

केवल सरकारी प्रयोग के लिए  
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# **Narmada Control Authority**

**Department of Water Resources, River Development & Ganga Rejuvenation,  
Ministry of Jal Shakti, Government of India**

***NATIONAL COMPETITIVE BIDDING***

**Request for Proposal (RFP) for**

**Collection, Compilation and Verification of water utilization through Private  
Pumping Schemes (PPS) across all three seasons for the Narmada River and its  
major tributaries in Madhya Pradesh**

**MAY, 2026**

**Narmada Sadan, Scheme No. 74-C, Vijay Nagar, Indore, 452010**

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## GLOSSARY

Addendum	As defined in <u>Clause 2.8</u>
Associate	As defined in <u>Clause 2.1.13</u>
Authority	As defined in <u>Clause 1</u>
Bank Guarantee	As defined in <u>Clause 2.19</u>
Bid