a withdrawal from the loan account for the purpose of any payment to persons or entities, or for any import of goods, equipment or materials if such payment or import is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter

of the United Nations. No party other than the Borrower shall derive any rights from the Loan (or other financing) Agreement or have any claim to the funds.

- **3. Fraud and Corruption 3.1** The Bank requires compliance with the Bank's Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework, as set forth in Section VI.
  - 3.2 In further pursuance of this policy, Bidders shall permit and shall cause its agents (where declared or not), subcontractors, subconsultants, service providers, suppliers, and their personnel, to permit the Bank to inspect all accounts, records and other documents relating to any initial selection process, prequalification process, bid submission, proposal submission and contract performance (in the case of award), and to have them audited by auditors appointed by the Bank.
- 4. Eligible Bidders 4.1 A Bidder may be a firm that is a private entity, a state-owned entity or institution subject to ITB 4.6, or any combination of such entities in the form of a Joint Venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. In the case of a joint venture, all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the Bidding process and, in the event the JV is awarded the Contract, during contract execution. Unless specified in the BDS, there is no limit on the number of members in a JV.
  - 4.2 A Bidder shall not have a conflict of interest. Any Bidder found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest for the purpose of this Bidding process, if the Bidder:
    - (a) directly or indirectly controls, is controlled by or is under common control with another Bidder; or
    - (b) receives or has received any direct or indirect subsidy from another Bidder; or
    - (c) has the same legal representative as another Bidder; or
    - (d) has a relationship with another Bidder, directly or through common third parties, that puts it in a position to influence the Bid of another Bidder, or influence the decisions of the Employer regarding this Bidding process; or

- (e) or any of its affiliates participated as a consultant in the preparation of the Employer's Requirements (including Activities Schedules, Performance Specifications and Drawings) for the Non-Consulting Services that are the subject of the Bid; or
- (f) or any of its affiliates has been hired (or is proposed to be hired) by the Employer or Borrower for the Contract implementation; or
- (g) would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the project specified in the BDS ITB 2.1 that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm; or
- (h) has a close business or family relationship with a professional staff of the Borrower (or of the project implementing agency, or of a recipient of a part of the loan) who: (i) are directly or indirectly involved in the preparation of the bidding document or specifications of the contract, and/or the Bid evaluation process of such contract; or (ii) would be involved in the implementation or supervision of such contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Bank throughout the procurement process and execution of the Contract.
- 4.3 A firm that is a Bidder (either individually or as a JV member) shall not participate in more than one Bid, except for permitted alternative Bids. This includes participation as a subcontractor. Such participation shall result in the disqualification of all Bids in which the firm is involved. A firm that is not a Bidder or a JV member, may participate as a sub-contractor in more than one Bid.
- 4.4 A Bidder may have the nationality of any country, subject to the restrictions pursuant to ITB 4.8. A Bidder shall be deemed to have the nationality of a country if the Bidder is constituted, incorporated or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed subcontractors or sub-consultants for any part of the Contract including related Services.
- 4.5 A Bidder that has been sanctioned by the Bank, pursuant to the Bank's Anti-Corruption Guidelines, and in accordance with its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework as described in Section VI paragraph 2.2 d., shall be ineligible to be initially selected for, prequalified for, bid for, submit proposal for, or be awarded a Bank-financed contract or benefit from a Bank-financed contract, financially or

otherwise, during such period of time as the Bank shall have determined. The list of debarred firms and individuals is available at the electronic address specified in the BDS.

- 4.6 Bidders that are state-owned enterprises or institutions in the Employer's Country may be eligible to compete and be awarded a Contract(s) only if they can establish, in a manner acceptable to the Bank, that they: (i) are legally and financially autonomous; (ii) operate under commercial law; and (iii) are not under supervision of the Employer.
- 4.7 A Bidder shall not be under suspension from Bidding by the Employer as the result of the operation of a Bid-Securing Declaration.
- 4.8 Firms and individuals may be ineligible if so indicated in Section V and (a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the supply of goods or the contracting of works or services required; or (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's country prohibits any import of goods or contracting of works or services from that country, or any payments to any country, person, or entity in that country.
- 4.9 This Bidding is open for all eligible Bidders, unless otherwise specified in ITB 18.4.
- 4.10 A Bidder shall provide such documentary evidence of eligibility satisfactory to the Employer, as the Employer shall reasonably request.
- 4.11 A firm that is under a sanction of debarment by the Borrower from being awarded a contract is eligible to participate in this procurement, unless the Bank, at the Borrower's request, is satisfied that the debarment; (a) relates to fraud or corruption, and (b) followed a judicial or administrative proceeding that afforded the firm adequate due process.
- **5. Qualification of** 5.1 All Bidders shall provide in Section IV, Bidding Forms, a preliminary description of the proposed work method and schedule, including the Bidder drawings and charts, as necessary.
  - 5.2 In the event that pregualification of Bidders has been undertaken as stated in ITB 18.4, the provisions on qualifications of the Section III, Evaluation and Qualification Criteria shall not apply.

### **B.** Contents of Bidding Document

6.1 The bidding document consists of Parts 1, 2, and 3, which include all the sections indicated below, and should be read in conjunction with

6. Sections of Bidding

Document	any Addenda issued in accordance with ITB 9.
	PART 1: Bidding Procedures
	• Section I - Instructions to Bidders (ITB)
	• Section II -Bid Data Sheet (BDS)
	• Section III - Evaluation and Qualification Criteria
	Section IV - Bidding Forms
	• Section V - Eligible Countries
	Section VI - Fraud and Corruption
	PART 2: Employer's Requirements
	Section VII - Employer's Requirements
	PART 3: Contract
	• Section VIII - General Conditions of Contract (GCC)
	• Section IX - Special Conditions of Contract (SCC)
	Section X - Contract Forms
	6.2 The Request for Bids issued by the Employer is not part of the Bidding Document
	6.3 Unless obtained directly from the Employer, the Employer is not responsible for the completeness of the document, responses to requests for clarification, the Minutes of the pre-Bid meeting (if any), or Addenda to the bidding document in accordance with ITB 9. In case of any contradiction, documents obtained directly from the Employer shall prevail.
	6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding document and to furnish with its Bid all information or documentation as is required by the bidding document.
7. Site Visit	7.1 The Bidder, at the Bidder's own responsibility and risk, is encouraged to visit and examine the Site of required Services and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for the Services. The costs of visiting the Site shall be at the Bidder's own expense.
8. Clarification of Bidding Document	8.1 The electronic bidding system specified in the BDS provides for online clarifications. A prospective Bidder requiring any clarification on the Bidding Documents may notify the Employer online. Clarifications requested through any other mode shall not be considered by the Employer. The Employer will respond to any request for clarification, provided that such request is received no later than

		Desc shall the s nece clari 9 and on t	en (15) days prior to the deadline for submission of bids. rription of clarification sought and the response of the Employer be uploaded for information of all Bidders without identifying ource of request for clarification. Should the Employer deem it ssary to amend the Bidding Documents as a result of a fication, it shall do so following the procedure under ITB Clause d ITB Sub-Clause 23.2. It is the bidder's responsibility to check he e-procurement system, for any addendum/ amendment/ gendum to the bidding document.
9. Amendment of Bidding Document	9.1	may adder Corri those	time prior to the deadline for submission of bids, the Employer amend the Bidding Documents by issuing addendum. The ndum will appear on the e-procurement system under "Latest gendum" and email notification is also automatically sent to bidders who have started working on the tender, or as wise specified in BDS.
	9.2		addendum thus issued shall be part of the Bidding Documents hall be deemed to have been communicated to all the bidders.
	9.3	adder its d	ive prospective Bidders reasonable time in which to take an ndum into account in preparing their bids, the Employer may, at iscretion, extend the deadline for the submission of bids, nant to ITB Sub-Clause 23.2
10. Cost of Bidding	10.1	submis or liab	<b>C. Preparation of Bids</b> idder shall bear all costs associated with the preparation and ssion of its Bid, and the Employer shall not be responsible le for those costs, regardless of the conduct or outcome of idding process.
11. Language of Bid	11.1	The Bid as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Employer shall be written in the language specified in the BDS. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages into the language specified in the BDS, in which case, for purposes of interpretation of the Bid, such translation shall govern.	
12 Documents Comprising the	12.1		d shall comprise two Parts, namely the Technical Part and the ial Part. These two Parts shall be submitted simultaneously.
Bid	12.2 <b>1</b>	The Tec	chnical Part shall contain the following:
			Letter of Bid – Technical Part, in accordance with ITB Clause 13;
		. ,	Bid Security, in accordance with ITB Clause 20.1, if required;

Alternative bids- Technical Part, if permissible, in (c) accordance with ITB 14, the Technical Part of any Alternative Bid;

- (d) written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB Clause 21.2;
- (e) documentary evidence in accordance with ITB Clause 18 establishing the Bidder's qualifications to perform the contract if its bid is accepted;
- (f) documentary evidence in accordance with ITB 18 establishing the Bidder's eligibility to bid;
- (g) documentary evidence in accordance with ITB Clauses 17, that the Services conform to the Bidding Documents;
- (h) any other document required in the BDS.

### 12.3 The Financial Part shall contain the following:

- (a) Letter of Bid Financial Part: prepared in accordance with ITB 13 and ITB 15;
- (b) Price Schedules: completed prepared in accordance with ITB 13 and ITB 15;
- (c) Alternative Bid Financial Part; if permissible in accordance with ITB 14, the Financial Part of any Alternative Bid; and
- (d) Any other document required in the BDS.
- 12.4 The Technical Part shall not include any financial information related to the Bid price. Where material financial information related to the Bid price is contained in the Technical Part, the Bid shall be declared non-responsive.
- 12.5 The Bidder shall furnish in the Letter of Bid, information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid.

# 13. Process of Bid 13.1 The Letter of Bid – Technical Part, Letter of Bid – Financial Part, and Price Schedules shall be prepared using the relevant forms furnished in Section IV, Bidding Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITB 22.2. All blank spaces shall be filled in with the information requested.

- 13.2 Entire Bid including the Letter of Bid and filled-up Price Schedules shall be submitted online on e-procurement system specified in ITB 8.1. Details and process of online submission of the tender and relevant documents are given in the website mentioned above. Scanned copies of documents listed in clauses 12 and 13.3 should also be uploaded on this website.
- 13.3 Submission of Original Documents: The bidders are required to separately submit (i) original bid security in approved form; and (ii) original affidavit regarding correctness of information furnished with bid document, with the office specified in the BDS,

		before the opening of the technical part of the Bid, either by registered/speed post/courier or by hand, failing which the bids will be declared non-responsive and will not be opened. Hard copy of rest of the bid is not to be submitted.
14. Alternative Bids	14.1	Unless otherwise specified in the BDS, alternative bids shall not be considered.
15. Bid Prices and Discounts	15.1	The prices and discounts (including any price reduction) quoted by the Bidder in the Letter of Bid and in the Activity Schedule(s) shall conform to the requirements specified below.
	15.2	All lots (contracts) and items must be listed and priced separately in the Activity Schedule(s).
	15.3	The Contract shall be for the Services, as described in Appendix A to the Contract and in the Specifications (or Terms of Reference), based on the priced Activity Schedule, submitted by the Bidder.
	15.4	The Bidder shall quote any discounts and indicate the methodology for their application in the Letter of Bid- Financial Part in accordance with ITB 13.1.
	15.5	The Bidder shall fill in rates and prices for all items of the Services described in the in Specifications (or Terms of Reference), and listed in the Activity Schedule in Section VII, Employer's Requirements. Items for which no rate or price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Activity Schedule.
	15.6	All duties, taxes, and other levies payable by the Service Provider under the Contract, or for any other cause, as of the date 28 days prior to the deadline for submission of Bids, shall be included in the total Bid price submitted by the Bidder.
	15.7	If provided for in the BDS, the rates and prices quoted by the Bidder shall be subject to adjustment during the performance of the Contract in accordance with and the provisions of Clause 6.6 of the General Conditions of Contract and/or Special Conditions of Contract. The Bidder shall submit with the Bid all the information required under the Special Conditions of Contract and of the General Conditions of Contract.
	15.8	For the purpose of determining the remuneration due for additional Services, a breakdown of the lump-sum price shall be provided by the Bidder in the form of Appendices D and E to the Contract.
16. Currencies of Bid and Payment	16.1	The Bidder shall quote the Price in Indian Rupees only.

17. Documents
 Establishing
 Conformity of
 Services
 17.1 To establish the conformity of the Non-Consulting Services to the bidding document, the Bidder shall furnish as part of its Bid the documentary evidence that Services provided conform to the technical specifications and standards specified in Section VII, Employer's Requirements.

- 17.2 Standards for provision of the Non-Consulting Services are intended to be descriptive only and not restrictive. The Bidder may offer other standards of quality provided that it demonstrates, to the Employer's satisfaction, that the substitutions ensure substantial equivalence or are superior to those specified in the Section VII, Employer's Requirements.
- 18.1 To establish Bidder's their eligibility in accordance with ITB 4, Bidders shall complete the Letter of Bid, included in Section IV, Bidding Forms.
  - 18.2 The documentary evidence of the Bidder's qualifications to perform the Contract if its Bid is accepted shall establish to the Employer's satisfaction that the Bidder meets each of the qualification criterion specified in Section III, Evaluation and Qualification Criteria.
  - 18.3 All Bidders shall provide in Section IV, Bidding Forms, a preliminary description of the proposed methodology, work plan and schedule.
  - 18.4 In the event that prequalification of Bidders has been undertaken as stated in the BDS, only Bids from prequalified Bidders shall be considered for award of Contract. These qualified Bidders should submit with their Bids any information updating their original prequalification applications or, alternatively, confirm in their Bids that the originally submitted prequalification information remains essentially correct as of the date of Bid submission.
  - 18.5 If prequalification has not taken place before Bidding, the qualification criteria for the Bidders are specified in Section III, Evaluation and Qualification Criteria.
- 19.1 Bids shall remain valid for the Bid Validity period specified in the BDS. The Bid Validity period starts from the date fixed for the Bid submission deadline date (as prescribed by the Employer in accordance with ITB 23.1). A Bid valid for a shorter period shall be rejected by the Employer as nonresponsive.
  - 19.2 In exceptional circumstances, prior to the expiration of the Bid validity period, the Employer may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with ITB 20, it shall also be extended for a corresponding period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not

18. Documents Establishing the Eligibility and Qualifications of the Bidder

19. Period of Validity of Bids be required or permitted to modify its Bid, except as provided in ITB 19.3.

- 19.3 If the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial bid validity period, the Contract price shall be determined as follows:
  - (a) in the case of fixed price contracts, the Contract price shall be the Bid price adjusted by the factor specified in the BDSfor each week or part of the week that has elapsed from the expiration of the initial bid validity to the date of notification of award to the successful bidder
  - (b) in the case of adjustable price contracts, no adjustment shall be made; or
  - (c) in any case, Bid evaluation shall be based on the Bid price without taking into consideration the applicable correction from those indicated above.
- **20. Bid Security** 20.1 The Bidder shall furnish as part of the Technical Part of its bid, a Bid Security, if required, as specified in the BDS.

20.2 Not used.

- 20.3 The Bid Security shall be in the amount specified in the BDS and denominated in Indian Rupees or a freely convertible currency, and shall:
  - at the bidder's option, be in the form of either a demand draft or a bank guarantee from a Nationalized /Scheduled Bank in India, or another security specified in the BDS;
  - be substantially in accordance with one of the forms of Bid Security included in Section IV, Bidding Forms, or other form approved by the Employer prior to bid submission;
  - be payable promptly upon written demand by the Employer in case the conditions listed in ITB Clause 20.7are invoked;
  - be submitted in its original form; copies will not be accepted;
  - remain valid for a period of 45 days beyond the original validity period of the bids, or beyond any period of extension of bid validity, if so requested under ITB Clause 19.2.
- 20.4 If a Bid Security is specified pursuant to ITB 20.1, any Bid not accompanied by a substantially responsive Bid Security shall be rejected by the Employer as non-responsive.
- 20.5 The Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's signing the

contract and furnishing the Performance Security pursuant to ITB 46.

- 20.6 The Bid Security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required Performance Security.
- 20.7 The Bid Security may be forfeited:
  - (a) If a Bidder withdraws its bid during the period of bid validity specified by the Bidder in the Letter of Bid (Technical Part and/or Financial Part), except as provided in ITB Sub-Clause 19.2; or
  - (b) if the successful Bidder fails to:
    - sign the Contract in accordance with ITB 45; or
    - furnish a performance security in accordance with ITB 46.
- 20.8 Not used.
- 20.9 If a Bid Security is not required in the BDS, pursuant to ITB 20.1, and if a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder on the Letter of Bid; or if the successful Bidder fails to: sign the Contract in accordance with ITB 45; or furnish a performance security in accordance with ITB 46; the Borrower may, if provided for in the BDS, declare the Bidder ineligible to be awarded a contract by the Employer for a period of

the Borrower may, if provided for in the BDS, declare the Bidder ineligible to be awarded a contract by the Employer for a period of time as stated in the BDS.

21. Format and

Signing of Bid

- 21.1 The Bidder shall prepare the Bid as per details given in ITB 22.
- 21.2 The bid shall be signed by a person duly authorized to sign on behalf of the Bidder. The authorization shall consist of a written confirmation as specified in the BDS and shall be uploaded along with the bid.
- 21.3 Not used.
- 21.4 Corrections if any in the bid can be carried out by editing the information before electronic submission on e-procurement portal

### **D.** Online Submission of Bids

22. Preparation of Bids 22.1 Bids, both Technical and Financial Parts, shall be submitted online on the e-procurement system specified in BDS 8.1. Detailed guidelines for viewing bids and submission of online bids are given on the website. The Invitation for Bids under this Project is published on this website and view the Invitation for Bids and can view the details of goods for which bids are invited. A prospective bidder can submit its bid online; however, the bidder is required to have enrolment/registration in the website, and should have valid Digital Signature Certificate (DSC) in the form of smart card/e-token obtained from any authorised certifying agency of Government of India (for class of DSC specified in BDS). The

	22.3	bidder should register in the website using the relevant option available. Then the Digital Signature registration has to be done with the e-token, after logging into the website. The bidder can then login the website through the secured login by entering the password of the e-token & the user id/ password chosen during registration. After getting the bid schedules, the Bidder should go through them carefully and submit the specified documents, along with the bid, otherwise the bid will be rejected. The completed bid comprising of documents indicated in ITB 12, should be uploaded on the e-procurement portal along with scanned copies of requisite certificates as are mentioned in different sections in the bidding document and scanned copy of the bid security. All the documents are required to be signed digitally by the bidder. After electronic on-line bid submission, the system generates a unique bid identification number which is time stamped as per server time. This shall be treated as acknowledgement of bid submission. Physical, Email, Telex, Cable or Facsimile bids will be rejected as non-responsive.
23. Deadline for Submission of Bids		Bids must be uploaded online no later than the date and time specified in the BDS. The Employer may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Documents in accordance with ITB Clause 9, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.
24.Late Bids	24.1	The electronic bidding system would not allow any late submission of bids after due date & time as per server time.
25.Withdrawal, Substitution and Modification of Bids		Bidders may modify their bids by using appropriate option for bid modification on the e-procurement portal, before the deadline for submission of bids. For bid modification and consequential re- submission, the bidder is not required to withdraw his bid submitted earlier. The last modified bid submitted by the bidder within the bid submission time shall be considered as the bid. For this purpose, modification/withdrawal by other means will not be accepted. In online system of bid submission, the modification and consequential re-submission of bids is allowed any number of times. A bidder may withdraw his bid by using appropriate option for bid withdrawal, before the deadline for submission of bids, however, if the bid is withdrawn, re-submission of the bid is not allowed (or allowed if specified in BDS).
	25.2	Clause 25.1 shall not be opened.
	25.3	No bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Letter of

Bid (Technical Part and/or Financial Part) or any extension thereof.

### E. Public Opening of Technical Parts of Bids

26. Public 26.1 The Employer shall publicly open Technical Parts of all bids received by the deadline, at the date, time and place specified **Opening of Technical Parts** in the BDS, in the presence of Bidder's designated of Bids representatives and anyone who chooses to attend, and this could also be viewed by the bidders online. The Financial Parts of the bids shall remain unopened in the e-procurement system, until the subsequent public opening, following the evaluation of the Technical Parts of the Bids. In all cases, original documents submitted as specified in ITB 13.3 shall be first scrutinized, and Bids that do not comply with the provisions of ITB 13.3 will be declared non-responsive and will not be opened. Thereafter, bidder's names, and such other details as the Employer may consider appropriate will be notified online as Technical Part bid opening summary.

> In the event of the specified date of bid opening being declared a holiday for the Employer, the bids will be opened at the appointed time and location on the next working day.

26.2 The electronic summary of the bid opening will be generated and uploaded online. The Employer will also prepare minutes of the Bid opening, including the information disclosed and upload the same for viewing online. Only Technical Parts of Bids, alternative bids - Technical Parts if permitted in ITB 14 that are opened at Bid opening shall be considered further for evaluation.

### F. Evaluation of Bids – General Provisions

- 27.1 Information relating to the evaluation of Bids and **27.** Confidentiality recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with the Bidding process until information on the Intention to Award the Contract is transmitted to all Bidders in accordance with ITB 42.
  - 27.2 Any effort by a Bidder to influence the Employer in the evaluation or contract award decisions may result in the rejection of its Bid.
  - 27.3 Notwithstanding ITB 27.2, from the time of Bid opening to the time of Contract Award, if any Bidder wishes to contact the Employer on any matter related to the Bidding process, it should do so in writing.

#### **28.** Clarification of 28.1 To assist in the examination, evaluation, and comparison of Bids, and qualification of the Bidders, the Employer may, at Bids

	the Employer's discretion, ask any Bidder for clarification of its Bid including breakdowns of the prices in the Activity Schedule, and other information that the Employer may require. Any clarification submitted by a Bidder in respect to its Bid and that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease, in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids, in accordance with ITB 34.
	28.2 If a Bidder does not provide clarifications of its Bid by the date and time set in the Employer's request for clarification, its Bid may be rejected.
29. Deviations,	29.1 During the evaluation of Bids, the following definitions apply:
Reservations, and Omissions	<ul><li>(a) "Deviation" is a departure from the requirements specified in the bidding document;</li></ul>
	(b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the bidding document; and
30.Nonconformitie	(c) "Omission" is the failure to submit part or all of the information or documentation required in the bidding document.
s, Errors and Omissions	<ul> <li>30.1 Provided that a Bid is substantially responsive, the Employer may waive any non-conformities in the Bid.</li> <li>30.2 Provided that a Bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.</li> <li>30.3 Provided that a Bid is substantially responsive, the Employer shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component in the manner specified In the BDS.</li> </ul>
	G. Evaluation of Technical Parts of Bids
31.Evaluation of	31.1 In evaluating the Technical Parts of each Bid, the Employer

**31.Evaluation of**<br/>Technical Parts**31.1** In evaluating the Technical Parts of each Bid, the Employer<br/>shall use the criteria and methodologies listed in ITB 31, ITB<br/>32, and Section III, Evaluation and Qualification Criteria. No

other evaluation criteria or methodologies shall be permitted.

### **32.** Determination

of Responsiveness

- 32.1 The Employer's determination of a Bid's responsiveness is to be based on the contents of the Bid itself, as defined in ITB 12.
- 32.2 A substantially responsive Bid is one that meets the requirements of the bidding document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that:
  - (a) if accepted, would:
    - (i) affect in any substantial way the scope, quality, or performance of the Non-Consulting Services specified in the Contract; or
    - (ii) limit in any substantial way, inconsistent with the bidding document, the Employer's rights or the Bidder's obligations under the Contract; or
  - (b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.

determine the completeness of each document submitted.

- 32.3 The Employer shall examine the bids to confirm that all documents and technical documentation requested in ITB Clause 12 have been provided.
- 32.4If a Bid is not substantially responsive to the requirements of bidding document, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

### H. Public Opening of Financial Parts of Bids

33 Public Opening of Financial part
33.1 Following the completion of the evaluation of the Technical Parts of the Bids, and the Bank has issued its no objection (if applicable), the Employer shall notify in writing / electronic medium to those Bidders who have failed to meet the Qualification Criteria and/or whose Bids were considered non-responsive to the requirements in the bidding document, advising them of the following information:

(a) their Technical Part of Bid failed to meet the requirements of the bidding document;

- (b) their Financial Part of the Bid shall not be opened; and
- (c) notify them of the date and time for public opening of the Financial Parts of the Bids. Financial Parts of the bids shall not be opened earlier than seven (7) days from the communication of technical evaluation results to the bidders.
- 33.2 The Employer shall, simultaneously, notify in writing / electronic medium those Bidders whose Technical Parts have

been evaluated as substantially responsive to the bidding document and met the Qualification Criteria, advising them of the following information:

- Their Bid has been evaluated as substantially responsive (a) to the bidding document and met the Qualification Criteria;
- (b) their Financial Part of Bid will be opened at the public opening of Financial Parts;

(c) notify them of the date and time of the second public opening of the Financial Parts of the Bids, as specified in the BDS.

33.3 The opening date should allow Bidders sufficient time to make arrangements for attending the opening. The Financial Part of the Bid shall be opened publicly in the presence of Bidders' designated representatives and anyone who chooses to attend, and this could also be viewed by the bidders online. The bidder's names, the Bid prices, the total amount of each bid, including any discounts and Alternative Bid - Financial Part, and such other details as the Employer may consider appropriate will be notified online by the Employer at the time of bid opening.

In the event of the specified date of bid opening being declared a holiday for the Employer, the bids will be opened at the appointed time and location on the next working day.

33.4 The electronic summary of the bid opening will be generated and uploaded online. The Employer will also prepare minutes of the Bid opening, including the information disclosed and upload the same for viewing online. Only Financial Part of Bids, Financial Parts of Alternative Bids and discounts that are opened and read out at Bid opening shall be considered further for evaluation.

### 34 Evaluation of **Evaluation of Financial Parts of Bids Financial Parts** 34.1 To evaluate the Financial Part of each Bid, the Employer shall consider the following:

(a) evaluation will be done for Items or Lots (contracts), as specified in the BDS ITB 1.1; and the Bid Price as quoted in accordance with ITB 15;

(b) Not used;

(c) price adjustment due to discounts offered in accordance with ITB 15.4;

(d)Not used;

- (e) price adjustment due to quantifiable nonmaterial nonconformities in accordance with ITB 30.3; and
- (f) the additional evaluation factors specified in the BDS as per ITB 34.5 from amongst those set out in Section III, Evaluation and Qualification Criteria.
- 34.2 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in Bid evaluation.
- 34.3 If this bidding document allows Bidders to quote separate prices for different lots (contracts), the methodology to determine the lowest evaluated cost of the lot (contract) combinations, including any discounts offered in the Letter of Bid Financial Part, is specified in Section III, Evaluation and Qualification Criteria.
- 34.4 The Employer's evaluation of a Bid shall include (i) price quoted EXW including GST as applicable on the finished goods; (ii) other taxes, if any, payable on finished goods; (iii) price for inland transportation, insurance, and other local services required to convey the Goods to their Final Destination; and (iv) price for Related Services, if any.
- 34.5 The Employer's evaluation of a Bid may require the consideration of other factors, in addition to the Bid price quoted in accordance with ITB 13. These factors may be related to the characteristics, performance, and terms and conditions of Related Services. The effect of the factors selected, if any, shall be expressed in monetary terms to facilitate comparison of Bids, unless otherwise specified in the BDS from amongst those set out in Section III, Evaluation and Qualification Criteria. The criteria and methodologies to be used shall be as specified in ITB 34.1 (f).

<b>35.</b> Correction of	
Arithmetical	
Errors	

35.1 The e-procurement system automatically calculates the total amount from unit rates and quantities and the system also automatically populates the amount in words from the amount in figures and therefore there is no scope of discrepancy and need for arithmetic correction.

36. Conversion to	36.1 Not applicable.
Single Currency	
<b>37.Margin of</b>	37.1 Not applicable.
Preference	

- **38. Comparison of Financial Parts 38.1** The Employer shall compare the evaluated prices of all substantially responsive bids to determine the lowest-evaluated bid, in accordance with ITB Clause 34.
- **39. Employer's39.1** The Employer reserves the right to accept or reject any Bid, and<br/>to annul the Bidding process and reject all Bids at any time

Any Bid, and to Reject Any or All Bids		to B	to Contract Award, without thereby incurring any liability idders. In case of annulment, all Bids submitted and fically, Bid securities, shall be promptly returned to the ers
40. Standstill Period	40.1	The Stand speci	Contract shall be awarded not earlier than the expiry of the dstill Period. The duration of the Standstill Period is fied in the BDS. Where only one Bid is submitted, the dstill Period shall not apply.
41. Notice On Intention to Award	41.1	When Empl been Inten Notif	a Standstill Period applies, it shall commence when the loyer has transmitted to each Bidder (that has not already notified that it has been unsuccessful) Notification of tion to Award the Contract to the successful Bidder. The fication of Intention to Award shall contain, at a minimum, ollowing information: the name and address of the Bidder submitting the successful Bid;
		(b)	the Contract price of the successful Bid;
		(c)	the names of all Bidders who submitted Bids, and their Bid prices as readout and as evaluated prices;
		(d)	a statement of the reason(s) the Bid (of the unsuccessful Bidder to whom the notice is addressed) was unsuccessful;
		(e)	the expiry date of the Standstill Period; and
		(f)	instructions on how to request a debriefing or submit a complaint during the standstill period.
			J. Award of Contract
42. Award Criteria	42.1	succe deter the E	ect to ITB 39.1, the Employer shall award the Contract to the essful Bidder. This is the Bidder whose Bid has been mined to be the Most Advantageous Bid. This is the Bid of Bidder that meets the qualification criteria and whose Bid has determined to be: substantially responsive to the bidding document; and the lowest evaluated cost.
43. Notification of Award	43.1	the S there filed succe notifi and speci the	o the expiration of the Bid Validity Period and upon expiry of tandstill Period, specified in BDS ITB 40.1, or any extension of, or upon satisfactorily addressing a complaint that has been within the Standstill Period, the Employer shall notify the essful Bidder, in writing, that its Bid has been accepted. The ication letter (hereinafter and in the Conditions of Contract Contract Forms called the "Letter of Acceptance") shall fy the sum that the Employer will pay the Supplier in ideration of the execution of the Contract (hereinafter and in Conditions of Contract and Contract Forms called "the ract Price").

	43.2	At the same time the Employer shall publish in a National website(GOI web site-https: //wbtenders.gov.in the Employer's website with free access if available, or in the official gazette, the results identifying the bid and lot numbers and the following information: (i) name of each Bidder who submitted a Bid; (ii) bid prices as read out at bid opening; (iii) name and evaluated prices of each Bid that was evaluated; (iv) name of bidders whose bids were rejected and the reasons for their rejection; and (v) name of the successful Bidder, and the price it offered, as well as the duration and summary scope of the contract awarded.
	43.3	The Employer shall promptly respond in writing to any unsuccessful Bidder who, after Publication of contract award, requests in writing the grounds on which its bid was not selected
	43.4	Until a formal Contract is prepared and executed, the Letter of Acceptance shall constitute a binding Contract.
	43.5	Upon the successful Bidder's furnishing of the performance security and signing the Contract Form pursuant to ITB Clause 44, the Employer will promptly notify each unsuccessful Bidder and will discharge its bid security, pursuant to ITB Clause 20.5
44. Debriefing by the employer	[Dele	ted]
45. Signing of Contract	45.1	Promptly upon Notification of Award, the Employer shall send the successful Bidder the Contract Agreement.
	45.2	Within twenty-eight (28) days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Employer.
46. Performance Security	46.1	Acceptance from the Employer, the successful Bidder, if required, shall furnish the Performance Security in accordance with the GCC 3.9 and as stated in BDS using for that purpose the Performance Security Form included in Section X, Contract Forms, or another Form acceptable to the Employer. If the Performance Security furnished by the successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Bidder to be acceptable to the Employer. A foreign institution providing a bond shall have a correspondent financial institution located in the Employer's Country, unless the Employer has agreed in writing that a correspondent financial institution is not required.
	46.2	Failure of the successful Bidder to submit the above- mentioned Performance Security or sign the Contract shall

constitute sufficient grounds for the annulment of the award

and forfeiture of the Bid Security. In that event the Employer may award the Contract to the Bidder offering the next Most Advantageous Bid.

47. Adjudicator47.1 The Employer proposes the person named in the BDS to be appointed as Adjudicator under the Contract, at daily fee specified in the BDS, plus reimbursable expenses. If the Bidder disagrees with this Bid, the Bidder should so state in the Bid. If, in the Letter of Acceptance, the Employer has not agreed on the appointment of the Adjudicator, the Adjudicator shall be appointed by the Appointing Authority designated in the Special Conditions of Contract at the request of either party.

# Section II -Bid Data Sheet (BDS)

The following specific data for the Non-Consulting Services to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

ITB Reference	A. General
ITB 1.1	The reference number of the Request for Bids (RFB) is :WBIW/NHP/RFB-02/2023-24 The Employer is: The Executive Engineer Burdwan Investigation & Planning Division, I&W Dte, Govt. of West Bengal. Purta Bhawan, 3rd Floor, Purba Burdwan-713103, West Bengal Tel. No: 0342- 2646799, 90643 78729 e-mail: eebipd2022@gmail.com

ITB 1.1	The name and identification i	number	of service	s for the wo	ork comprising
	this NCB is: Name of the Services for the				
	work "Survey of embankment & corresponding mapping and health checking under i) Howrah Irrigation Division in the districts of Howrah and Hooghly, ii) Contai Irrigation Division (Ph-II) in the districts of Purba Medinipur, iii) West Midnapore Division (Ph-II) in the districts of Paschim Medinipur & iv) Canals Division in the districts of North and South 24 Parganas under NHP of I&W Department GoWB."	Unit	Quantity	Bid Security in INR	Completion Period
	1) Survey of embankments under Howrah Irrigation Division in the districts of Howrah and Hooghly and corresponding mapping and health checking.	Km	90		
	2) Survey of embankments under Contai Irrigation Division (Ph II) in the districts of Purba Medinipur and corresponding mapping and health checking.	Km	180	1,72,000	4 (Four) Months
	3) Survey of embankments under West Midnapore Division (Ph - II) in the districts of Paschim Medinipur and corresponding mapping and health checking.	Km	210		
	4) Survey of embankments under Canals Division in the districts of North & South 24 Parganas and corresponding mapping and health checking.	Km	225		
ITB 1.2(a)	Electronic –Procurement Sy	ystem			
	The Employer shall use the f manage this Bidding pro	-	g electron	ic-procuren	nent system to
	https: //wbtenders.gov.in The used to manage the following bidding document, submission etc.	aspects	of the Bio	dding proce	ss: issuing
ITB 1.3	The Intended Completion Da	te is <mark>4 (I</mark>	Four) Mo	nths.	

ITB 2.1	The Burrower is: <i>Govt. of India</i> The name of the Project is: <i>National Hydrology Project (NHP)</i>
ITB 4.1	Maximum number of members in the Joint Venture (JV) shall be: JV Not Allowed
ITB 4.5	A list of debarred firms and individuals is available on the Bank's external website: <u>http://www.worldbank.org/debarr.</u>
	<b>B.</b> Contents of Bidding Document
ITB 8.1	Electronic – Procurement System
	The Employer shall use the following electronic-procurement system to manage this Bidding process:
	https://wbtenders.gov.in
ITB 9.1	The addendum will appear on the e-procurement system under <u>https:</u> //wbtenders. gov.in "Latest Corrigendum" and email notification is also automatically sent to those bidders who have started working on this tender.
	C. Preparation of Bids
ITB 11.1	The language of the Bid is: <i>English</i>
	All correspondence exchange shall be in English language.
ITB 12.2(h)	The Bidder shall submit the following additional documents in its bid – technical part: <i>No</i> (Please check the Qualifying Requirement in Section II : Employers Requirement)
ITB 12.3(d)	The Bidder shall submit the following additional documents in its bid – financial part: <i>No</i> (Please check the Qualifying Requirement in Section II : Employers Requirement)
	<b>Note for Bidders:</b> Bidders have to submit the bids on the e-procurement portal along with the relevant required documents. For this purpose, the bidders shall fill up online, the forms that are available for online filling on the e-portal. The rest of the forms shall be download by the bidders and filled up. The filled-up pages shall then be scanned and uploaded on the e-procurement portal along with the scanned copies of the supporting documents.
ITB 13.3	For submission of original documents, the Employer's address is: <b>The Executive Engineer</b> <b>Burdwan Investigation &amp; Planning Division,</b> <b>I&amp;W Dte., Govt. of West Bengal.</b> <b>Purta Bhawan, 3rd Floor, Purba Burdwan-713103, West Bengal</b> Tel. No: 0342- 2646799, e-mail: <u>eebipd2022@gmail.com</u>
ITB 14.1	Alternative Bids "shall not be "considered.

ITB 15.7	The prices quoted by the Bidder <b>shall not</b> be subject to adjustment during the performance of the Contract.
ITB 18.4	Prequalification "has not "been undertaken.
ITB 19.1	The Bid validity period shall be 90 days.
ITB 19.3 (a)	The Bid price shall be adjusted by the following factor(s): 1.000769 per week
ITB 20.1	A Bid Security "shall be" required.
	The amount and currency of the Bid Security shall be <u>as given in Table</u> <u>in ITB 1.1</u>
ITB 20.3 (a)	Other types of acceptable securities: <i>None</i>
ITB 21.2	The written confirmation of authorization to sign on behalf of the Bidder shall consist of: An organizational document, board resolution or its equivalent, or power of attorney specifying the representative's authority to sign the Bid on behalf of, and to legally bind, the Bidder.
	D. Online Submission and Opening of Bids
ITB 22.1	Class of DSC required is: Class III
ITB 23.1	The deadline for uploading of bids is: Date: 08.11.2023 15.00 Hrs System Server Time.
ITB 25.1	Re-submission of the bid "not allowed", if withdrawn.
	E. Public Opening of Technical Parts of Bids
ITB 26.1	The online opening of the Technical Parts of Bids shall take place at: Burdwan Investigation & Planning Division, I&W Dte., Govt. of West Bengal. Purta Bhawan, 3rd Floor, Purba Burdwan-713103, West Bengal Tel. No: 0342- 2646799, e-mail: <u>eebipd2022@gmail.com</u> Date:08.11.2023 Time:16:00 Hrs.
	F. Evaluation of Bids – General Provisions
ITB 30.3	The adjustment shall be based on the highest price of the item or component as quoted in other substantially responsive Bids, subject to a maximum of the estimated price of the item. If the price of the item or component cannot be derived from the price of other substantially responsive Bids, the Employer shall use its best estimate.

	H. Public Opening of Financial Parts of Bids			
ITB 33.2(c)	ollowing the completion of the evaluation of the Technical Parts of the bids, the Employer will notify all Bidders of the date and time of the public pening of Financial Parts. The online opening of the Financial Parts of bids (for technically qualified idders) shall take place at: <b>Burdwan Investigation &amp; Planning Division,</b> <b>I&amp;W Dte, Govt. of West Bengal.</b> <b>Purta Bhawan, 3rd Floor, Purba Burdwan-713103,</b> <b>West Bengal</b> Date:[to be intimated later] ime: [to be intimated later]			
E. Evaluation of Financial Part of Bid				
ITB 34.1(a)	The Price shall be quoted by the bidder(s) for each & every items (line wise) for the entire work in the <b>Price Schedule Form.</b>			
ITB 34.5	[deleted]			
ITB 40.1 Standstill Period	The Standstill Period is10 Business Days from the date the Employer has transmitted to all Bidders that submitted Bids, the Notification of its Intention to Award the Contract to the successful Bidder.			
ITB 46	The amount of <b>performance security</b> shall be <b>5% (Five Percent</b> ) of the contract price.			
	F. Award of Contract			
ITB 47	The <b>Adjudicator</b> proposed by the Employer is <b>Kaushik Chatterjee</b> , Retired Secretary Irrigation and waterways Department West Bengal. The Daily fee for this proposed Adjudicator shall Rs 5,000/ The biographical data of the proposed Adjudicator is as follows Retired Secretary Irrigation and waterways Department West Bengal.			

### **Section III**

### **Evaluation and Qualification Criteria**

### 1. Qualification

All Bidders shall include the following information and documents with their Bids:

- (a) Copies of original documents defining the constitution or legal status, place of registration, and principal place of business; written power of attorney of the signatory of the Bid to commit the Bidder;
- (b) Total monetary value of Services performed for each of the last five years;
- (c) Experience in Services of a similar nature and size for each of the last five years, and details of Services under way or contractually committed; and names and address of clients who may be contacted for further information on those contracts;
- (d) List of major items of equipment proposed to carry out the Contract available with the prospective bidder or proposed to be procured;
- (e) Qualifications and experience of key site management and technical personnel proposed for the Contract;
- (f) Reports on the financial standing of the Bidder, such as profit and loss statements and auditor's reports for the past five years;
- (g) Evidence of adequacy of working capital for this Contract (access to line(s) of credit and availability of other financial resources);
- (h) Authority to the Employer to seek references from the Bidder's bankers;
- (i) Information regarding any litigation, current or during the last five years, in which the Bidder is involved, the parties concerned, and disputed amount; and
- (j) Proposals for subcontracting components of the Services amounting to more than 10 percent of the Contract Price.

# **TECHNICAL PART**: To qualify for award of the Contract, Bidders shall meet the following minimum qualifying criteria:

### (A) <u>Financial Capability:</u>

The average annual financial turnover of intending bidder during last three Financial Years ending 31st March of previous financial year should **not be less than INR 86** (Eighty Six) Lakhs. The bidders have to submit Audited Annual Accounts Reports in support of their Average Annual Financial Turnover. If the bidder does not have Audited Annual Account Report for the last Financial Year, he may submit Certificate from practicing Chartered Accountant (applicable only for last Financial Year).

#### (B) <u>Technical Capability:</u>

Experience of having completed similar works during last 5 years ending last day of month previous to the one in which offers are invited should be either of the following:

(a) Two similar completed works each costing not less than the amount equal to INR 43,00,000/- Only.

Or

- (b) One similar completed work costing not less than the amount equal to INR 68,80,000/- Only.
- <u>Completed Work means</u> Executed / completed / delivered portion of Work Order / AMC / RC / Purchase Order, Payment receipt documents with ref. to WO No. and date or execution certificate with executed value and referred order no. be also considered as a proof of execution / delivery even if the works / services have not been completed in totality (subject to furnishing proof of executed / supplied value of works / services in the form of certified copies of RA Bills) or any relevant documents, which is sufficient to proof the works / services completed / delivered or to be completed.
- <u>Similar Work Means</u>-Topographic, Hydrographic / Bathymetric / Sedimentation Survey Works using latest instruments like TS, RTK,DGPS, ADCP etc.

#### (C) <u>Essential Documents:</u>

The bidders shall have to submit the following documents in order to meet the Qualifying Requirements:

- 1. Copies of Audited Annual Accounts reports / certificate of Chartered Accountant in support of Financial Capability as stipulated in SL. No. (A).
- 2. Copy(s) of Credential Certificate(s) in support of Technical Capability as stipulated in Sl No (B).
- 3. Copy of GST Registration Certificate.
- 4. Copy of PAN Card.
- 5. Copy of Partnership deed / Affidavit of Proprietorship / Article of Association including any change in the constitution business duly attested by a Notary Public.
- 6. List of major items of equipment owned by the company and the list of instruments proposed to be utilised for the contract as per format below.
- 7. Qualifications, experience and no. of personnel in the payroll of the company and the key site management and technical personnel proposed for the Contract;

#### FINANCIAL PART

- Evaluation (ITB 35.1(f)) In addition to the criteria listed in ITB 35.1 (a) to (e) the following criteria shall apply: None
- 2. Multiple Contracts: Not Applicable
- 3. Award Criteria of the Contract [ITB 42.1]

The contract will be awarded to the qualified Bidder(s) offering the lowest evaluated cost for the entire work.

# **Section IV- Bidding Forms**

Table of Forms	
Letter of Bid	40
Bidder Information Form	45
Qualification Information	45
Schedule Forms	48
Proforma for performance statement	58
Form of Affidavit for Correctness of Information and Documents Submitted with Bid	59
Notification of Award - Letter of Acceptance	60
Form of Contract	61
Form of Bid Security	63

## 1A. Letter of Bid-Technical Part

INSTRUCTIONS TO BIDDERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE DOCUMENT

The Bidder must prepare this Letter of Bid on stationery with its letterhead clearly showing the Bidder's complete name and business address.

Note: All italicized text is to help Bidders in preparing this form.

**Date of this Bid submission**: [insert date (as day, month and year) of Bid submission] **RFB No.**: [insert number of RFB process] **Alternative No.**: [insert identification No if this is a Bid for an alternative]

To: [insert complete name of Employer]

- (a) **No reservations:** We have examined and have no reservations to the bidding document, including Addenda issued in accordance with ITB 9;
- (b) **Eligibility**: We meet the eligibility requirements and have no conflict of interest in accordance with ITB 4;
- (c) **Bid-Securing Declaration:** We have not been suspended nor declared ineligible by the Employer based on execution of a Bid-Securing Declaration in the Employer's Country in accordance with ITB 4.7;
- (d) **Conformity:** We offer to provide the Non-Consulting Services in conformity with the bidding document of the following: [*insert a brief description of the Non-Consulting Services*];
- (e) **Bid Validity Period:** Our Bid shall be valid for the period specified in BDS 19.1 (as amended if applicable) from the date fixed for the Bid submission deadline (specified in BDS 23.1 (as amended if applicable), and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (f) **Performance Security:** If our Bid is accepted, we commit to obtain a Performance Security in accordance with the bidding document;
- (g) **One Bid Per Bidder:** We are not submitting any other Bid(s) as an individual Bidder, and we are not participating in any other Bid(s) as a Joint Venture member or as a subcontractor, and meet the requirements of ITB 4.3, other than alternative Bids submitted in accordance with ITB 14;
- (h) Suspension and Debarment: We, along with any of our subcontractors, suppliers, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the World Bank Group or a debarment imposed by the World Bank Group in accordance with the Agreement for Mutual Enforcement of Debarment Decisions between the World Bank and other development banks. Further, we are not ineligible under the Employer's Country laws or official regulations or pursuant to a decision of the United Nations Security Council;

- (i) **State-owned enterprise or institution**: [select the appropriate option and delete the other] [We are not a state-owned enterprise or institution] / [We are a state-owned enterprise or institution but meet the requirements of ITB 4.6];
- (j) [Delete if not appropriate, or amend to suit] We confirm that we understand the provisions relating to Standstill Period as described in this bidding document and the Procurement Regulations.
- (k) **Binding Contract**: We understand that this Bid, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- (1) **Not Bound to Accept:** We understand that you are not bound to accept the lowest evaluated cost Bid, the Most Advantageous Bid or any other Bid that you may receive; and
- (m)**Fraud and Corruption:** We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Fraud and Corruption.
- (n) We accept the appointment of [insert name proposed in Bid Data Sheet] as the Adjudicator
- [or]

We do not accept the appoint of [insert name proposed in Bid Data Sheet] as the Adjudicator and propose instead that [insert name] be appointed as Adjudicator whose daily fees and biographical data are attached; and

**Name of the Bidder**: \*[*insert complete name of person signing the Bid*]

**Name of the person duly authorized to sign the Bid on behalf of the Bidder**: \*\*[*insert complete name of person duly authorized to sign the Bid*]

Title of the person signing the Bid: [insert complete

**Signature of the person named above**: [insert signature of person whose name and capacity are shown above]

**Date signed** [insert date of signing] **day of** [insert month], [insert year]

## **1B.** Letter of Bid- Financial Part

The Bidder must prepare the Letter of Bid on stationery with its letterhead clearly showing the Bidder's complete name and address.

# *Note:* All *italicized text* is for use in preparing these forms and shall be deleted from the final products.

No alterations to the text except as provided in ITB 20.2, shall be permitted and no substitutions shall be accepted except as provided in ITB 12.]

Date: [insert date (as day, month and year) of Bid Submission] NCB No.: [insert number of bidding process] Invitation for Bid No.: [insert No of RFB] Alternative No.: [insert identification No if this is a Bid for an alternative]

To: [insert complete name of Employer]

We, the undersigned Bidder, hereby submit the second part of our Bid, the Financial Part. In submitting our Financial Part we make the following additional declarations:

- (a) Our bid shall be valid for the period of time specified in ITB Sub-Clause 18.1, from the date fixed for the bid submission deadline in accordance with ITB Sub-Clause 22, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (b) The total price of our Bid, excluding any discounts offered in item (c) below, is:

In case of only one lot, total price of the Bid [Rate Quoted Online.];

In case of multiple lots, total price of each lot [Rate Quoted Online.];

In case of multiple lots, total price of all lots (sum of all lots) [Rate Quoted Online.];

- (c) The discounts offered and the methodology for their application are:
  - (i) The discounts offered are: [Specify in detail each discount offered.]
  - (ii) The exact method of calculations to determine the net price after application of discounts is shown below: [Specify in detail the method that shall be used to apply the discounts]; Discounts.
- (d) The following commissions, gratuities, or fees have been paid or are to be paid with respect to the bidding process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]*

Name of Recipient	Address	Reason	Amount

(If none has been paid or is to be paid, indicate "none.")

(e) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed.

Name of the Bidder \_\_\_\_\_ [insert complete name of person signing the Bid]

Name of the person duly authorized to sign the Bid on behalf of the Bidder\*\* [*insert complete name of person duly authorized to sign the Bid*]

Title of the person signing the Bid [insert complete title of the person signing the Bid]

Signature of the person named above *[insert signature of person whose name and capacity are shown above]* 

Date signed \_[insert date of signing] day of [insert month], [insert year]

\*\*: Person signing the Bid shall have the power of attorney given by the Bidder to be attached with the Bid Schedules.

## **Bidder Information Form**

[The Bidder shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted.]

Date: [insert date (as day, month and year) of Bid submission] RFB No.: [insert number of Bidding process] Alternative No.: [insert identification No if this is a Bid for an alternative]

Page \_\_\_\_\_ of \_\_\_\_ pages

1. Bidder's Name [insert Bidder's legal name]
2. In case of JV, legal name of each member :[insert legal name of each member in JV]
3. Bidder's actual or intended country of registration: [insert actual or intended country of registration]
4. Bidder's year of registration: [insert Bidder's year of registration]
5. Bidder's Address in country of registration: [insert Bidder's legal address in country of registration]
6. Bidder's Authorized Representative Information
Name: [insert Authorized Representative's name]
Address: [insert Authorized Representative's Address]
Telephone/Fax numbers: [insert Authorized Representative's telephone/fax numbers]
Email Address: [insert Authorized Representative's email address]
7. Attached are copies of original documents of [check the box(es) of the attached original documents]
Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, in accordance with ITB 4.4.
$\Box$ In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB 4.1.
□ In case of state-owned enterprise or institution, in accordance with ITB 4.6 documents establishing:
<ul> <li>Legal and financial autonomy</li> <li>Operation under commercial law</li> <li>Establishing that the Bidder is not under the supervision of the agency of the Employer</li> </ul>
2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

## **Qualification Information**

1.	Individual Bidders or Individual Members of Joint Ventures	1.1	Constitution or legal status of Bidder: [ <i>attach copy</i> ] Place of registration: [ <i>insert</i> ] Principal place of business: [ <i>insert</i> ] Power of attorney of signatory of Bid: [ <i>attach</i> ]
		1.2	Total annual volume of Services performed in five years, in the internationally traded currency specified in the BDS: [insert]
		1.3	Services performed as prime Service Provider on the provision of Services of a similar nature and volume over the last five years. The values should be indicated in the same currency used for Item 1.2 above. Also list details of Services under way or committed, including expected completion date.

Project name and country	Name of employer and contact person	Type of Services provided and year of completion	Value of contract
(a)			
(b)			

1.4 Major items of Service Provider's Equipment proposed for carrying out the Services. List all information requested below.

Item of equipment	Description, make, and age (years)	Condition (new, good, poor) and number available	Owned, leased (from whom?), or to be purchased (from whom?)
(a)			,
(b)			

1.5 Qualifications and experience of key personnel proposed for administration and execution of the Contract. Attach biographical data. Refer to GCC Clause 4.1.

	Position	Name	Years of experience (general)	Years of experience in proposed position
(8	a)			
(1	)			

1.6 Proposed subcontracts and firms involved. Refer to GCC Clause 3.5.

Sections of the Services	Value of subcontract	Subcontractor (Name and address)	Experience in providing similar Services
(a)			
(b)			

- 1.7 Financial reports for the last five years: balance sheets, profit and loss statements, auditors' reports, etc. List below and attach copies.
- 1.8 Evidence of access to financial resources to meet the qualification requirements: cash in hand, lines of credit, etc. List below and attach copies of support documents. We certify/confirm that we comply with eligibility requirements as per ITB 4.
- 1.9 Name, address, and telephone, telex, and facsimile numbers of banks that may provide references if contacted by the Employer.
- 1.10 Information regarding any litigation, current or within the last five years, in which the Bidder is or has been involved.

Other party(ies)	Cause of dispute	Details of litigation award	Amount involved
(a)			
(b)			

- 1.11 Statement of compliance with the requirements of ITB 4.2.
- 1.12 Proposed Program (service work method and schedule). Descriptions, drawings, and charts, as necessary, to comply with the requirements of the bidding document.
- 2. Joint Ventures 2.1 Not Applicable
- **3.** Additional **3.1** Bidders should provide any additional information required in **the BDS**.

## **Schedule of Forms**

[The Bidder shall fill in these Forms in accordance with the instructions indicated. The list of line items in column 1 of the Activity Schedules shall coincide with the List of Non-Consulting Services specified in the Employer's Requirements.]

### **PRICE SCHEDULE FORM**

(This price schedule is indicative only and bidders must submit the price schedule in the BOQ Excel sheet attached with the published bid and submit online as prescribed)

Tender Inviting Authority: The Executive Engineer, Burdwan Investigation & Planning Division, I&WD, Govt. of West Bengal

Name of Work: "Survey of embankment & corresponding mapping and health checking under i) Howrah Irrigation Division in the districts of Howrah and Hooghly, ii) Contai Irrigation Division (Ph-II) in the districts of Purba Medinipur, iii) West Midnapore Division (Ph-II) in the districts of Paschim Medinipur & iv) Canals Division in the districts of North and South 24 Parganas under NHP of I&W Department GoWB."

Contract No: WBIW/NHP/RFB-02/2023-24

Name of the Bidder/ Bidding Firm / Company:

#### PRICE SCHEDULE

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)

NUMBE	TEXT <mark>#</mark>	NU	TEXT	NUMBER	NUMBE	NUMBE	NUMBE	TEX
R #		MBE R #	#	#	R #	R #	R #	T #
SI. No.	Item Description	Qua ntity	Units	Quoted Unit Rate with all taxes and all incidental charges excluding GST in INR	Total GST applicabl e per item in INR	TOTAL AMOUN T Without Taxes [Col. (4*13)]	TOTAL AMOUN T With Taxes [Col. (51 + 53)]	TOT AL AMO UNT In Word s
1	2	4	5	13	51	53	54	55
1	Survey of embankments under Howrah Irrigation Division in the districts of Howrah and Hooghly and corresponding mapping and health checking.							

embankment       situated         along       various         rivers/channels/ seashore       /creek etc by using Total         /creek etc by using Total       station         station       /RTK-DGPS.         consisting of topographic       survey along centre line,         cross section       @ not         exceeding       250M         (extending 30 m and 50 m       beyond riverside banktoe         and countryside bank toe       respectively), including         capturing       all detail         information       regarding         croded stretches, inlet       /outlet         /outlet       structures,         hutments, bank protection       damaged, vegetative cover         , water body, etc within       survey proort         both in hard and soft copy       showing index map, long         section, cross section,       detail         detail asset list, geo       referenced dwgs as         gcodata base, DWG       &KKMZ/KML format etc         including all raw survey       dat all complete as per         direction of engineer in       charge.         inclusive of cost of flying       of G.T.S. Bench Mark         from nearest available       locations upto working <th>1.01</th> <th>Detailed field survey of</th> <th>90.00</th> <th>Km</th> <th></th> <th>0.00</th> <th>0.00</th> <th>INR</th>	1.01	Detailed field survey of	90.00	Km		0.00	0.00	INR
along various rivers/channels/ seashore /creck etc by using Total station /RTK-DGPS. consisting of topographic survey along centre line, cross section @ not exceeding 250M (extending 30 m and 50 m beyond riverside banktoe and countryside banktoe and countryside banktoe respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey data all complete as per direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working	1.01		20.00	13111		0.00	0.00	Zero
rivers/channels/ seashore /creek etc by using Total station //RTK-DGPS. consisting of topographic survey along centre line, cross section @ not exceeding 250M (extending 30 m and 50 m beyond riverside bank toe and countryside bank toe respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey data all complete as per direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
/creck etc by using Total station       /RTK-DGPS.         consisting of topographic survey along centre line, cross section @ not exceeding 250M (extending 30 m and 50 m beyond riverside banktoe and countryside banktoe and countryside bank toe respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KKMZ/KML format etc including all raw survey data all complete as per direction of engineer in charge.         (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations up to wriking								omy
station /RTK-DGPS. consisting of topographic survey along centre line, eross section @ not exceeding 20 m and 50 m beyond riverside banktoe and countryside bank toe respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, ete within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KKMZ/KML format ete including all raw survey data all complete as per direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
consisting of topographic survey along centre line, cross section @ not exceeding 250M (extending 30 m and 50 m beyond riverside bank toe respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey data all complete as per direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
survey along centre line, cross section @ not exceeding 30 m and 50 m beyond riverside bank toe and countryside bank toe respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey data all complete as per direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
cross section @ not         exceeding 20 m and 50 m         beyond riverside banktoe         and countryside banktoe         and countryside banktoe         respectively), including         capturing all detail         information regarding         eroded stretches, inlet         /outlet structures,         hutments, bank protection         damaged, vegetative cover         , water body, etc within         survey zone, all geo         referenced and submission         of final survey report         both in hard and soft copy         showing index map, long         section, cross section,         detail asset list, geo         referenced dwgs as         geodata base, DWG         &KMZ/KML format etc         including all raw survey         data all complete as per         direction of engineer in         charge.         (Note: The rate is         inclusive of cost of flying         of G.T.S. Bench Mark         from nearest available         locations upto working								
exceeding 250M (extending 30 m and 50 m beyond riverside bank toe respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey data all complete as per direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
(extending 30 m and 50 m         beyond riverside banktoe         and countryside banktoe         respectively), including         capturing all detail         information regarding         eroded stretches, inlet         /outlet structures,         hutments, bank protection         damaged, vegetative cover         , water body, etc within         survey zone, all geo         referenced and submission         of         final survey report         both in hard and soft copy         showing index map, long         section, cross section,         detail asset list, geo         referenced dwgs as         geodata base, DWG         &KKMZ/KML format etc         including all raw survey         data all complete as per         direction of engineer in         charge.         (Note: The rate is         inclusive of cost of flying         of G.T.S. Bench Mark         from nearest available         locations upto working		0						
beyond riverside banktoe and countryside bank toe respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey data all complete as per direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
and countryside bank toe respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey data all complete as per direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey data all complete as per direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey data all complete as per direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, ete within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey data all complete as per direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
/outlet       structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey data all complete as per direction of engineer in charge.         (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
hutments, bank protection         damaged, vegetative cover         , water body, etc within         survey zone, all geo         referenced and submission         of       final survey report         both in hard and soft copy         showing index map, long         section, cross section,         detail asset list, geo         referenced dwgs as         geodata base, DWG         &KMZ/KML format etc         including all raw survey         data all complete as per         direction of engineer in         charge.         (Note: The rate is         inclusive of cost of flying         of G.T.S. Bench Mark         from nearest available         locations upto working								
damaged, vegetative cover         , water body, etc within         survey zone, all geo         referenced and submission         of final survey report         both in hard and soft copy         showing index map, long         section, cross section,         detail asset list, geo         referenced dwgs as         geodata base, DWG         &KMZ/KML format etc         including all raw survey         data all complete as per         direction of engineer in         charge.         (Note: The rate is         inclusive of cost of flying         of G.T.S. Bench Mark         from nearest available         locations upto working		/outlet structures,						
, water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey data all complete as per direction of engineer in charge.         (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working		hutments, bank protection						
survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey data all complete as per direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey data all complete as per direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
of       final survey report         both in hard and soft copy       showing index map, long         section, cross section,       detail asset list, geo         referenced dwgs as       geodata base, DWG         &KMZ/KML format etc       including all raw survey         data all complete as per       direction of engineer in         charge.       (Note: The rate is         inclusive of cost of flying       of G.T.S. Bench Mark         from nearest available       locations upto working								
both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey data all complete as per direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey data all complete as per direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey data all complete as per direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
detail asset list, geo         referenced dwgs as         geodata base, DWG         &KMZ/KML format etc         including all raw survey         data all complete as per         direction of engineer in         charge.         (Note: The rate is         inclusive of cost of flying         of G.T.S. Bench Mark         from nearest available         locations upto working								
referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey data all complete as per direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
geodata base, DWG &KMZ/KML format etc including all raw survey data all complete as per direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
&KMZ/KML format etc including all raw survey data all complete as per direction of engineer in charge.       Image:								
including all raw survey data all complete as per direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
data all complete as per direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
(Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working								
inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working		charge.						
inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working		(Note: The rate is						
of G.T.S. Bench Mark from nearest available locations upto working								
from nearest available locations upto working								
locations upto working								
		location and all incidental						
charges like carriage of								
instruments, engagement								
of manpower and								
machineries etc required								
to complete to work in all								
respect)		-						

1.02	Conducting in-situ field	45.00	Each		0.00	0.00	INR
1.02	density test by common	13.00	locatio		0.00	0.00	Zero
	balance, field moisture		n				Only
	content test by rapid						
	moisture meter, field						
	permeability test by						
	constant head and falling head method [at the depth						
	of 1.5m from countryside						
	toe of the embankment (a)						
	2000 m c/c distance along						
	both embankments and/ or						
	banks and submission of						
	report after getting them						
	certified by reputed Govt. organization/institute as						
	per direction of Engineer-						
	in-Chargecomplete.						
	Note i)The rate is						
	inclusive of all incidental						
	charges like all types of						
	carriage, engagement of manpower &						
	instruments/equipment						
	etc. as applicable to						
	complete to work in all						
	respect.						
1.03	Construction of Bench	18.00	Each		0.00	0.00	INR
	Mark pillar as per attached						Zero
	specifications at suitable locations on embankment						Only
	proper or at places not						
	greater than 100 M from						
	embankment as per						
	direction of the Engineer						
	in charge.						
	(Note: The rate is						
	(Note: The rate is inclusive all charges like						
	material, labour,						
	equipment, carriage etc						
	required to complete the						
	work as per						
1.04	specifications)	22.00	Fash		0.00	0.00	INR
1.04	Collection of undisturbed soil samples @ 4000 m	23.00	Each locatio		0.00	0.00	INR Zero
	c/c distance along both		n				Only
	embankments and/ or						,
	banks from a suitable						
	depth from top of						
	embankment/bank &						
	carriage of those samples						
	with proper labeling of collection locations for						
	assessment of different						
	geotechnical and soil						
	properties to the nearest						
	Lab of River Research						
	Institute, West Bengal, as						
	per direction of Engineer-						
	in-Charge complete.						

1							
	Note i)The rate is						
	inclusive of all incidental						
	charges like all type						
	carriage, engagement of						
	manpower &						
	instruments/equipment						
	etc. as applicable to						
	complete to work in all						
	respect.						
2	Survey of						
	embankments under						
	Contai Irrigation						
	Division (Ph II) in the						
	districts of Purba						
	Medinipur and						
	corresponding						
	mapping and health						
	checking.						
2.01	Detailed field survey of	180.0	Km		0.00	0.00	INR
	embankment situated	0					Zero
	along various						Only
	rivers/channels/ seashore						-
	/creek etc by using Total						
	station /RTK-DGPS.						
	consisting of topographic						
	survey along centre line,						
	cross section @ not						
	exceeding 250M						
	(extending 30 m and 50 m						
	beyond riverside bank toe						
	and countryside bank toe						
	respectively), including						
	capturing all detail						
	information regarding						
	eroded stretches, inlet						
	/outlet structures,						
	hutments, bank protection						
	damaged, vegetative cover						
	, water body, etc within						
	survey zone, all geo						
	referenced and submission						
	of final survey report						
	both in hard and soft copy						
	showing index map, long						
	section, cross section,						
	detail asset list, geo						
	referenced dwgs as						
	geodata base, DWG						
	&KMZ/KML format etc						
	including all raw survey						
	data all complete as per						
	direction of engineer in						
	charge.						
	(Note: The rate is						
	inclusive of cost of flying						
	of G.T.S. Bench Mark						
	from nearest available						
	locations upto working						
	location and all incidental						

2.02	charges like carriage of instruments, engagement of manpower and machineries etc required to complete to work in all respect) Conducting in-situ field density test by common balance, field moisture content test by rapid moisture meter, field	90.00	Each locatio n		0.00	0.00	INR Zero Only
	moisture meter, field permeability test by constant head and falling head method [at the depth of 1.5m from countryside toe of the embankment @ 2000 m c/c distance along both embankments and/ or banks and submission of report after getting them certified by reputed Govt. organization/institute as per direction of Engineer- in-Chargecomplete.						
	Note i)The rate is inclusive of all incidental charges like all types of carriage, engagement of manpower & instruments/equipment etc. as applicable to complete to work in all respect.						
2.03	Construction of Bench Mark pillar as per attached specifications at suitable locations on embankment proper or at places not greater than 100 M from embankment as per direction of the Engineer in charge. (Note: The rate is inclusive all charges like material, labour, equipment, carriage etc required to complete the	36.00	Each		0.00	0.00	INR Zero Only
2.04	work as per specifications) Collection of undisturbed soil samples @ 4000 m c/c distance along both embankments and/ or banks from a suitable depth from top of embankment/bank & carriage of those samples	45.00	Each locatio n		0.00	0.00	INR Zero Only

3       Survey       of embankments under West Midnapore Division (Ph - 11) in the districts of Paschim Medinipur and corresponding mapping and health checking.       210.0       Km       0.00       0.00       INR Zero Only         3.01       Detailed field survey of embankment situated along various rivers/channels/ seashore /creck etc by using Total station //RTK-DCPS, consisting of topographic survey along centre line, eross section @ not exceeding 250M (extending 30 m and 50 m beyond riverside bank tee respectively), including capturing all detail information regarding croded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, ete within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map. long section, cross section, detail asset. Bist, geo referenced drugs as geodata bases, DWG &KMZ/KML format ete including all rave survey data all complete as per		with proper labeling of collection locations for assessment of different geotechnical and soil properties to the nearest Lab of River Research Institute, West Bengal, as per direction of Engineer- in-Charge complete. Note i)The rate is inclusive of all incidental charges like all type carriage, engagement of manpower & instruments/equipment etc. as applicable to complete to work in all respect.						
and and the set of west Midnapore Division (Ph - 1I) in the districts of Paschim Medinipur and corresponding mapping and health checking.       and corresponding mapping and health checking.       and corresponding mapping and health checking.         3.01       Datailed field survey of embankment situated along various rivers/channels/ seashore //recek tet by using Total station //RTK-DGPS. consisting of topographic survey along centre line, cross section @ not exceeding 250M (extending 30 m and 50 m beyond riverside bank toe respectively), including all detail information regarding eroded stretches, inlet //outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, detail asset list, geo referenced dwgs as godata base, DWG &//KML format etc including all raw survey       asset list, geo	3							<b> </b>
West Midnapore Division (Ph - 11) in the districts of Paschim Medinipur and corresponding mapping and health checking.       210.0       Km       0.00       0.00       INR Zero Only         3.01       Detailed field survey of embankment situated long various rivers/channels/ seashore /creek etc by using Total station /RTK-DGPS. consisting of topographic survey along centre line, eross section @ not exceeding 0 m and 50 m beyond riverside bank toe and countryside bank toe and count								
the districts of Paschim Medinipur and corresponding mapping and health checking.210.0Km0.000.00INR Zero Only3.01Detailed field survey of embankment situated along various rivers/channels/ seashore /creek et by using Total station /RTK-DGPS. consisting of topographic survey along centre line, cross section @ not exceeding 250M (extending 30 m and 50 m beyond riverside bank toe and countryside bank toe respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced ad submission of final survey proof both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw surveyImaged, vegetative cover as section, arrows section, detail asset list, geo referenced avarset, geo as geodata base, DWG &KMZ/KML format etc including all raw surveyImaged, vegetative cover as section, arrows section, detail asset list, geo referenced avarset, geo as geodata base, DWG &KMZ/KML format etc including all raw surveyImaged, vegetative cover as section, arrows section, detail asset list, geo referenced avarset, geo work getative cover as geodata base, DWG wetail asset list, geo referenced avarset, geo as geodata base, DWG wetail asset list, geo referenced avarset, geo asset on a cover asset list, geo referenced avarset list, geo referenced av		West Midnapore						
Paschim Medinipur and corresponding mapping and healthImapping and healthImapping and health3.01Detailed field survey of embankment situated along various rivers/channels/ seashore /creek et by using Total station /RTK-DGPS. consisting of topographic survey along centre line, cross section @ not exceeding 250M (extending 30 m and 50 m beyond riverside bank toe and countryside bank toe respectively), including capturing all detail information regarding eroded stretches, initet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo section, cross section, detail asset list, geo section, cross section, detail asset list, geo section, detail asset list,								
and corresponding mapping and healthImage: Corresponding mapping and healthImage: Corresponding mapping and health3.01Detailed field survey of embankment situated along various rivers/channels/ seashore /creek etc by using Total station /RTK-DGPS.Km00.00NRCross Section (2000) exceeding 250M (extending 30 m and 50 m beyond riverside bank toe and countryside bank toe respectively), including capturing all detail information regarding 								
mapping and health checking.210.0Km0.000.00NR Zero Only3.01Detailed field survey of embankment situated along various rivers/chanels/ seasore /creek etc by using Total station /RTK-DGPS. consisting of topographic survey along centre line, cross section @ not exceeding 250M (extending 30 m and 50 m beyond riverside bank toe and countryside bank toe respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey proprt both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &&KMZ/KML format etc including all raw surveyKmImage: Comparison of the comparison of an and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw surveyImage: Comparison of the compa								
checking.       Image: Construction of the survey of embankment situation of the seashore seashore data and the seashore data data and the seashore data and the seashore data data								
3.01 Detailed field survey of embankment situated along various rivers/channels/ seashore /creek ete by using Total station /RTK-DGPS. consisting of topographic survey along centre line, cross section @ not exceeding 250M (extending 30 m ad 50 m beyond riverside bank toe respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey								
along various rivers/channels/ seashore /creek etc by using Total station /RTK-DGPS. consisting of topographic survey along centre line, cross section @ not exceeding 250M (extending 30 m and 50 m beyond riverside bank toe and countryside bank toe and countryside bank toe respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey	3.01	Detailed field survey of	210.0	Km		0.00	0.00	INR
rivers/channels/ seashore //reek etc by using Total station //RTK-DGPS. consisting of topographic survey along centre line, cross section @ not exceeding 250M (extending 30 m and 50 m beyond riverside bank toe and countryside bank toe respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, eross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey			0					
/creek etc by using Total station //RTK-DGPS. consisting of topographic survey along centre line, cross section @ not exceeding 250M (extending 30 m and 50 m beyond riverside bank toe and countryside bank toe respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey								Only
station /RTK-DGPS. consisting of topographic survey along centre line, cross section @ not exceeding 250M (extending 30 m and 50 m beyond riverside bank toe and countryside bank toe respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, ete within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey								
survey along centre line, cross section @ not exceeding 250M (extending 30 m and 50 m beyond riverside bank toe and countryside bank toe respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey								
cross section @ not exceeding 250M (extending 30 m and 50 m beyond riverside bank toe and countryside bank toe respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey								
exceeding 250M (extending 30 m and 50 m beyond riverside bank toe and countryside bank toe respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey								
(extending 30 m and 50 m beyond riverside bank toe and countryside bank toe respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey		0						
beyond riverside bank toe and countryside bank toe respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey								
respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey		beyond riverside bank toe						
capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey								
information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey								
eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey		1 0						
hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey								
damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey								
, water body, etc within survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey								
survey zone, all geo referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey								
referenced and submission of final survey report both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey		survey zone, all geo						
both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey		referenced and submission						
showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey								
section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey								
detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey		section, cross section,						
geodata base, DWG &KMZ/KML format etc including all raw survey		detail asset list, geo						
&KMZ/KML format etc including all raw survey								
including all raw survey								
	1							

	direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working location and all incidental charges like carriage of instruments, engagement of manpower and machineries etc required to complete to work in all respect)						
3.02	Conducting in-situ field density test by common balance, field moisture content test by rapid moisture meter, field permeability test by constant head and falling head method [at the depth of 1.5m from countryside toe of the embankment @ 2000 m c/c distance along both embankments and/ or banks and submission of report after getting them certified by reputed Govt. organization/institute as per direction of Engineer- in-Chargecomplete. Note i)The rate is inclusive of all incidental charges like all types of carriage, engagement of manpower & instruments/equipment etc. as applicable to complete to work in all respect.	105.0	Each locatio n		0.00	0.00	INR Zero Only
3.03	Construction of Bench Mark pillar as per attached specifications at suitable locations on embankment proper or at places not greater than 100 M from embankment as per direction of the Engineer in charge. (Note: The rate is inclusive all charges like material, labour, equipment, carriage etc required to complete the work as per	40.00	Each		0.00	0.00	INR Zero Only

	specifications)						
3.04	Collection of undisturbed soil samples @ 4000 m c/c distance along both embankments and/ or banks from a suitable depth from top of embankment/bank & carriage of those samples with proper labeling of collection locations for assessment of different geotechnical and soil properties to the nearest Lab of River Research Institute, West Bengal, as per direction of Engineer- in-Charge complete. Note i)The rate is inclusive of all incidental charges like all type carriage, engagement of manpower & instruments/equipment etc. as applicable to	52.00	Each locatio n		0.00	0.00	INR Zero Only
	complete to work in all						
4	respect. <b>Survey of</b>						
	embankments under Canals Division in the districts of North & South 24 Parganas and corresponding mapping and health checking.						
4.01	Detailed field survey of embankment situated along various rivers/channels/ seashore /creek etc by using Total station /RTK-DGPS. consisting of topographic survey along centre line, cross section @ not exceeding 250M (extending 30 m and 50 m beyond riverside banktoe and countryside bank toe respectively), including capturing all detail information regarding eroded stretches, inlet /outlet structures, hutments, bank protection damaged, vegetative cover , water body, etc within survey zone, all geo referenced and submission of final survey report	225.0 0	Km		0.00	0.00	INR Zero Only

	both in hard and soft copy showing index map, long section, cross section, detail asset list, geo referenced dwgs as geodata base, DWG &KMZ/KML format etc including all raw survey data all complete as per direction of engineer in charge. (Note: The rate is inclusive of cost of flying of G.T.S. Bench Mark from nearest available locations upto working location and all incidental charges like carriage of instruments, engagement of manpower and machineries etc required to complete to work in all respect)						
4.02	Conducting in-situ field density test by common balance, field moisture content test by rapid moisture meter, field permeability test by constant head and falling head method [at the depth of 1.5m from countryside toe of the embankment @ 2000 m c/c distance along both embankments and/ or banks and submission of report after getting them certified by reputed Govt. organization/institute as per direction of Engineer- in-Chargecomplete. Note i)The rate is inclusive of all incidental charges like all types of carriage, engagement of manpower & instruments/equipment etc. as applicable to complete to work in all respect.	110.0 0	Each locatio n		0.00	0.00	INR Zero Only
4.03	Construction of Bench Mark pillar as per attached specifications at suitable locations on embankment proper or at places not	45.00	Each		0.00	0.00	INR Zero Only

## Proforma for performance statement

RFQ No. -----

Name of Bidder -----

## [for a period of last 03 financial years]

Name of Work	Work Order Reference	Order Placed By	Description of Services	Value of Order	Date of Completion	Value of Services at Completion	Remarks If Any

SIGNATURE OF BIIDDER

## Form of Affidavit for Correctness of Information and Documents Submitted with Bid

[Reference ITB 13.3]

[This affidavit should be on a non-judicial stamp paper of Rs.10/- and shall be attested by Magistrate/Sub-Judge/Notary Public]

Deponent

Place:	
Date:	••

\* This sub-paragraph is not applicable if the Bidder is an individual and is signing the Bid on his own behalf.

### Notification of Award - Letter of Acceptance

[letterhead paper of the Employer]

[date]

To: [name and address of the Service Provider]

This is to notify you that your Bid dated [date] for execution of the [name of the Contract and identification number, as given in the Special Conditions of Contract] for the Contract Price of the equivalent of [amount in numbers and words] [name of currency], as corrected and modified in accordance with the Instructions to Bidders is hereby accepted by our Agency.

**Note:** Insert one of the 3 options for the second paragraph. The first option should be used if the Bidder has not objected the name proposed for Adjudicator. The second option if the Bidder has objected the proposed Adjudicator and proposed a mane for a substitute, who was accepted by the Employer. And the third option if the Bidder has objected the proposed Adjudicator and proposed the proposed Adjudicator and proposed the proposed the proposed.

We confirm that [insert name proposed by Employer in the Bid Data Sheet],

or

We accept that [name proposed by Bidder] be appointed as the Adjudicator

#### or

We do not accept that *[name proposed by Bidder]* be appointed as Adjudicator, and by sending a copy of this letter of acceptance to *[insert the name of the Appointing Authority]*, we are hereby requesting *[name]*, the Appointing Authority, to appoint the Adjudicator in accordance with ITB 47.1

You are hereby instructed to proceed with the execution of the said contract for the provision of Services in accordance with the Contract documents.

Please return the attached Contract dully signed

Authorized Signature:	
Name and Title of Signatory:	
Name of Agency:	

Attachment: Contract

### **Form of Contract**

[letterhead paper of the Employer]

#### LUMP-SUM REMUNERATION

This CONTRACT (hereinafter called the "Contract") is made the [day] day of the month of [month], [year], between, on the one hand, [name of Employer] (hereinafter called the "Employer") and, on the other hand, [name of Service Provider] (hereinafter called the "Service Provider").

[Note: In the text below text in brackets is optional; all notes should be deleted in final text. If the Service Provider consist of more than one entity, the above should be partially amended to read as follows: "...(hereinafter called the "Employer") and, on the other hand, a joint venture consisting of the following entities, each of which will be jointly and severally liable to the Employer for all the Service Provider's obligations under this Contract, namely, [name of Service Provider] (hereinafter called the "Service Provider").]

WHEREAS

- (a) the Employer has requested the Service Provider to provide certain Services as defined in the General Conditions of Contract attached to this Contract (hereinafter called the "Services");
- (b) the Service Provider, having represented to the Employer that they have the required professional skills, and personnel and technical resources, have agreed to provide the Services on the terms and conditions set forth in this Contract at a contract price of......;
- (c) the Employer has received [*or* has applied for] a loan from the International Bank for Reconstruction and Development (hereinafter called the "Bank") [*or* a credit from the International Development Association (hereinafter called the "Association")] towards the cost of the Services and intends to apply a portion of the proceeds of this loan [*or* credit] to eligible payments under this Contract, it being understood (i) that payments by the Bank [*or* Association] will be made only at the request of the Employer and upon approval by the Bank [*or* Association], (ii) that such payments will be subject, in all respects, to the terms and conditions of the agreement providing for the loan [*or* credit], and (iii) that no party other than the Employer shall derive any rights from the agreement providing for the loan [*or* credit] or have any claim to the loan [*or* credit] proceeds;

NOW THEREFORE the parties hereto hereby agree as follows:

1. The following documents shall be deemed to form and be read and construed as part of this Agreement, and the priority of the documents shall be as follows:

- (a) the Letter of Acceptance;
- (b) the Service Provider's Bid
- (c) the Special Conditions of Contract;
- (d) the General Conditions of Contract;
- (e) the Specifications;
- (f) the Priced Activity Schedule; and

(g) The following Appendices:

Appendix A: Description of the Services

Appendix B: Schedule of Payments

Appendix C: Key Personnel and Subcontractors

Appendix D: Breakdown of Contract Price in Foreign Currency...Not Used

Appendix E: Breakdown of Contract Price in Local Currency....Not Used

Appendix F: Services and Facilities Provided by the Employer

Appendix G: Performance Incentive Compensation....Not Used

- 2. The mutual rights and obligations of the Employer and the Service Provider shall be as set forth in the Contract, in particular:
  - (a) the Service Provider shall carry out the Services in accordance with the provisions of the Contract; and
  - (b) the Employer shall make payments to the Service Provider in accordance with the provisions of the Contract.

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names as of the day and year first above written.

For and on behalf of *[name of Employer]* 

[Authorized Representative]

For and on behalf of [name of Service Provider]

#### [Authorized Representative]

[*Note*: If the Service Provider consists of more than one entity, all these entities should appear as signatories, e.g., in the following manner:]

For and on behalf of each of the Members of the Service Provider

[name of member]

[Authorized Representative]

[name of member]

[Authorized Representative]

## Form of Bid Security

(Bank Guarantee)

[The bank shall fill in this Bank Guarantee Form in accordance with the instructions indicated. Non-Judicial Stamp should be issued in the favour of bank]

[Guarantor letterhead or SWIFT identifier code]

**Beneficiary:** [Employer to insert its name and address]

**RFB No.:** [Employer to insert reference number for the Request for Bids]

Alternative No.: [Insert identification No if this is a Bid for an alternative]

**Date:** *[Insert date of issue]* 

**BID GUARANTEE No.:** [Insert guarantee reference number]

Guarantor: [Insert name and address of place of issue, unless indicated in the letterhead]

We have been informed that \_\_\_\_\_ [insert name of the Bidder, which in the case of a joint venture shall be the name of the joint venture (whether legally constituted or prospective) or the names of all members thereof] (hereinafter called "the Applicant") has submitted or will submit to the Beneficiary its Bid (hereinafter called "the Bid") for the execution of \_\_\_\_\_\_ under Request for Bids No. \_\_\_\_\_\_ ("the RFB").

Furthermore, we understand that, according to the Beneficiary's conditions, Bids must be supported by a Bid guarantee.

- (a) has withdrawn its Bid during the period of Bid validity set forth in the Applicant's Letter of Bid ("the Bid Validity Period"), or any extension thereto provided by the Applicant; or
- (b) having been notified of the acceptance of its Bid by the Beneficiary during the Bid Validity Period or any extension thereto provided by the Applicant, (i) has failed to sign the contract agreement, or (ii) has failed to furnish the performance security, in accordance with the Instructions to Bidders ("ITB") of the Beneficiary's bidding document.

This guarantee will expire: (a) if the Applicant is the successful Bidder, upon our receipt of copies of the Contract agreement signed by the Applicant and the performance security issued to the Beneficiary in relation to such Contract agreement; or (b) if the Applicant is not the successful Bidder, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Bidding process; or (ii)twenty-eight days after the end of the Bid Validity Period.

Consequently, any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758.

[Signature(s)]

*Note: All italicized text is for use in preparing this form and shall be deleted from the final product.* 

# **Section V - Eligible Countries**

Eligibility for the Provision of Goods, Works and Services in Bank-Financed Procurement

1. In reference to ITB 4.8, for the information of the Bidders, at the present time firms, goods and services from the following countries are excluded from this Bidding process:

Under ITB 4.8 (a): None Under ITB 4.8 (b) : None

## **Section VI - Fraud and Corruption**

### (Section VI shall not be modified)

#### 1. Purpose

1.1 The Bank's Anti-Corruption Guidelines and this annex apply with respect to procurement under Bank Investment Project Financing operations.

#### 2. Requirements

- 2.1 The Bank requires that Borrowers (including beneficiaries of Bank financing); bidders, consultants, contractors and suppliers; any sub-contractors, sub-consultants, service providers or suppliers; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection and contract execution of Bank-financed contracts, and refrain from Fraud and Corruption.
- 2.2 To this end, the Bank:
  - a. Defines, for the purposes of this provision, the terms set forth below as follows:
    - i. "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
    - ii. "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
    - iii. "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
    - iv. "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
    - v. "obstructive practice" is:
      - (a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
      - (b) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.
  - b. Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
  - c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring misprocurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of

the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;

- d. Pursuant to the Bank's Anti- Corruption Guidelines and in accordance with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;<sup>1</sup>(ii) to be a nominated<sup>2</sup> sub-contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and (iii) to receive the proceeds of any loan made by the Bank or otherwise to participate further in the preparation or implementation of any Bank-financed project;
- e. Requires that a clause be included in bidding/request for proposals documents and in contracts financed by a Bank loan, requiring (i) bidders, consultants, contractors, and suppliers, and their sub-contractors, sub-consultants, service providers, suppliers, agents personnel, permit the Bank to inspect<sup>3</sup> all accounts, records and other documents relating to the submission of bids and contract performance, and to have them audited by auditors appointed by the Bank.

<sup>&</sup>lt;sup>1</sup> For the avoidance of doubt, a sanctioned party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in a consultancy, and bidding, either directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.

<sup>&</sup>lt;sup>2</sup> A nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider (different names are used depending on the particular bidding document) is one which has been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

<sup>&</sup>lt;sup>3</sup> Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

## **Section VII - Activity Schedule**

## <u>Description of Services</u>

# 1) Survey of embankments under Howrah Irrigation Division in the districts of Howrah and Hooghly and corresponding mapping and health checking.

#### Background:

The mighty rivers Ganga, and its tributary flow through the southern and central districts of West Bengal. Due to heavy rains in the upper catchment large amount of flow is discharged through these rivers and often discharge flows over the banks causing great calamity to the people living on the side of the river. As such numerous embankments have been constructed by the Irrigation & Waterways department to ensure the safety of the people from floods. But till date a complete database of the embankments in the region has not been compiled. Hence it has been long felt that digitized and geo-tagged information of all the embankments in this region is necessary

Under this situation it has been decided to take up the work of survey of the embankments in the districts of Howrah & Hooghly under the jurisdiction of Howrah Irrigation Division.

The survey shall provide a detailed picture of the existing status of the embankments in this area. This data is expected to act as the basic information which when studied shall help in the decision-making process for suitable restoration and strengthening as required. The data so generated by this survey work shall be geo-referenced and the same shall be incorporated in the Web based Integrated Embankment Management System (IEMS) being developed under NHP. Once the survey data as per this contract is available in the GIS based system it will be very useful to formulate and decide the repair / rehabilitation /strengthening/ raising of the embankments at the vulnerable stretches including flood emergency preparedness that needs to be taken up during severe cyclones which this area is highly prone to. The works undertaken and progress including all technical and administrative details of a work on the embankment shall be available in the system with dates for future reference and action. Data in the IEMS system shall be regularly updated from time to time through regular survey and supervision reports by departmental staff / contracts with departmental fund or even by crowd sourcing as and when necessary. It is required to capture time-stamped geo-tagged photographs showing the sections of the embankment that are (i) weak (ii) have important structures behind (iii) are protected by plantations or have berm for plantation (iv) have structural protection works (v) have ponds behind(vi) any other important feature as decided by the engineer in charge. It is envisaged that the maximum elevation of water attained at critical locations on the embankment with date, and locations of historical breach would also be captured and documented during field survey. These would be integrated with the Embankment Asset Management System being developed under a separate assignment.

The current area considered in this work consists of the embankments under E.E. Howrah Irrigation Division of I&W Department, Govt of West Bengal.

#### **OBJECTIVES OF PROPOSAL**

The main objectives of the proposal in brief are:

- i. Detail topographic survey along Embankments of along various rivers / channels / sea /creek etc involving long section and cross-section at regular intervals, alignment, physical status and assets etc as detailed below
- ii. Capturing details of the Embankment physical status, HFL information as available at site regulator inlets,(including geo-tagged and time stamped photographs) bank protection, river training works, locations showing signs of problems like rat burrows, cuts, depressions etc, locations with encroachments, vegetative growth etc and any other sensitive information on embankment etc as per direction of Engineer in Charge, all geo tagged and time stamped.
- iii. Collection of undisturbed Soil samples along embankment up to a depth of 1.5 m @ 4000 M c/c & carriage of same to the to the Quality Control Lab of River Research Institute (RRI) of Irrigation & Waterways Department at Salt Lake, Kolkata, West Bengal for future laboratory tests (to be carried out separately).
- iv. Conducting in-situ field density test m @ 2000 M c/c
- v. Digitization of the entire surveyed area including the embankments, and all other information all on GIS platform.
- vi. Fixing of DGPS control points and Fixation and Construction of Bench Mark pillars at suitable interval as per direction of Engineer in Charge.
- vii. Generation and submission of hard (at a scale of 1: 4000 or larger, as decided by the engineer in charge) and soft copies of longitudinal (along the centre-line) and cross-sectional plots as per survey specifications Plan view of the embankment along the alignment of the embankment showing all important structures, encroachments, vegetation (mangrove), etc within the zone of survey i.e., 30 M and 50 M on either side of embankment toe, representing riverside and countryside, respectively.
- viii. Submission of the embankment data in standard GIS file format for integration in Embankment Management Software.
- ix. Create visualization and plots for verification.
- x. Submission of survey completion report.
- xi. In-situ geo-technical investigation of soil samples along embankment / bank line of those rivers/khals at suitable intervals

#### 4. SCOPE OF PROPOSAL

The survey is to be carried out using survey instruments like Total Stations, DGPS-RTK, and associated with GPS system to ensure accuracy and Geo-reference and as per instruction of Engineer-in-Charge.

The work shall cover all technical aspects of topographic & hydrographic survey, collection of soil samples for geo technical investigation, etc. which includes the following:

#### The field survey consists of:

- (i) Topographical survey of centre line of embankment @ 50 M c/c and the top edges of the embankment. (accuracy should be  $\pm$  2.5 cm vertically and  $\pm$  7.5 cm horizontally). However, all points depicting changes/ other important features should be captured in addition.
- (ii) Cross section survey of the embankment @ not exceeding 250 M c/c (extending 50Mbeyond country side toe line and 30M beyond riverside toe line; accuracy should be  $\pm$  2.5 cm vertically and  $\pm$  7.5 cm horizontally). For sections underwater, necessary bathymetric survey is to be done using eco sounding / ADCP.
- (iii) Survey along the embankment line and along the sides capturing physical features like bank protection (including the type of protection), present status (damaged or not and degree of damage), vegetative growth like Mangrove etc if any, pond, inlet/outlet structure (With details and photograph), jetties, hutments etc all within the survey zone of 30 M and 50 M on either side as mentioned above.
- (iv) Collection of undisturbed soil samples @ 4000 M c/c distance along embankment up to a depth of 1.5 M from top of embankment & carriage of those samples with proper labeling all complete as per IS 2132 (1986) for assessment of different soil properties like unconfined compressive strength (UCS), Specific gravity (G),Liquid limit (LL), Plastic limit (PL), Grain size distribution (by dry and wet method), to the to the Quality Control Lab of River Research Institute (RRI) under Irrigation & Waterways Department at Salt Lake, Kolkata, West Bengal for future laboratory tests (to be carried out separately) as per direction of Engineer-in-Charge. The cost of soil sample analysis is to be borne by the department.
- (v) Construction of Bench Mark pillar as per attached specifications at suitable locations (approximately 1BM pillar for every 5 KM approx)on embankment proper or at places not greater than 100 M from embankment as per direction of the Engineer in charge.
- (vi) Identification of (i) vulnerable locations (ii) locations needing immediate attention and (iii) relatively safe zones of the embankment
- (vii) Conducting in-situ field density test by common balance, field moisture content test by rapid moisture meter, field permeability test by constant head and falling head method [at the depth of 1.5 M from countryside toe of the embankment] @2000 m c/c distance along embankments and submission of report after getting them certified by reputed Govt. organization / Institute as per direction of Engineer-in-Charge.

#### Submission of report shall comprise of the following

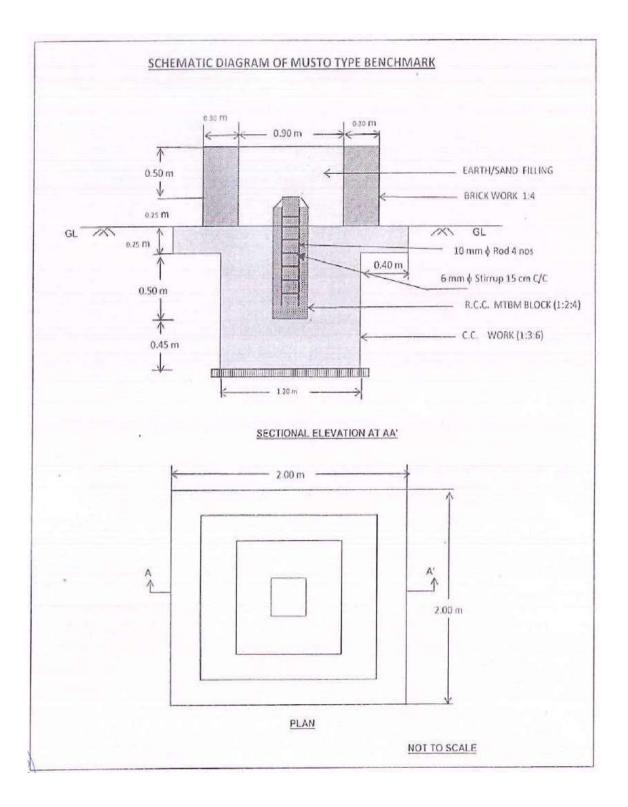
- (i) Index map of the surveyed area showing all important features in a suitable scale, all geo referenced.
- (ii) Longitudinal section (along the centre-line) and cross-sectional plots of embankments.

- (iii) Survey map along the alignment of the embankment showing all important features like armoured / un-armoured, houses, inlets/outlet structures, mangrove growth, pond, jetties, eroded zones and similar other important information of importance all geo referenced.
- (iv) List of inlet /outlet structures along with details of type, location etc along with photographs all geo tagged and time stamped.
- (v) Apart from the hard copy of report & drawings (envisaged at a scale of 1:4000 or larger, three copies are to be submitted), soft copies of all survey data are to be submitted as geo data base as well as kml, Excel and AutoCAD format for records and further analysis and incorporation in integrated embankment management system.
- (vi) Submission of all raw data from digital level shall be submitted along with adjusted and unadjusted levels in tabular form & by using applicable Geo-Office software as per direction of Engineer in- Charge complete
- (vii) DWG& .KMZ/.KML file of the detailed topographic survey of the embankment/ bank shall be made from the survey data such that the layer can be visualized in Google Earth/Arc GIS Earth.
- (viii) Submission of hard copy (3 nos) and soft copies of all shape files and/or geo data base, dwgs, maps etc, one each *for Project Manager, DDO and Director, Adv Planning Jalasampad Bhavan, Salt Lake, Kolkata.*
- (ix) In-situ Geo technical soil investigation report certified by reputed Govt. organization/Institute as per direction of Engineer-in-Charge.

SI no	District	Name of Block / Municipality	Name of Embankment	Name of River / Khal	Side of Bank on which Embankmen t is situated (L/B & R/B)	Approximat e length (KM)
1		Amta-II	Left Embankment	Rupnarayan	Left Bank	13.460
2		Bagnan-I	Left Embankment	Rupnarayan	Left Bank	7.515
3		Bagnan-II	Left Embankment	Rupnarayan	Left Bank	17.338
4		Shyampur-II	Left Embankment	Rupnarayan	Left Bank	13.298
5		Shyampur-I	Left Embankment	Rupnarayan	Left Bank	13.817
6	Howrah	Shyampur-I	Right Embankment	Hooghly	Right Bank	19.925
7		Uluberia-I	Right Embankment	Hooghly	Right Bank	4.000
				Total length		89.353
				Tendered Length (KM	Л)	90.000

### Total length of embankment [Tentative]: = 90 km





# **TYPICAL SECTION OF BM PILLAR**

# 2) Survey of embankments under Contai Irrigation Division (Ph II) in the districts of Purba Medinipur and corresponding mapping and health checking.

#### Background:

The mighty rivers Ganga, and its tributary flow through the southern and central districts of West Bengal. Due to heavy rains in the upper catchment large amount of flow is discharged through these rivers and often discharge flows over the banks causing great calamity to the people living on the side of the river. As such numerous embankments have been constructed by the Irrigation & Waterways department to ensure the safety of the people from floods. But till date a complete database of the embankments in the region has not been compiled. Hence it has been long felt that digitized and geo-tagged information of all the embankments in this region is necessary

Under this situation it has been decided to take up the work of survey of the additional embankments (Ph II) in the district of East Medinipur under the jurisdiction of Contai Irrigation Division.

The survey shall provide a detailed picture of the existing status of the embankments in this area. This data is expected to act as the basic information which when studied shall help in the decision-making process for suitable restoration and strengthening as required. The data so generated by this survey work shall be geo-referenced and the same shall be incorporated in the Web based Integrated Embankment Management System (IEMS)being developed under NHP. Once the survey data as per this contract is available in the GIS based system it will be very useful to formulate and decide the repair / rehabilitation /strengthening/ raising of the embankments at the vulnerable stretches including flood emergency preparedness that needs to be taken up during severe cyclones which this area is highly prone to. The works undertaken and progress including all technical and administrative details of a work on the embankment shall be available in the system with dates for future reference and action. Data in the IEMS system shall be regularly updated from time to time through regular survey and supervision reports by departmental staff / contracts with departmental fund or even by crowd sourcing as and when necessary. It is required to capture time-stamped geo-tagged photographs showing the sections of the embankment that are (i) weak (ii) have important structures behind (iii) are protected by plantations or have berm for plantation (iv) have structural protection works (v) have ponds behind(vi) any other important feature as decided by the engineer in charge. It is envisaged that the maximum elevation of water attained at critical locations on the embankment with date, and locations of historical breach would also be captured and documented during field survey. These would be integrated with the Embankment Asset Management System being developed under a separate assignment.

The current area considered in this work consists of the embankments under Contai Irrigation Division of I&W Department, Govt of West Bengal.

#### **OBJECTIVES OF PROPOSAL**

The main objectives of the proposal in brief are:

i. Detail topographic survey along Embankments of along various rivers / channels / sea /creek etc involving long section and cross-section at regular intervals, alignment, physical status and assets etc as detailed below

- ii. Capturing details of the Embankment physical status, regulator inlets,(including geotagged and time stamped photographs) bank protection, river training works, locations showing signs of problems like rat burrows, cuts, depressions etc., locations with encroachments, vegetative growth etc and any other sensitive information on embankment etc as per direction of Engineer in Charge, all geo tagged and time stamped.
- iii. Collection of undisturbed Soil samples along embankment up to a depth of 1.5 m @ 4000 M c/c & carriage of same to the to the Quality Control Lab of River Research Institute (RRI) of Irrigation & Waterways Department at Contai, East Medinipur West Bengal for future laboratory tests (to be carried out separately).
- iv. Conducting in-situ field density test m @ 2000 M c/c
- v. Digitization of the entire surveyed area including the embankments, and all other information all on GIS platform.
- vi. Fixing of DGPS control points and Fixation and Construction of Bench Mark pillars at suitable interval as per direction of Engineer in Charge.
- vii. Generation and submission of hard (at a scale of 1: 4000 or larger, as decided by the engineer in charge) and soft copies of longitudinal (along the centre-line) and cross-sectional plots as per survey specifications Plan view of the embankment along the alignment of the embankment showing all important structures, encroachments, vegetation (mangrove), etc within the zone of survey i.e., 30 M and 50 M on either side of embankment toe, representing riverside and countryside, respectively.
- viii. Submission of the embankment data in standard GIS file format for integration in Embankment Management Software.
- ix. Create visualization and plots for verification.
- x. Submission of survey completion report.
- xi. In-situ geo-technical investigation of soil samples along embankment / bank line of those rivers / khals at suitable intervals

#### 4. SCOPE OF PROPOSAL

The survey is to be carried out using survey instruments like Total Stations, DGPS-RTK, and associated with GPS system to ensure accuracy and Geo-reference and as per instruction of Engineer-in-Charge.

The work shall cover all technical aspects of topographic & hydro graphic survey, collection of soil samples for geo technical investigation, etc. which includes the following:

#### The field survey consists of:

- (i) Topographical survey of centre line of embankment @ 50 M c/c and the top edges of the embankment.(accuracy should be  $\pm$  2.5 cm vertically and  $\pm$  7.5 cm horizontally). However, all points depicting changes / other important features should be captured in addition.
- (ii) Cross section survey of the embankment @ not exceeding 250 M c/c (extending 50 M beyond country side toe line and 30 M beyond riverside toe line; accuracy should be  $\pm$  2.5 cm vertically and  $\pm$  7.5 cm horizontally). For sections underwater, necessary bathymetric survey is to be done using eco sounding / ADCP.
- (iii) Survey along the embankment line and along the sides capturing physical features like bank protection (including the type of protection), present status (damaged or not and degree of damage), vegetative growth like Mangrove etc if any, pond, inlet/outlet structure (With details and photograph), jetties, hutments etc all within the survey zone of 30 M and 50 M on either side as mentioned above.
- (iv) Collection of undisturbed soil samples @ 4000 M c/c distance along embankment up to a depth of 1.5 M from top of embankment & carriage of those samples with proper labeling all complete as per IS 2132 (1986) for assessment of different soil properties like unconfined compressive strength (UCS), Specific gravity (G),Liquid limit (LL), Plastic limit (PL), Grain size distribution (by dry and wet method), to the to the Quality Control Lab of River Research Institute (RRI) under Irrigation & Waterways Department at Contai, East Medinipur, West Bengal for future laboratory tests (to be carried out separately) as per direction of Engineer-in-Charge. The cost of soil sample analysis is to be borne by the department.
- (v) Construction of Bench Mark pillar as per attached specifications at suitable locations (approximately 1BM pillar for every 5 KM approx)on embankment proper or at places not greater than 100 M from embankment as per direction of the Engineer in charge.
- (vi) Identification of (i) vulnerable locations (ii) locations needing immediate attention and (iii) relatively safe zones of the embankment
- (vii) Conducting in-situ field density test by common balance, field moisture content test by rapid moisture meter, field permeability test by constant head and falling head method [at the depth of 1.5 M from countryside toe of the embankment] @2000 m c/c distance along embankments and submission of report after getting them certified by reputed Govt. organization / Institute as per direction of Engineer-in-Charge.

#### Submission of report shall comprise of the following

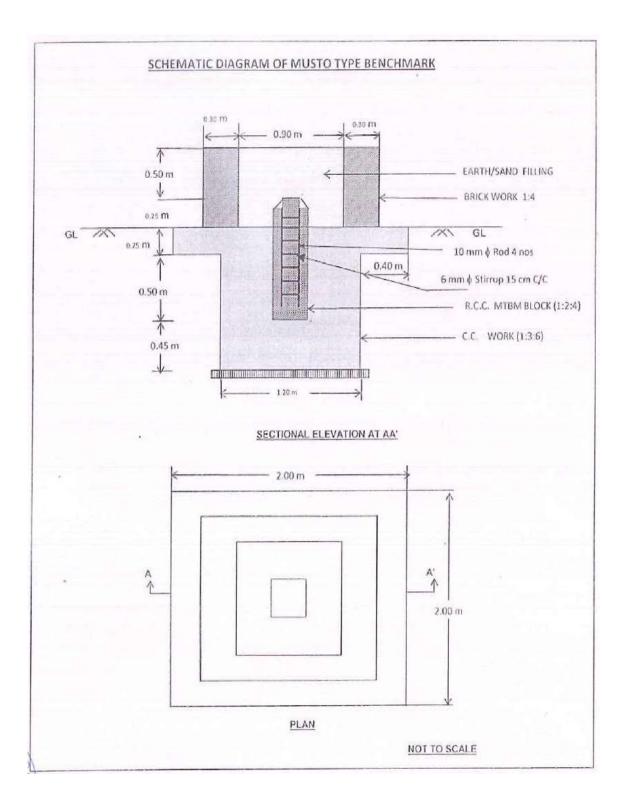
- (i) Index map of the surveyed area showing all important features in a suitable scale, all geo referenced.
- (ii) Longitudinal section (along the centre-line) and cross-sectional plots of embankments.
- (iii) Survey map along the alignment of the embankment showing all important features like armoured / un-armoured, houses, inlets/outlet structures, mangrove growth, pond, jetties, eroded zones and similar other important information of importance all geo referenced.

- (iv) List of inlet /outlet structures along with details of type, location etc along with photographs all geo tagged and time stamped.
  - (v) Apart from the hard copy of report & drawings (envisaged at a scale of 1:4000 or larger, three copies are to be submitted), soft copies of all survey data are to be submitted as geo data base as well as kml, Excel and AutoCAD format for records and further analysis and incorporation in integrated embankment management system.
  - (vi) Submission of all raw data from digital level shall be submitted along with adjusted and unadjusted levels in tabular form & by using applicable Geo-Office software as per direction of Engineer in- Charge complete
  - (vii) DWG& .KMZ/.KML file of the detailed topographic survey of the embankment/ bank shall be made from the survey data such that the layer can be visualized in Google Earth/Arc GIS Earth.
  - (viii) Submission of hard copy (3 nos) and soft copies of all shape files and/or geo data base, dwgs, maps etc, one each *for Project Manager, DDO and Director, Adv Planning Jalasampad Bhavan, Salt Lake, Kolkata.*
  - (ix)In-situ Geo technical soil investigation report certified by reputed Govt. organization/Institute as per direction of Engineer-in-Charge.

	Name of Block / Municipality	Name of Embankment	Name of River	Bank on which Embankme nt is situated (L/B & R/B)	Appro x. length in Km.
		A. EMBANKMENT	<u>T</u>		
	Deshapran	Rasulpur Right Embankment	Rasulpur	R/B	26.00 Km
	Contai-III	Balighain Embankment	Balighai	R/B	5.00 Km
	Khejuri I	45 circuit Embankment	Palaboni Khal	R/B	14.00 Km
Purba Medinipur	Patashpur II &Bhagawan pur II	48 circuit Embankment	Sadar Khal &Nimtola Khal	R/B	12.00 Km
	Patashpur I	Kaliaghai Right Embankment	Kaliaghai	R/B	12.00 Km
	Sabang	Kaliaghai Right Embankment	Kaliaghai	R/B	5.00 Km
	Nandigram I &II	Goomgarh Embankment	Haldi& Hooghly	R/B	30.20 Km
	Nandigram I	Sonachura-Kendraima Embankment	Hooghly	R/B	20.50 Km
	Khejuri II	Schedule- D Embankment	Hooghly	R/B	16.50 Km
	Khejuri I & II	Hansia Embankment	Rasulpur	L/B	19.00 Km
	Patashpur I	Gokulpur Circuit Embankment	Old Kaliaghai&Bag hai	Old Kaliaghai (R/B), Baghai River (L/B)	9.50 Km
	Egra-l	Juki Embankment		,	2.50 Km
Total					172.20 Km
	Medinipur	Contai-IIIKhejuri IPatashpur II&Bhagawanpur IIPatashpur ISabangNandigram I&IINandigram I&IIKhejuri IKhejuri IKhejuri I & IIPatashpur IEgra-I	Desnapran       Embankment         Contai-III       Balighain Embankment         Khejuri I       45 circuit Embankment         Patashpur II       & Gircuit Embankment         Patashpur II       Kaliaghai Right         Babankment       Patashpur II         Patashpur I       Kaliaghai Right         Patashpur I       Kaliaghai Right         Sabang       Kaliaghai Right         Sabang       Kaliaghai Right         Nandigram I       Goomgarh Embankment         Nandigram I       Sonachura-Kendraima         Embankment       Khejuri II         Nandigram I       Schedule- D         Embankment       Khejuri I & III         Hansia Embankment       Khejuri I & II         Patashpur I       Gokulpur Circuit         Embankment       Egra-I         Juki Embankment       Imbankment	DesnapranEmbankmentRasulpurContai-IIIBalighain EmbankmentBalighaiKhejuri I45 circuit EmbankmentPalaboni KhalPatashpur II &Bhagawan pur II48 circuit EmbankmentSadar Khal &Nimtola KhalPatashpur IKaliaghai Right EmbankmentKaliaghaiSabangKaliaghai Right EmbankmentKaliaghaiNandigram I &IIGoomgarh EmbankmentHaldi& HooghlyNandigram I &IISonachura-Kendraima EmbankmentHooghlyKhejuri IISchedule-D EmbankmentHooghlyKhejuri I & IIIHansia EmbankmentRasulpurPatashpur IGokulpur Circuit EmbankmentOld Kaliaghai&Bag haiEgra-IJuki EmbankmentI	DesnapranEmbankmentRasulpurR/BContai-IIIBalighain EmbankmentBalighaiR/BKhejuri I45 circuit EmbankmentPalaboni KhalR/BPatashpur II48 circuit EmbankmentSadar Khal &Nimtola KhalR/BPatashpur IIKaliaghai Right EmbankmentKaliaghaiR/BSabangKaliaghai Right EmbankmentKaliaghaiR/BSabangKaliaghai Right EmbankmentKaliaghaiR/BNandigram I &IIGoomgarh Embankment EmbankmentHaldi& HooghlyR/BNandigram I &IISonachura-Kendraima EmbankmentHooghlyR/BKhejuri I & IIHansia EmbankmentRasulpurL/BPatashpur IGokulpur Circuit EmbankmentOld Kaliaghai&Bag haiKaliaghai R/BEgra-IJuki EmbankmentRasulpurL/BTotalIInternational IInternational IInternational R/B

## Total length of embankment [Tentative]: = 180 km





# **TYPICAL SECTION OF BM PILLAR**

# **3)** Survey of embankments under West Midnapore Division (Ph - II) in the districts of Paschim Medinipur and corresponding mapping and health checking.

#### Background:

The mighty rivers Ganga, and its tributary flow through the southern and central districts of West Bengal. Due to heavy rains in the upper catchment large amount of flow is discharged through these rivers and often discharge flows over the banks causing great calamity to the people living on the side of the river. As such numerous embankments have been constructed by the Irrigation & Waterways department to ensure the safety of the people from floods. But till date a complete database of the embankments in the region has not been compiled. Hence it has been long felt that digitized and geo-tagged information of all the embankments in this region is necessary

Under this situation it has been decided to take up the work of survey of the embankments in the district of West Medinipur under the jurisdiction of West Midnapore Division.

The survey shall provide a detailed picture of the existing status of the embankments in this area. This data is expected to act as the basic information which when studied shall help in the decision-making process for suitable restoration and strengthening as required. The data so generated by this survey work shall be geo-referenced and the same shall be incorporated in the Web based Integrated Embankment Management System (IEMS) being developed under NHP. Once the survey data as per this contract is available in the GIS based system it will be very useful to formulate and decide the repair / rehabilitation /strengthening/ raising of the embankments at the vulnerable stretches including flood emergency preparedness that needs to be taken up during severe cyclones which this area is highly prone to. The works undertaken and progress including all technical and administrative details of a work on the embankment shall be available in the system with dates for future reference and action. Data in the IEMS system shall be regularly updated from time to time through regular survey and supervision reports by departmental staff / contracts with departmental fund or even by crowd sourcing as and when necessary. It is required to capture time-stamped geo-tagged photographs showing the sections of the embankment that are (i) weak (ii) have important structures behind (iii) are protected by plantations or have berm for plantation (iv) have structural protection works (v) have ponds behind(vi) any other important feature as decided by the engineer in charge. It is envisaged that the maximum elevation of water attained at critical locations on the embankment with date, and locations of historical breach would also be captured and documented during field survey. These would be integrated with the Embankment Asset Management System being developed under a separate assignment.

The current area considered in this work consists of the embankments under West Midnapore Division of I&W Department, Govt of West Bengal.

#### **OBJECTIVES OF PROPOSAL**

The main objectives of the proposal in brief are:

i. Detail topographic survey along Embankments of along various rivers / channels / sea /creek etc involving long section and cross-section at regular intervals, alignment, physical status and assets etc as detailed below

- ii. Capturing details of the Embankment physical status, regulator inlets,(including geotagged and time stamped photographs) bank protection, river training works, locations showing signs of problems like rat burrows, cuts, depressions etc., locations with encroachments, vegetative growth etc and any other sensitive information on embankment etc as per direction of Engineer in Charge, all geo tagged and time stamped.
- iii. Collection of undisturbed Soil samples along embankment up to a depth of 1.5 m @ 4000 M c/c & carriage of same to the to the Quality Control Lab of River Research Institute (RRI) of Irrigation & Waterways Department at Contai, East Medinipur West Bengal for future laboratory tests (to be carried out separately).
- iv. Conducting in-situ field density test m @ 2000 M c/c
- v. Digitization of the entire surveyed area including the embankments, and all other information all on GIS platform.
- vi. Fixing of DGPS control points and Fixation and Construction of Bench Mark pillars at suitable interval as per direction of Engineer in Charge.
- vii. Generation and submission of hard (at a scale of 1: 4000 or larger, as decided by the engineer in charge) and soft copies of longitudinal (along the centre-line) and cross-sectional plots as per survey specifications Plan view of the embankment along the alignment of the embankment showing all important structures, encroachments, vegetation (mangrove), etc within the zone of survey i.e., 30 M and 50 M on either side of embankment toe, representing riverside and countryside, respectively.
- viii. Submission of the embankment data in standard GIS file format for integration in Embankment Management Software.
- ix. Create visualization and plots for verification.
- x. Submission of survey completion report.
- xi. In-situ geo-technical investigation of soil samples along embankment / bank line of those rivers / khals at suitable intervals

#### 4. SCOPE OF PROPOSAL

The survey is to be carried out using survey instruments like Total Stations, DGPS-RTK, and associated with GPS system to ensure accuracy and Geo-reference and as per instruction of Engineer-in-Charge.

The work shall cover all technical aspects of topographic & hydro graphic survey, collection of soil samples for geo technical investigation, etc. which includes the following:

#### The field survey consists of:

(i) Topographical survey of centre line of embankment @ 50 M c/c and the top edges of the embankment.(accuracy should be  $\pm 2.5$  cm vertically and  $\pm 7.5$  cm horizontally).

However, all points depicting changes / other important features should be captured in addition.

- (ii) Cross section survey of the embankment @ not exceeding 250 M c/c (extending 50Mbeyond country side toe line and 30M beyond riverside toe line; accuracy should be  $\pm$  2.5 cm vertically and  $\pm$  7.5 cm horizontally). For sections underwater, necessary bathymetric survey is to be done using eco sounding / ADCP.
- (iii) Survey along the embankment line and along the sides capturing physical features like bank protection (including the type of protection), present status (damaged or not and degree of damage), vegetative growth like Mangrove etc if any, pond, inlet/outlet structure (With details and photograph), jetties, hutments etc all within the survey zone of 30 M and 50 M on either side as mentioned above.
- (iv) Collection of undisturbed soil samples @ 4000 M c/c distance along embankment up to a depth of 1.5 M from top of embankment & carriage of those samples with proper labeling all complete as per IS 2132 (1986) for assessment of different soil properties like unconfined compressive strength (UCS), Specific gravity (G),Liquid limit (LL), Plastic limit (PL), Grain size distribution (by dry and wet method), to the to the Quality Control Lab of River Research Institute (RRI) under Irrigation & Waterways Department at Contai, East Medinipur, West Bengal for future laboratory tests (to be carried out separately) as per direction of Engineer-in-Charge. The cost of soil sample analysis is to be borne by the department.
- (v) Construction of Bench Mark pillar as per attached specifications at suitable locations (approximately 1BM pillar for every 5 KM approx)on embankment proper or at places not greater than 100 M from embankment as per direction of the Engineer in charge.
- (vi) Identification of (i) vulnerable locations (ii) locations needing immediate attention and (iii) relatively safe zones of the embankment
- (vii) Conducting in-situ field density test by common balance, field moisture content test by rapid moisture meter, field permeability test by constant head and falling head method [at the depth of 1.5 M from countryside toe of the embankment] @2000 m c/c distance along embankments and submission of report after getting them certified by reputed Govt. organization / Institute as per direction of Engineer-in-Charge.

#### Submission of report shall comprise of the following

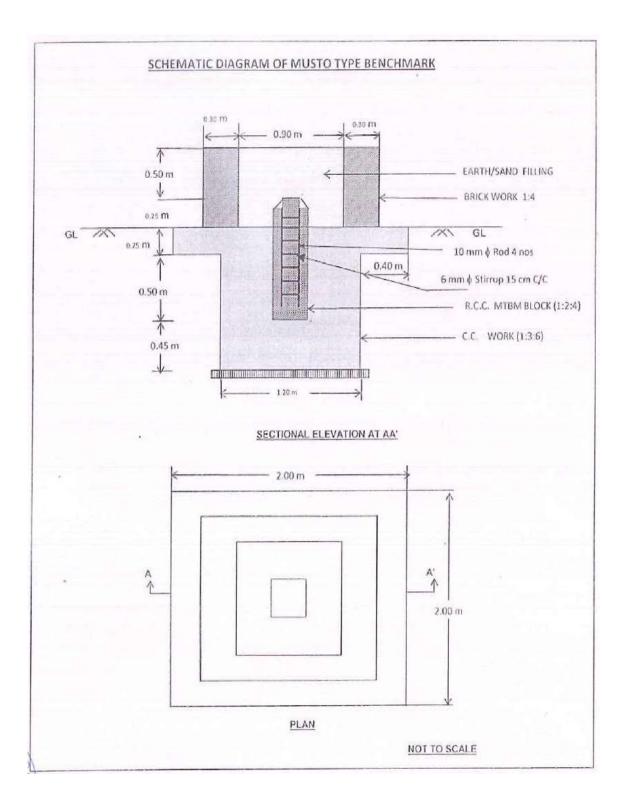
- (i) Index map of the surveyed area showing all important features in a suitable scale, all geo referenced.
- (ii) Longitudinal section (along the centre-line) and cross-sectional plots of embankments.
- (iii) Survey map along the alignment of the embankment showing all important features like armoured / un-armoured, houses, inlets/outlet structures, mangrove growth, pond, jetties, eroded zones and similar other important information of importance all geo referenced.
- (iv) List of inlet /outlet structures along with details of type, location etc along with photographs all geo tagged and time stamped.

- (v) Apart from the hard copy of report & drawings (envisaged at a scale of 1:4000 or larger, three copies are to be submitted), soft copies of all survey data are to be submitted as geo data base as well as kml, Excel and AutoCAD format for records and further analysis and incorporation in integrated embankment management system.
- (vi) Submission of all raw data from digital level shall be submitted along with adjusted and unadjusted levels in tabular form & by using applicable Geo-Office software as per direction of Engineer in- Charge complete
- (vii) DWG& .KMZ/.KML file of the detailed topographic survey of the embankment/ bank shall be made from the survey data such that the layer can be visualized in Google Earth/Arc GIS Earth.
- (viii) Submission of hard copy (3 nos) and soft copies of all shape files and/or geo data base, dwgs, maps etc, one each *for Project Manager, DDO and Director, Adv Planning Jalasampad Bhavan, Salt Lake, Kolkata.*
- (ix) In-situ Geo technical soil investigation report certified by reputed Govt. organization/Institute as per direction of Engineer-in-Charge.

Location of river/Khal Embankments to be mapped (Ph II, under NHP) under Executive Engineer, West Midnapore Division, Midnapore.						
SI no	District	Name of Block / Municipality	Name of Embankment	Name of River	Side of Bank on which Embankme nt is situated (L/B & R/B)	Approx. length in Km.
			A. EMBANKMENT			
1		Midnapur Sadar	Schedule -D embankment	River Cossye	L/B	1.22 Km
2	Paschim	Midnapur Sadar	Kalaichandi Phase-I	River Cossye	L/B	7.10 Km
3	Medinipur	Midnapur Sadar	Kalaichandi Phase-II	River Cossye	L/B	17.00 Km
4		Midnapur Sadar	Marginal Embankment	Kalaichandi Khal	L/B & R/B	12.20 Km
	Total				37.52 Km	
B. EX-ZAMINDARY EMBANKMENT						
1		Ghatal	Komra to Gangaprasad (left)	Jhumi	L/B	13.85 Km
2		Ghatal	Mohonpur to Radhachak (left)	Kethia	L/B	16.92 Km
3		Ghatal	Kotalpur to Radhachak (right)	Kethia	R/B	14.94 Km
4		Ghatal	Kushman to Panna (left)	Katan Khal	L/B	14.18 Km
5		Ghatal	Kushman to Panna (right)	Katan Khal	R/B	14.18 Km
6		Ghatal	Dubraj Kundu to Panna (left)	Gara Khal	L/B	3.50 Km
7		Ghatal	Dubraj Kundu to Panna (right)	Gara Khal	R/B	3.50 Km
8	Paschim	Ghatal	Radhakantapur to Shyampur (left)	Buri Khal	L/B	5.74 Km
9	Medinipur	Ghatal	Radhakantapur to Shyampur (right)	Buri Khal	R/B	5.74 Km
10		Daspur-I	Dharma Ex-zamindary Embankment	Bhosra Khal	L/B	5.00 Km
11		Kharagpur-II	Janardanpur to Akra (right)	River Cossye	R/B	8.50 Km
12		Debra	Pandat to Ten vent Sluice (right)	Bhosra Khal	R/B	13.50 Km
13		Debra	Pandat to Chak Madhuri (left)	Bhosra Khal	L/B	9.50 Km
14		Midnapur Sadar	Kakoi to Raghunathpur (left)	River Cossye	L/B	4.20 Km
15		Keshpur         Raghunathpur to Raipur (left)         River Cossye& Old Cossye         L/B		26.00 Km		
	Total					159.25 Km

Total length of Survey work due (Embankment + Ex-Zamindary Embankment) Tendered Length 196.77 Km 210.00 Km





# **TYPICAL SECTION OF BM PILLAR**

# 4) Survey of embankments under Canals Division in the districts of North & South 24 Parganas and corresponding mapping and health checking.

#### Background:

The mighty rivers Ganga, and its tributary flow through the southern and central districts of West Bengal. Due to heavy rains in the upper catchment large amount of flow is discharged through these rivers and often discharge flows over the banks causing great calamity to the people living on the side of the river. As such numerous embankments have been constructed by the Irrigation & Waterways department to ensure the safety of the people from floods. But till date a complete database of the embankments in the region has not been compiled. Hence it has been long felt that digitized and geo-tagged information of all the embankments in this region is necessary

Under this situation it has been decided to take up the work of survey of the embankments in the districts of North & South 24 Parganas under the jurisdiction of Canals Division.

The survey shall provide a detailed picture of the existing status of the embankments in this area. This data is expected to act as the basic information which when studied shall help in the decision-making process for suitable restoration and strengthening as required. The data so generated by this survey work shall be geo-referenced and the same shall be incorporated in the Web based Integrated Embankment Management System (IEMS) being developed under NHP. Once the survey data as per this contract is available in the GIS based system it will be very useful to formulate and decide the repair / rehabilitation /strengthening/ raising of the embankments at the vulnerable stretches including flood emergency preparedness that needs to be taken up during severe cyclones which this area is highly prone to. The works undertaken and progress including all technical and administrative details of a work on the embankment shall be available in the system with dates for future reference and action. Data in the IEMS system shall be regularly updated from time to time through regular survey and supervision reports by departmental staff / contracts with departmental fund or even by crowd sourcing as and when necessary. It is required to capture time-stamped geo-tagged photographs showing the sections of the embankment that are (i) weak (ii) have important structures behind (iii) are protected by plantations or have berm for plantation (iv) have structural protection works (v) have ponds behind(vi) any other important feature as decided by the engineer in charge. It is envisaged that the maximum elevation of water attained at critical locations on the embankment with date, and locations of historical breach would also be captured and documented during field survey. These would be integrated with the Embankment Asset Management System being developed under a separate assignment.

The current area considered in this work consists of the embankments under EE - I & EE - IICanals Division of I&W Department, Govt. of West Bengal.

#### **OBJECTIVES OF PROPOSAL**

The main objectives of the proposal in brief are:

i. Detail topographic survey along Embankments of along various rivers / channels / sea /creek etc involving long section and cross-section at regular intervals, alignment, physical status and assets etc as detailed below

- ii. Capturing details of the Embankment physical status, regulator inlets,(including geotagged and time stamped photographs) bank protection, river training works, locations showing signs of problems like rat burrows, cuts, depressions etc., locations with encroachments, vegetative growth etc and any other sensitive information on embankment etc as per direction of Engineer in Charge, all geo tagged and time stamped.
- iii. Collection of undisturbed Soil samples along embankment up to a depth of 1.5 m @ 4000 M c/c & carriage of same to the to the Quality Control Lab of River Research Institute (RRI) of Irrigation & Waterways Department at Salt Lake, Kolkata West Bengal for future laboratory tests (to be carried out separately).
- iv. Conducting in-situ field density test m @ 2000 M c/c
- v. Digitization of the entire surveyed area including the embankments, and all other information all on GIS platform.
- vi. Fixing of DGPS control points and Fixation and Construction of Bench Mark pillars at suitable interval as per direction of Engineer in Charge.
- vii. Generation and submission of hard (at a scale of 1: 4000 or larger, as decided by the engineer in charge) and soft copies of longitudinal (along the centre-line) and cross-sectional plots as per survey specifications Plan view of the embankment along the alignment of the embankment showing all important structures, encroachments, vegetation (mangrove), etc within the zone of survey i.e., 30 M and 50 M on either side of embankment toe, representing riverside and countryside, respectively.
- viii. Submission of the embankment data in standard GIS file format for integration in Embankment Management Software.
- ix. Create visualization and plots for verification.
- x. Submission of survey completion report.
- xi. In-situ geo-technical investigation of soil samples along embankment / bank line of those rivers / khals at suitable intervals

#### 4. SCOPE OF PROPOSAL

The survey is to be carried out using survey instruments like Total Stations, DGPS-RTK, and associated with GPS system to ensure accuracy and Geo-reference and as per instruction of Engineer-in-Charge.

The work shall cover all technical aspects of topographic & hydro graphic survey, collection of soil samples for geo technical investigation, etc. which includes the following:

#### The field survey consists of:

(i) Topographical survey of centre line of embankment @ 50 M c/c and the top edges of the embankment.(accuracy should be  $\pm 2.5$  cm vertically and  $\pm 7.5$  cm horizontally).

However, all points depicting changes / other important features should be captured in addition.

- (ii) Cross section survey of the embankment @ not exceeding 250 M c/c (extending 50Mbeyond country side toe line and 30M beyond riverside toe line; accuracy should be  $\pm$  2.5 cm vertically and  $\pm$  7.5 cm horizontally). For sections underwater, necessary bathymetric survey is to be done using eco sounding / ADCP.
- (iii) Survey along the embankment line and along the sides capturing physical features like bank protection (including the type of protection), present status (damaged or not and degree of damage), vegetative growth like Mangrove etc if any, pond, inlet/outlet structure (With details and photograph), jetties, hutments etc all within the survey zone of 30 M and 50 M on either side as mentioned above.
- (iv) Collection of undisturbed soil samples @ 4000 M c/c distance along embankment up to a depth of 1.5 M from top of embankment & carriage of those samples with proper labeling all complete as per IS 2132 (1986) for assessment of different soil properties like unconfined compressive strength (UCS), Specific gravity (G),Liquid limit (LL), Plastic limit (PL), Grain size distribution (by dry and wet method), to the to the Quality Control Lab of River Research Institute (RRI) under Irrigation & Waterways Department at Salt Lake, Kolkata West Bengal for future laboratory tests (to be carried out separately) as per direction of Engineer-in-Charge. The cost of soil sample analysis is to be borne by the department.
- (v) Construction of Bench Mark pillar as per attached specifications at suitable locations (approximately 1BM pillar for every 5 KM approx)on embankment proper or at places not greater than 100 M from embankment as per direction of the Engineer in charge.
- (vi) Identification of (i) vulnerable locations (ii) locations needing immediate attention and (iii) relatively safe zones of the embankment
- (vii) Conducting in-situ field density test by common balance, field moisture content test by rapid moisture meter, field permeability test by constant head and falling head method [at the depth of 1.5 M from countryside toe of the embankment] @2000 m c/c distance along embankments and submission of report after getting them certified by reputed Govt. organization / Institute as per direction of Engineer-in-Charge.

#### Submission of report shall comprise of the following

- (i) Index map of the surveyed area showing all important features in a suitable scale, all geo referenced.
- (ii) Longitudinal section (along the centre-line) and cross-sectional plots of embankments.
- (iii) Survey map along the alignment of the embankment showing all important features like armoured / un-armoured, houses, inlets/outlet structures, mangrove growth, pond, jetties, eroded zones and similar other important information of importance all geo referenced.
- (iv) List of inlet /outlet structures along with details of type, location etc along with photographs all geo tagged and time stamped.

- (v) Apart from the hard copy of report & drawings (envisaged at a scale of 1:4000 or larger, three copies are to be submitted), soft copies of all survey data are to be submitted as geo data base as well as kml, Excel and AutoCAD format for records and further analysis and incorporation in integrated embankment management system.
- (vi) Submission of all raw data from digital level shall be submitted along with adjusted and unadjusted levels in tabular form & by using applicable Geo-Office software as per direction of Engineer in- Charge complete
- (vii) DWG& .KMZ/.KML file of the detailed topographic survey of the embankment/ bank shall be made from the survey data such that the layer can be visualized in Google Earth/Arc GIS Earth.
- (viii) Submission of hard copy (3 nos) and soft copies of all shape files and/or geo data base, dwgs, maps etc, one each *for Project Manager, DDO and Director, Adv Planning Jalasampad Bhavan, Salt Lake, Kolkata.*
- (ix) In-situ Geo technical soil investigation report certified by reputed Govt. organization/Institute as per direction of Engineer-in-Charge.

# Total length of embankment [Tentative]: = 225 km

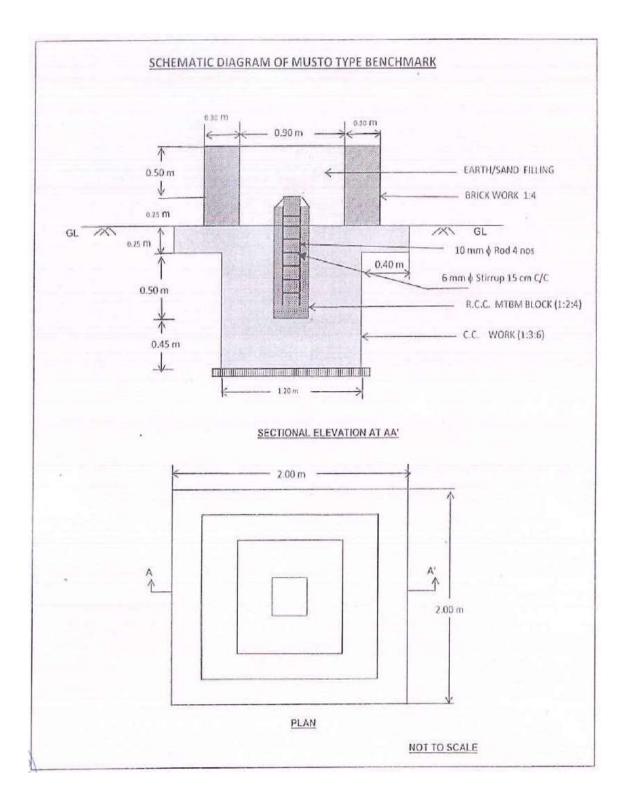
District	Name of Block / Municipalities	Name of River	Side of Bank on which Embankment is situated (L/B & R/B)	Approx. length in Km.
	Embankment under EE	- I Canals Divisi	on	
North 24 Parganas	Halisahar Municipality	Hooghly	Left Bank	4.00
North 24 Parganas	Naihati Municipality	Hooghly	Left Bank	5.00
North 24 Parganas	Bhatpara Municipality	Hooghly	Left Bank	8.00
North 24 Parganas	Garulia Municipality	Hooghly	Left Bank	4.00
North 24 Parganas	North Barrakepur Municipality	Hooghly	Left Bank	5.00
North 24 Parganas	Barrakpore Municipality	Hooghly	Left Bank	3.00
North 24 Parganas	Titagarh Municipality	Hooghly	Left Bank	1.00
North 24 Parganas	Khardah Municipality	Hooghly	Left Bank	2.00
North 24 Parganas	Panihati Municipality	Hooghly	Left Bank	2.00
North 24 Parganas	Kamarhati Municipality	Hooghly	Left Bank	2.00
North 24 Parganas	Baranagar Municipality Hooghl		Left Bank	3.00
Kolkata	Kolkata Municipal Corporation	Hooghly	Left Bank	5.00
North 24 Parganas	Haroa Block	Bidyadhari	Right Bank	10.00
North 24 Parganas	Deganga Block	Bidyadhari	Left Bank	2.00
South 24 Parganas	Bhangore-II Block	Bidyadhari	RightBank	2.50
			Total	58.50
	Embankment under EE	Il Canals Divisio	on	
Kolkata	K.M.C	Hooghly river	Left Bank	10.10
South 24Pgs	Thakurpukur Maheshtala	Hooghly river	Left Bank	7.10
South 24Pgs	Budge Budge-I	Hooghly river	Left Bank	15.10
South 24Pgs	Budge Budge-II	Hooghly river	Left Bank	4.70
South 24Pgs	Budge-Budge-II	Hooghly river	Left Bank	4.00
South 24Pgs	Falta	Hooghly river	Left Bank	8.48
South 24Pgs	Diamond Harbour-II	Hooghly river	Left Bank	43.50
South 24Pgs	Diamond Harbour-I	Hooghly river	Left Bank	18.50
South 24Pgs	Kulpi	Hooghly river	Left Bank	21.85
South 24Pgs Kulpi &Kakdwip		Banshtala River	Left Bank	23.25
			Total	156.57

# Location of Embankment under Canals Division

Grand Total (KM)=	215.07
Length considered in Bid (KM)=	225.00



# **TYPICAL SECTION OF BM PILLAR** 94



## EQUIPMENT PREFERRED

The survey is to be carried out using survey instruments like Total Stations, DGPS-RTK , with desired accuracy as per standard practices, so that the minimum output accuracy of  $\pm 2.5$  cm horizontal vertically and  $\pm 7.5$  cm horizontally is maintained.

## **PAYMENT SCHEDULE FOR THE WORK:**

	Milestone	Duration	Payment
1	Submission and approval of Mid Term progress report for work completion not less than 60% of the envisaged work along with submission of draft report of the survey works undertaken.		40%
2	Submission and approval of Final Report	4 (Four) months after award of contract	60%

#### **KEY PERSONAL AND MAN MONTH**

A suggestive manpower and man months required are given in the table below. Survey firm may propose an alternative team as per the requirement of study.

Sl.	Position	Number	Qualification and experience	Man month
no.				
	Manager	1	The persons should possess	1x 4 =
	Team lead	(For each	Degree in Civil Engineering	4months
		Services)	with more than 10 years of	
			experience in topographic	
			survey works and well versed in	
			latest survey instruments and	
			survey practices including	
			hydrographic survey with fair	
			knowledge of computers and	
			survey related software	
2	Surveyor	4	The persons should have	4 x 4 = 16
		(For each	Certificate in field surveying	months
		Service)	from recognized ITI. Required	
			to have minimum 3 years'	
			working experience in precision	

Sl. no.	Position	Number	Qualification and experience	Man month
			survey in flat terrain as well as under water using Modern Electronic survey equipment like Electronic Total station, DGPS and Digital/Auto Level.	
3	AutoCAD Draughtsman	2 (For each Service)	ITI certificate in draughtsmanship with a minimum experience of 3 years, preferably in similar works	2x 4= 8 months
4	GIS expert	1 (For each Service)	M.Sc. / M. Tech in Geo informatics/Geography/ Geo Science/ Geology with specialization in GIS/ RS. At least 3 years of experience in RS/GIS applications for resource mapping, preparation and integration of GIS datasets,	1 x 4= 4 months
5	Geotechnical expert	4 (For each Service)	M.Tech/ M.E in Geotechnical Engineering/ Soil Mechanics with minimum 5 years' working experience in geotechnical investigations	4 x 4 = 16 months
6	Non- technical Support staff	2 (For each Service)	Graduate with 2 years professional experience. Should have extensive knowledge and experience on MS Office	2 x 4= 8 months
7	Unskilled labour for survey and soil test	25 (For each Service)	As found suitable by the contractors	25 x 4 = 100month s

# **Section VIII - General Conditions of Contract**

# **A. General Provisions**

#### 1.1 Definitions

Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:

- (a) The Adjudicator is the person appointed jointly by the Employer and the Service Provider to resolve disputes in the first instance, as provided for in Sub-Clause 8.2 hereunder.
- (b) "Activity Schedule" is the priced and completed list of items of Services to be performed by the Service Provider forming part of his Bid;
- (c) "Bank" means the International Bank for Reconstruction and Development, Washington, D.C., U.S.A.;
- (c) "Association" means the International Development Association, Washington, D.C., U.S.A.;
- (d) "Completion Date" means the date of completion of the Services by the Service Provider as certified by the Employer
- (e) "Contract" means the Contract signed by the Parties, to which these General Conditions of Contract (GCC) are attached, together with all the documents listed in Clause 1 of such signed Contract;
- (f) "Contract Price" means the price to be paid for the performance of the Services, in accordance with Clause 6;
- (g) "Dayworks" means varied work inputs subject to payment on a time basis for the Service Provider's employees and equipment, in addition to payments for associated materials and administration.
- (h) "Employer" means the party who employs the Service Provider
- (i) "Foreign Currency" means any currency other than the currency of the country of the Employer;
- (j) "GCC" means these General Conditions of Contract;
- (k) "Government" means the Government of the Employer's Country;
- (l) "Local Currency" means the currency of the country of the Employer;
- (m) "Member," in case the Service Provider consist of a joint venture of more than one entity, means any of these entities;

"Members" means all these entities, and "Member in Charge" means the entity specified in the SC to act on their behalf in exercising all the Service Provider' rights and obligations towards the Employer under this Contract;

- (n) "Party" means the Employer or the Service Provider, as the case may be, and "Parties" means both of them;
- (o) "Personnel" means persons hired by the Service Provider or by any Subcontractor as employees and assigned to the performance of the Services or any part thereof;
- (p) "Service Provider" is a person or corporate body whose Bid to provide the Services has been accepted by the Employer;
- (q) "Service Provider's Bid" means the completed Bidding Document submitted by the Service Provider to the Employer
- (r) "SCC" means the Special Conditions of Contract by which the GCC may be amended or supplemented;
- (s) "Specifications" means the specifications of the service included in the Bidding Document submitted by the Service Provider to the Employer
- (t) "Services" means the work to be performed by the Service Provider pursuant to this Contract, as described in Appendix A; and in the Specifications and Schedule of Activities included in the Service Provider's Bid.
- (u) "Subcontractor" means any entity to which the Service Provider subcontracts any part of the Services in accordance with the provisions of Sub-Clauses 3.5 and 4.
- **1.2 Applicable Law** The Contract shall be interpreted in accordance with the laws of the Employer's Country, unless otherwise **specified in the Special Conditions of Contract (SCC).**
- **1.3 Language** This Contract has been executed in the language **specified in the SCC**, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract.
- **1.4 Notices** Any notice, request, or consent made pursuant to this Contract shall be in writing and shall be deemed to have been made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail, telex, telegram, or facsimile to such Party at the address **specified in the SCC.**
- **1.5 Location** The Services shall be performed at such locations as are specified in Appendix A, in the specifications and, where the location of a particular task is not so specified, at such locations, whether in the Government's country or elsewhere, as the Employer may approve.

1.6Authorized Representative s	Any action required or permitted to be taken, and any document required or permitted to be executed, under this Contract by the Employer or the Service Provider may be taken or executed by the officials <b>specified in the SCC</b> .
--------------------------------------	---

- Pursuant to paragraph 2.2 e. of Appendix A to the General Conditions, **1.7 Inspection and** the Supplier shall permit and shall cause its subcontractors and sub-Audit by the consultants to permit, the Bank and/or persons appointed by the Bank Bank to inspect the Site and/or the accounts and records relating to the performance of the Contract and the submission of the Bid, and to have such accounts and records audited by auditors appointed by the Bank if requested by the Bank. The Supplier's and its Subcontractors' and sub-consultants' attention is drawn to Sub-Clause 3.10 which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank's prevailing sanctions procedures).
- **1.8 Taxes and Duties** The Service Provider, Subcontractors, and their Personnel shall pay such taxes, duties, fees, and other impositions as may be levied under the Applicable Law, the amount of which is deemed to have been included in the Contract Price.

# 2. Commencement, Completion, Modification, and Termination of Contract

#### 2.1 Effectiveness of Contract

This Contract shall come into effect on the date the Contract is signed by both parties or such other later date as may be **stated in the SCC.** 

2.2 Commencement of Services

**2.2.1 PROGRAM** Before commencement of the Services, the Service Provider shall submit to the Employer for approval a Program showing the general methods, arrangements, order and timing for all activities. The Services shall be carried out in accordance with the approved Program as updated.

2.2.2 STARTING The Service Provider shall start carrying out the Services thirty (30) DATE days after the date the Contract becomes effective, or at such other date as may be **specified in the SCC.** 

2.3 Intended Completion Date
Unless terminated earlier pursuant to Sub-Clause 2.6, the Service Provider shall complete the activities by the Intended Completion Date, as is specified in the SCC. If the Service Provider does not complete the activities by the Intended Completion Date, it shall be liable to pay liquidated damage as per Sub-Clause 3.8. In this case, the Completion Date will be the date of completion of all activities.

**2.4Modification** Modification of the terms and conditions of this Contract, including any modification of the scope of the Services or of the Contract Price, may only be made by written agreement between the Parties and shall not be effective until the consent of the Bank or of the Association, as the case may be, has been obtained.

2.4.1 Value Engineering The Service Provider may prepare, at its own cost, a value engineering proposal at any time during the performance of the contract. The value engineering proposal shall, at a minimum, include the following;

- (a) the proposed change(s), and a description of the difference to the existing contract requirements;
- (b) a full cost/benefit analysis of the proposed change(s) including a description and estimate of costs (including life cycle costs, if applicable) the Employer may incur in implementing the value engineering proposal; and
- (c) a description of any effect(s) of the change on performance/functionality.

The Employer may accept the value engineering proposal if the proposal demonstrates benefits that:

- (a) accelerates the delivery period; or
- (b) reduces the Contract Price or the life cycle costs to the Employer; or
- (c) improves the quality, efficiency, safety or sustainability of the services; or
- (d) yields any other benefits to the Employer,

without compromising the necessary functions of the Facilities.

If the value engineering proposal is approved by the Employer and results in:

- (a) a reduction of the Contract Price; the amount to be paid to the Service Provider shall be the percentage specified in the SCC of the reduction in the Contract Price; or
- (b) an increase in the Contract Price; but results in a reduction in life cycle costs due to any benefit described in (a) to (d) above, the amount to be paid to the Service Provider shall be the full increase in the Contract Price.

#### 3.5 Force Majeure

2.5.1 **DEFINITION** For the purposes of this Contract, "Force Majeure" means an event

which is beyond the reasonable control of a Party and which makes a Party's performance of its obligations under the Contract impossible or so impractical as to be considered impossible under the circumstances.

- 2.5.2 NO BREACH OF CONTRACT The failure of a Party to fulfil any of its obligations under the contract shall not be considered to be a breach of, or default under, this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event (a) has taken all reasonable precautions, due care and reasonable alternative measures in order to carry out the terms and conditions of this Contract, and (b) has informed the other Party as soon as possible about the occurrence of such an event.
- 2.5.3Extension of Time Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.
- **3.5.4** *Payments* During the period of their inability to perform the Services as a result of an event of Force Majeure, the Service Provider shall be entitled to continue to be paid under the terms of this Contract, as well as to be reimbursed for additional costs reasonably and necessarily incurred by them during such period for the purposes of the Services and in reactivating the Service after the end of such period.

#### 3.6 Terminati on

- **2.6.1** By the Employer The Employer may terminate this Contract, by not less than thirty (30) days' written notice of termination to the Service Provider, to be given after the occurrence of any of the events specified in paragraphs (a) through (d) of this Sub-Clause 2.6.1:
  - (a) if the Service Provider does not remedy a failure in the performance of its obligations under the Contract, within thirty (30) days after being notified or within any further period as the Employer may have subsequently approved in writing;
  - (b) if the Service Provider become insolvent or bankrupt;
  - (c) if, as the result of Force Majeure, the Service Provider is unable to perform a material portion of the Services for a period of not less than sixty (60) days; or
  - (d) if the Service Provider, in the judgment of the Employer has engaged in Fraud and Corruption, as defined in paragraph 2.2a. of the Appendix A to the GCC, in competing for or in executing the Contract
  - 2.6.2 By the The Service Provider may terminate this Contract, by not less than thirty (30) days' written notice to the Employer, such notice to be

Provider		n after the occurrence of any of the events specified in graphs (a) and (b) of this Sub-Clause 2.6.2:
	(a)	if the Employer fails to pay any monies due to the Service Provider pursuant to this Contract and not subject to dispute pursuant to Clause 7 within forty-five (45) days after receiving written notice from the Service Provider that such payment is overdue; or
	(b)	if, as the result of Force Majeure, the Service Provider is unable to perform a material portion of the Services for a period of not less than sixty (60) days.
2.6.3 Suspension of Loan or Credit	Emp	he event that the World Bank suspends the loan or Credit to the bloyer, from which part of the payments to the Service Provider being made:
	(a)	The Employer is obligated to notify the Service Provider of such suspension within 7 days of having received the World Bank's suspension notice.
	(b)	If the Service Provider has not received sums due to by the due date stated in the SCC in accordance with Sub-Clause 6.5 the Service Provider may immediately issue a 14 day termination notice.
2.6.4 Payment upon Terminatio	2.6.2	n termination of this Contract pursuant to Sub-Clauses 2.6.1 or 2, the Employer shall make the following payments to the vice Provider:
n	(a)	remuneration pursuant to Clause 6 for Services satisfactorily performed prior to the effective date of termination;
	(b)	except in the case of termination pursuant to paragraphs (a), (b), (d) of Sub-Clause 2.6.1, reimbursement of any reasonable cost incident to the prompt and orderly termination of the Contract, including the cost of the return travel of the Personnel.

# 3. Obligations of the Service Provider

#### **3.1General**

The Service Provider shall perform the Services in accordance with the Specifications and the Activity Schedule, and carry out its obligations with all due diligence, efficiency, and economy, in accordance with generally accepted professional techniques and practices, and shall observe sound management practices, and employ appropriate advanced technology and safe methods. The Service Provider shall always act, in respect of any matter relating to this Contract or to the Services, as faithful adviser to the Employer, and shall at all times support and safeguard the Employer's legitimate interests in any dealings with Subcontractors or third parties.

#### **3.2 Conflict of Interests**

- 3.2.1 Service Provider Not to Benefit from Commissions and Discounts. The remuneration of the Service Provider pursuant to Clause 6 shall constitute the Service Provider's sole remuneration in connection with this Contract or the Services, and the Service Provider shall not accept for their own benefit any trade commission, discount, or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract, and the Service Provider shall use their best efforts to ensure that the Personnel, any Subcontractors, and agents of either of them similarly shall not receive any such additional remuneration.
- 3.2.2 Service
   Provider and
   Affiliates Not to
   be Otherwise
   Interested in
   Project
   The Service Provider agree that, during the term of this Contract and after its termination, the Service Provider and its affiliates, as well as any Subcontractor and any of its affiliates, shall be disqualified from providing goods, works, or Services (other than the Services and any continuation thereof) for any project resulting from or closely related to the Services.
- 3.2.3 Prohibition of Conflicting Activities Neither the Service Provider nor its Subcontractors nor the Personnel shall engage, either directly or indirectly, in any of the following activities:
  - (a) during the term of this Contract, any business or professional activities in the Government's country which would conflict with the activities assigned to them under this Contract;
  - (b) during the term of this Contract, neither the Service Provider nor their Subcontractors shall hire public employees in active duty or on any type of leave, to perform any activity under this Contract;
  - (c) after the termination of this Contract, such other activities as may be **specified in the SCC.**

**3.3Confidentiality** The Service Provider, its Subcontractors, and the Personnel of either of them shall not, either during the term or within two (2) years after the expiration of this Contract, disclose any proprietary or confidential information relating to the Project, the Services, this Contract, or the Employer's business or operations without the prior written consent of the Employer.

3.4Insurance to be Taken Out by the Service Provider Taken Out by the Service Provider Taken Out by the Service Provider Subcontractors to take out and maintain, at its (or the Subcontractors', as the case may be) own cost but on terms and conditions approved by the Employer, insurance against the risks, and for the coverage, as shall be **specified in the SCC;** and (b) at the Employer's request, shall provide evidence to the Employer showing that such insurance has been taken out and maintained and that the current premiums have been paid. 3.5 Service Provider's Actions Requiring Employer's Prior Approval The Service Provider shall obtain the Employer's prior approval in writing before taking any of the following actions:

- (a) entering into a subcontract for the performance of any part of the Services,
- (b) appointing such members of the Personnel not listed by name in Appendix C ("Key Personnel and Subcontractors"),
- (c) changing the Program of activities; and
- (d) any other action that may be **specified in the SCC.**

# The Service Provider shall submit to the Employer the reports and documents specified in Appendix B in the form, in the numbers, and within the periods set forth in the said Appendix.

3.7 Documents Prepared by the Service Provider to Be the Property of the Employer

**3.6 Reporting** 

**Obligations** 

All plans, drawings, specifications, designs, reports, and other documents and software submitted by the Service Provider in accordance with Sub-Clause 3.6 shall become and remain the property of the Employer, and the Service Provider shall, not later than upon termination or expiration of this Contract, deliver all such documents and software to the Employer, together with a detailed inventory thereof. The Service Provider may retain a copy of such documents and software. Restrictions about the future use of these documents, if any, shall be **specified in the SCC**.

#### **3.8Liquidated Damages**

- 3.8.1 Payments of Liquidated Damages The Service Provider shall pay liquidated damages to the Employer at the rate per day stated in the SCC for each day that the Completion Date is later than the Intended Completion Date. The total amount of liquidated damages shall not exceed the amount defined in the SCC. The Employer may deduct liquidated damages from payments due to the Service Provider. Payment of liquidated damages shall not affect the Service Provider's liabilities.
- **3.8.2 Correction for Over-payment** If the Intended Completion Date is extended after liquidated damages have been paid, the Employer shall correct any overpayment of liquidated damages by the Service Provider by adjusting the next payment certificate. The Service Provider shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in Sub-Clause 6.5.
- 3.8.3 Lack of performance penalty If the Service Provider has not corrected a Defect within the time specified in the Employer's notice, a penalty for Lack of performance will be paid by the Service Provider. The amount to be paid will be calculated as a percentage of the cost of having the Defect corrected, assessed as described in Sub-Clause 7.2 and specified in the SCC.

3.9 Performance Security	The Service Provider shall provide the Performance Security to the Employer no later than the date specified in the Letter of acceptance. The Performance Security shall be issued in an amount and form and by a bank or surety acceptable to the Employer, and denominated in the types and proportions of the currencies in which the Contract Price is payable. The performance Security shall be valid until a date 28 days from the Completion Date of the Contract in case of a bank guarantee, and until one year from the Completion Date of the Contract in the case of a Performance Bond.
3.10 Fraud and Corruption	The Bank requires compliance with the Bank's Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework, as set forth in the Appendix to the GCC.
	The Employer requires the Supplier to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the bidding process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee.
3.11 Sustainable Procurement	The Service Provider shall conform to the sustainable procurement contractual provisions, if and as specified in the SCC.

# **4** Service Provider's Personnel

#### 4.1Description of Personnel

4.2 Removal and/or Replacement of Personnel The titles, agreed job descriptions, minimum qualifications, and estimated periods of engagement in the carrying out of the Services of the Service Provider's Key Personnel are described in Appendix C. The Key Personnel and Subcontractors listed by title as well as by name in Appendix C are hereby approved by the Employer.

- (a) Except as the Employer may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Service Provider, it becomes necessary to replace any of the Key Personnel, the Service Provider shall provide as a replacement a person of equivalent or better qualifications.
- (b) If the Employer finds that any of the Personnel have (i) committed serious misconduct or have been charged with having committed a criminal action, or (ii) have reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Service Provider shall, at the Employer's written request specifying the grounds thereof, provide as a replacement a person with qualifications and experience acceptable to the Employer.
- (c) The Service Provider shall have no claim for additional costs arising out of or incidental to any removal and/or replacement of Personnel.

# 5 Obligations of the Employer

5.1 Assistance and Exemptions The Employer shall use its best efforts to ensure that the Government shall provide the Service Provider such assistance and exemptions as **specified in the SCC.** 

5.2 Change in the Applicable Law with respect to taxes and duties which increases or decreases the cost of the Services rendered by the Service Provider, then the remuneration and reimbursable expenses otherwise payable to the Service Provider under this Contract shall be increased or decreased accordingly by agreement between the Parties, and corresponding adjustments shall be made to the amounts referred to in Sub-Clauses 6.2 (a) or (b), as the case may be.

**5.3 Services and** The Employer shall make available to the Service Provider the Services and Facilities listed under Appendix F.

Facilities

# 6. Payments to the Service Provider

6.1 Lump-Sum

Remuneratio

n

The Service Provider's remuneration shall not exceed the Contract Price and shall be a fixed lump-sum including all Subcontractors' costs, and all other costs incurred by the Service Provider in carrying out the Services described in Appendix A. Except as provided in Sub-Clause 5.2, the Contract Price may only be increased above the amounts stated in Sub-Clause 6.2 if the Parties have agreed to additional payments in accordance with Sub-Clauses 2.4 and 6.3.

(a) The price payable in local currency is set forth in the SCC.

## 6.2 Contract Price

- (b) The price payable in foreign currency is set forth in the SCC.
- 6.3 Payment for Additional Services, and Performance Incentive Compensatio n
- 6.3.1 For the purpose of determining the remuneration due for additional Services as may be agreed under Sub-Clause 2.4, a breakdown of the lump-sum price is provided in Appendices D and E.
- 6.3.2 If the SCC so specify, the service provider shall be paid performance incentive compensation as set out in the Performance Incentive Compensation appendix.

6.4 Terms and Conditions of Payment Payments will be made to the Service Provider according to the payment schedule **stated in the SCC.Unless otherwise stated in the SCC**, the advance payment (Advance for Mobilization, Materials and Supplies) shall be made against the provision by the Service Provider of a bank guarantee for the same amount, and shall be valid for the period **stated in the SCC**. Any other payment shall be made after the conditions **listed in the SCC** for such payment have been met, and the Service Provider have submitted an invoice to the Employer specifying the amount due.

6.5 Interest on Delayed Payments

Adjustment

6.6 Price

If the Employer has delayed payments beyond fifteen (15) days after the due date stated in the SCC, interest shall be paid to the Service Provider for each day of delay at the rate stated in the SCC.

6.6.1 Prices shall be adjusted for fluctuations in the cost of inputs only if **provided for in the SCC.** If so provided, the amounts certified in each payment certificate, after deducting for Advance Payment, shall be adjusted by applying the respective price adjustment factor to the payment amounts due in each currency. A separate formula of the type indicated below applies to each Contract currency:

#### $P_c = A_c + B_c Lmc/Loc + C_c Imc/Ioc$

Where:

 $P_c$  is the adjustment factor for the portion of the Contract Price payable in a specific currency "c".

 $A_c$ ,  $B_c$  and  $C_c$  are coefficients specified in the SCC, representing:  $A_c$  the nonadjustable portion;  $B_c$  the adjustable portion relative to labor costs and  $C_c$  the adjustable portion for other inputs, of the Contract Price payable in that specific currency "c"; and

Lmc is the index prevailing at the first day of the month of the corresponding invoice date and Loc is the index prevailing 28 days before Bid opening for labor; both in the specific currency "c".

Imc is the index prevailing at the first day of the month of the corresponding invoice date and Ioc is the index prevailing 28 days before Bid opening for other inputs payable; both in the specific currency "c".

If a price adjustment factor is applied to payments made in a currency other than the currency of the source of the index for a particular indexed input, a correction factor Zo/Zn will be applied to the respective component factor of pn for the formula of the relevant currency. Zo is the number of units of currency of the country of the index, equivalent to one unit of the currency payment on the date of the base index, and Zn is the corresponding number of such currency units on the date of the current index.

- 6.6.2 If the value of the index is changed after it has been used in a calculation, the calculation shall be corrected and an adjustment made in the next payment certificate. The index value shall be deemed to take account of all changes in cost due to fluctuations in costs.
- 6.7.1 If applicable, the Daywork rates in the Service Provider's Bid shall be used for small additional amounts of Services only when the Employer has given written instructions in advance for

#### 6.7 Dayworks

additional services to be paid in that way.

- 6.7.2 All work to be paid for as Dayworks shall be recorded by the Service Provider on forms approved by the Employer. Each completed form shall be verified and signed by the Employer representative as indicated in Sub-Clause 1.6 within two days of the Services being performed.
- 6.7.3 The Service Provider shall be paid for Dayworks subject to obtaining signed Dayworks forms as indicated in Sub-Clause 6.7.2

# 7 Quality Control

#### 7.1 Identifying Defects

The principle and modalities of Inspection of the Services by the Employer shall be as **indicated in the SCC.** The Employer shall check the Service Provider's performance and notify him of any Defects that are found. Such checking shall not affect the Service Provider's responsibilities. The Employer may instruct the Service Provider to search for a Defect and to uncover and test any service that the Employer considers may have a Defect. Defect Liability Period is as **defined in the SCC**.

- 7.2 Correction of Defects, and Lack of Performance Penalty
- (a) The Employer shall give notice to the Service Provider of any Defects before the end of the Contract. The Defects liability period shall be extended for as long as Defects remain to be corrected.
- (b) Every time notice a Defect is given, the Service Provider shall correct the notified Defect within the length of time specified by the Employer's notice.
- (c) If the Service Provider has not corrected a Defect within the time specified in the Employer's notice, the Employer will assess the cost of having the Defect corrected, the Service Provider will pay this amount, and a Penalty for Lack of Performance calculated as described in Sub-Clause 3.8.

# 8. Settlement of Disputes

#### 8.1 Amicable Settlement

**Settlement** 

8.2 Dispute

The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.

- 8.2.1 If any dispute arises between the Employer and the Service Provider in connection with, or arising out of, the Contract or the provision of the Services, whether during carrying out the Services or after their completion, the matter shall be referred to the Adjudicator within 14 days of the notification of disagreement of one party to the other.
- 8.2.2 The Adjudicator shall give a decision in writing within 28 days of receipt of a notification of a dispute.

- 8.2.3 The Adjudicator shall be paid by the day at the rate **specified in the BDS and SCC**, together with reimbursable expenses of the types **specified in the SCC**, and the cost shall be divided equally between the Employer and the Service Provider, whatever decision is reached by the Adjudicator. Either party may refer a decision of the Adjudicator to an Arbitrator within 28 days of the Adjudicator's written decision. If neither party refers the dispute to arbitration within the above 28 days, the Adjudicator's decision will be final and binding.
- 8.2.4 The arbitration shall be conducted in accordance with the arbitration procedure published by the institution named and in the place **shown in the SCC.**
- 8.2.5 Should the Adjudicator resign or die, or should the Employer and the Service Provider agree that the Adjudicator is not functioning in accordance with the provisions of the Contract, a new Adjudicator will be jointly appointed by the Employer and the Service Provider. In case of disagreement between the Employer and the Service Provider, within 30 days, the Adjudicator shall be designated by the Appointing Authority **designated in the SCC** at the request of either party, within 14 days of receipt of such request.

## **APPENDIX I**

## **Fraud and Corruption**

(Text in this Appendix shall not be modified)

#### 1. Purpose

1.1 The Bank's Anti-Corruption Guidelines and this annex apply with respect to procurement under Bank Investment Project Financing operations.

#### 2. Requirements

2.1 The Bank requires that Borrowers (including beneficiaries of Bank financing); bidders, consultants, contractors and suppliers; any sub-contractors, sub-consultants, service providers or suppliers; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection and contract execution of Bank-financed contracts, and refrain from Fraud and Corruption.

#### 2.2 To this end, the Bank:

- a. Defines, for the purposes of this provision, the terms set forth below as follows:
  - i. "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
  - ii. "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
  - iii. "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
  - iv. "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
  - v. "obstructive practice" is:
    - (a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
    - (b) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.
- b. Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;

- c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring misprocurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- d. Pursuant to the Bank's Anti- Corruption Guidelines and in accordance with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;<sup>4</sup> (ii) to be a nominated<sup>5</sup> sub-contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and (iii) to receive the proceeds of any loan made by the Bank or otherwise to participate further in the preparation or implementation of any Bank-financed project;
- e. Requires that a clause be included in bidding/request for proposals documents and in contracts financed by a Bank loan, requiring (i) bidders, consultants, contractors, and suppliers, and their sub-contractors, sub-consultants, service providers, suppliers, agents personnel, permit the Bank to inspect<sup>6</sup> all accounts, records and other documents relating to the submission of bids and contract performance, and to have them audited by auditors appointed by the Bank.

<sup>&</sup>lt;sup>4</sup> For the avoidance of doubt, a sanctioned party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in a consultancy, and bidding, either directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.

<sup>&</sup>lt;sup>5</sup> A nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider (different names are used depending on the particular bidding document) is one which has been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

<sup>&</sup>lt;sup>o</sup> Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

## **Section IX - Special Conditions of Contract**

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract		
1.1	The words "in the Government's country" are amended to read "in <i>India</i> ."		
1.1(a)	The Adjudicator is <i>Kaushik Chatterjee</i> , <i>Retired Secretary</i> , <i>I&amp;W</i> Department Govt. of West Bengal		
1.1(e)	The contract name is "Survey of embankment & corresponding mapping and health checking under i) Howrah Irrigation Division in the districts of Howrah and Hooghly, ii) Contai Irrigation Division (Ph-II) in the districts of Purba Medinipur, iii) West Midnapore Division (Ph-II) in the districts of Paschim Medinipur & iv) Canals Division in the districts of North and South 24 Parganas under NHP of I&W Department GoWB."		
1.1(h)	The Employer is The Executive Engineer Burdwan Investigation & Planning Division, I&W Dte., Govt. of West Bengal. Purta Bhawan, 3rd Floor, Purba Burdwan-713103, West Bengal		
1.2	The Applicable Law is: Govt. Of India Law		
1.3	The language is <i>English</i>		
1.4	The addresses are:		
	Employer :-		
	The Executive Engineer Burdwan Investigation & Planning Division, I&W Dte, Govt. of West Bengal. Purta Bhawan, 3rd Floor, Purba Burdwan-713103,West Bengal Tel. No: 0342- 2646799, e-mail: <u>eebipd2022@gmail.com</u> Service Provider :-		
	e-mail		
1.6	The Authorized Representatives are:		
	Project Manager on behalf of the employer :		
	The Deputy Director, Advance planning Project Evaluation and Monitoring Cell, Jalasampad Bhavan, Salt Lake, Kolkata will assist all the Project Managers by certifying the softcopies of output deliverables required for incorporation into IEMS		
	1. The Executive Engineer, Howrah Irrigation Division will function as Project Manager for "Survey of embankments under Howrah Irrigation Division in the districts of Howrah and Hooghly and corresponding mapping and health checking." and will give the final recommendation for any payment against work done. Certificate towards softcopies of output deliverables to be received before certifying final		

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract	
	payment for the work. All necessary instructions and final acceptance are to be obtained from the Project Manager.	
	2. The Executive Engineer, Contai Irrigation Division will function as Project Manager for "Survey of embankments under Contai Irrigation Division (Ph II) in the districts of Purba Medinipur and corresponding mapping and health checking." and will give the final recommendation for any payment against work done. Certificate towards softcopies of output deliverables to be received before certifying final payment for the work. All necessary instructions and final acceptance are to be obtained from the Project Manager.	
	3. The Executive Engineer, West Midnapore Division will function as Project Manager for "Survey of embankments under West Midnapore Division (Ph - II) in the districts of Paschim Medinipur and corresponding mapping and health checking." and will give the final recommendation for any payment against work done. Certificate towards softcopies of output deliverables to be received before certifying final payment for the work. All necessary instructions and final acceptance are to be obtained from the Project Manager.	
	4. The Executive Engineer - II, Canals Division will function as Project Manager for "Survey of embankments under Canals Division in the districts of North & South 24 Parganas and corresponding mapping and health checking." and will give the final recommendation for any payment against work done. Certificate towards softcopies of output deliverables to be received before certifying final payment for the work. All necessary instructions and final acceptance are to be obtained from the Project Manager.(Note: The Executive Engineer - I, Canals Division, shall assist the Project Manager by certifying the work under their jurisdiction and send it to the Project Manager with due recommendation of payment.)	
	5. Executive Engineer - II, Canals Division will compile and draw the final bill of abstract after receiving the quantity abstracts from Executive Engineer, Howrah Irrigation Division, Executive Engineer, Contai Irrigation Division and Executive Engineer, West Midnapore Division.	
	6. Executive Engineer, Howrah Irrigation Division, Executive Engineer, Contai Irrigation Division and Executive Engineer, West Midnapore Division will send quantity abstracts to Executive Engineer - II, Canals Division for compilation.	
	For the Service Provider:	
2.1	The date on which this contact shall come into effect is	

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract	
2.2	The starting date for the commencement of service is	
2.3	The Intended Completion Date is 4 (Four) Months.	
2.4.1	If the value of engineering proposal is approved by the Employer the amount to be paid to the Service Provider shall be 0% of the reduction in the Contract Price.	
3.2.3	Activities prohibited after termination of this Contract are: None	
3.4	The risks and coverage by insurance shall be:	
	<ul> <li>(i) Third Party motor vehicle</li> <li>(ii) Third Party liability</li> <li>(iii) Employer's liability and workers' compensation</li> <li>(iv) Professional liability</li> <li>(v) Loss or damage to equipment and property</li> </ul>	
3.5(d)	The other actions are <u>None</u> .	
3.7	Restrictions on the use of documents prepared by the Service Provider are: <u>None.</u>	
3.8.1	The liquidated damages rate is Rs 4300 per day	
	The maximum amount of liquidated damages for the whole contract is 5% percent of the final Contract Price.	
3.8.3	The percentage to be used for the calculation of Lack of performance Penalty(i.es) is 105%	
3.11	[deleted].	
5.1	The assistance and exemptions provided to the Service Provider are:	
6.2(a)	The amount in local currency is	
6.2(b)	The amount in foreign currency or currencies is Not applicable.	
6.3.2	The performance incentive paid to the Service Provider shall be: Not Applicable	
6.4	Payments shall be made according to the following schedule:	
	• Progress payments in accordance with the milestones established as follows, subject to certification by the Employer, that the Services have been rendered satisfactorily, pursuant to the performance indicators:	
	Payments will be released after successful survey of each demand after submission & analysis of data in hard as well as soft copy and after acceptance of report by the employer's representative, The Project Manager, on milestone basis as below:	

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract			
		Milestone	Duration	Dormant
	1	Submission and approval of Mid Term progress report for work completion not less than 60% of the envisaged work along with submission of draft report of the survey works undertaken.	2 (Two) months after award of contract	Payment 40%
	2	Submission and approval of Final Report	4 (Four) months after award of contract	60%
6.5	-	made within <i>21</i> days of receipt specified in Sub-Clause 6.4, and		
	relevant documents specified in Sub-Clause 6.4, and within 45days in the case of the final payment.			
6.6.1	Price adjustment is <i>not applicable</i> in accordance with Sub-Clause 6.6.			e 6.6.
7.1	The principle and modalities of inspection of the Services by the Employer are as follows: Site visit during the progress of the work& satisfactory compliances by the agency as per discretion of Engineer-in-charge.			
	The Defects Liability Period is 6 months.			
8.2.3	The Adjudicator is Kaushik Chatterjee, Retired Secretary, I&W Department Govt. of West Bengal The following reimbursable expenses are recognized: Daily fee of <b>Rs.5000.00</b> Kaushik Chatterjee, Retired Secretary, I&W Department Govt. of West Bengal.			
8.2.4	The rules of procedure for arbitration proceedings pursuant to GCC Clause 8.2.4 shall be as follows: GCC 8.2.4 (a)—All disputes arising in connection with the present Contract shall be finally settled under the Rules of Conciliation and Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with said Rules.			
8.2.5	The designated Appointing Authority for a new Adjudicator is Chief Engineer (South) I&W Department, GOWB Jalasampad Bhawan, Salt			

Number of	Amendments of, and Supplements to, Clauses in the General	
GC Clause	Conditions of Contract	
	Lake, Kolkata-700091	

# **Section X -Contract Forms**

## **Table of Forms**

Performance Security	118
Advance Payment Security	

## **Performance Security**

### **Option 1: (Bank Guarantee)**

[The bank, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated Non Judicial Stamp should be issued in the favour of bank]

[Guarantor letterhead or SWIFT identifier code]

**Beneficiary:** *[insert name and Address of Employer]* 

**Date:** *[Insert date of issue]* 

**PERFORMANCE GUARANTEE No.:** [Insert guarantee reference number]

Guarantor: [Insert name and address of place of issue, unless indicated in the letterhead]

We have been informed that \_ [insert name of Service Provider which in the case of a joint venture shall be the name of the joint venture] (hereinafter called "the Applicant") has entered into Contract No. [insert reference number of the contract] dated [insert date] with the Beneficiary, for the Non-Consulting Services of \_ [insert name of contract and brief description of the Non-Consulting Services](hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of [insert amount in figures] ( ) [insert amount in words],1 such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the Contract, without the Beneficiary needing to prove or to show grounds for your demand or the sum specified therein.

<sup>&</sup>lt;sup>1</sup> The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance, and denominated either in the currency (i.es) of the Contract or a freely convertible currency acceptable to the Beneficiary.

This guarantee shall expire, no later than the .... Day of ....., 2...2, and any demand for payment under it must be received by us at this office indicated above on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.

[signature(s)]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product

<sup>&</sup>lt;sup>2</sup> Insert the date twenty-eight days after the expected completion date as described in GCC. The Service Provider should note that in the event of an extension of this date for completion of the Contract, the Service Provider would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Service Provider might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

### **Option 2: Performance Bond**

By this Bond *[insert name of Principal]* as Principal (hereinafter called "the Service Provider") and *[insert name of Surety]* as Surety (hereinafter called "the Surety"), are held and firmly bound unto *[insert name of Employer]* as Obligee (hereinafter called "the Service Provider") in the amount of *[insert amount in words and figures]*, for the payment of which sum well and truly to be made in the types and proportions of currencies in which the Contract Price is payable, the Service Provider and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Service Provider has entered into a written Agreement with the Employer dated the \_\_\_\_\_\_ day of \_\_\_\_\_\_, 20 \_\_\_\_, for [name of contract and brief description of Non-Consulting Services] in accordance with the documents, plans, specifications, and amendments thereto, which to the extent herein provided for, are by reference made part hereof and are hereinafter referred to as the Contract.

NOW, THEREFORE, the Condition of this Obligation is such that, if the Service Provider shall promptly and faithfully perform the said Contract (including any amendments thereto), then this obligation shall be null and void; otherwise, it shall remain in full force and effect. Whenever the Service Provider shall be, and declared by the Employer to be, in default under the Contract, the Employer having performed the Employer's obligations thereunder, the Surety may promptly remedy the default, or shall promptly:

- (1) complete the Contract in accordance with its terms and conditions; or
- (2) obtain a Bid or Bids from qualified Bidders for submission to the Employer for completing the Contract in accordance with its terms and conditions, and upon determination by the Employer and the Surety of the lowest responsive Bidder, arrange for a Contract between such Bidder and Employer and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the Balance of the Contract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "Balance of the Contract Price," as used in this paragraph, shall mean the total amount payable by Employer to the Service Provider under the Contract, less the amount properly paid by Employer to the Service Provider; or

(3) pay the Employer the amount required by Employer to complete the Contract in accordance with its terms and conditions up to a total not exceeding the amount of this Bond.

The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

Any suit under this Bond must be instituted before the expiration of one year from the date of the issuing of the Taking-Over Certificate.

No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Employer named herein or the heirs, executors, administrators, successors, and assigns of the Employer.

In testimony whereof, the Service Provider has hereunto set his hand and affixed his seal, and the Surety has caused these presents to be sealed with his corporate seal duly attested by the signature of his legal representative, this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_.

SIGNED ON	_on behalf of
By	in the capacity of
In the presence of	
SIGNED ON	_on behalf of
By	in the capacity of
In the presence of	

## **Advance Payment Security**

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: [Insert name and Address of Employer]

Date: [Insert date of issue]

ADVANCE PAYMENT GUARANTEE No.: [Insert guarantee reference number]

Guarantor: [Insert name and address of place of issue, unless indicated in the letterhead]

We have been informed that [insert name of Service Provider, which in the case of a joint venture shall be the name of the joint venture] (hereinafter called "the Applicant") has entered into Contract No. [insert reference number of the contract] dated [insert date] with the Beneficiary, for the execution of [insert name of contract and brief description of Non-Consulting Services] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum [insert amount in figures] () [insert amount in words] is to be made against an advance payment guarantee.

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of [insert amount in figures] () [insert amount in words]1 upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating either that the Applicant:

- (a) has used the advance payment for purposes other than toward delivery of Services; or
- (b) has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Applicant has failed to repay.

A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the advance payment referred to above has been credited to the Applicant on its account number [insert number] at [insert name and address of Applicant's bank].

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Applicant as specified in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that ninety (90) percent of the Accepted Contract Amount, has been certified for payment, or on the [insert day] day of [insert month], 2 [insert year], whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

<sup>&</sup>lt;sup>1</sup> The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency (ies) of the advance payment as specified in the Contract, or in a freely convertible currency acceptable to the Employer.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No.758, except that the supporting statement under Article 15(a) is hereby excluded.

[Signature(S)] Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

# Service Provider's qualification requirement (and any other requirements which will be used for evaluation)

The bidder shall furnish the Technical Compliance Sheet as a part of his bid with **supporting documents**; which establishing the bidder's eligibility to bid and his qualification to participate in the bid, without fulfilling the following parameter, the bidder is liable for rejection without arising any reason.

The bidder is qualified only when he is the actual service provider and meets the required norms as specified below and all original evidences to be produced in due course of time as & when asked by the Tender/Quotation Inviting Authority.

TECHNICAL COMPLIANCE SHEET		
Sl No	Item	Complied with [ Yes/No ]
1	The average annual financial turnover of intending bidder during last three Financial Years ending 31st March of previous financial year should <b>not be less than INR 86 (Eighty Six) Lakhs.</b> The bidders have to submit Audited Annual Accounts Reports in support of their Average Annual Financial Turnover. If the bidder does not have Audited Annual Account Report for the last Financial Year, he may submit Certificate from practicing Chartered Accountant (applicable only for last Financial Year).	
2	<ul> <li>The bidder should have experience in services of similar nature &amp; complexity.</li> <li>Two similar completed works each costing not less than the amount equal to INR 43,00,000 /-</li> <li>One similar completed work costing not less than the amount equal to INR 68,80,000/-</li> </ul>	
3	The bidder should have experienced manpower & equipment/ machinery in the field of Hydrographic & Topographic Survey.	
4	The bidder should have experienced manpower & equipment/machinery in the field of Geotechnical Investigation	

#### **Employer's Input and Counterpart Personnel:**

# a) Services, facilities and property to be made available to the Service Provider by the Employer:

- Index Map showing river network within working jurisdiction from concern Division /Sub-Division offices under Irrigation & Waterways Department, GoWB.
- Reference Bench Mark point locations and corresponding values as per availability from concerned Division /Sub-Division offices under Irrigation & Waterways Department, GoWB

# b) Professional and support counterpart personnel to be assigned by the Employer to the Service Provider's team:

• Experienced personnel to be assigned during joint field supervision / guidance etc from concerned Division /Sub-Division offices under Irrigation & Waterways Department, GoWB.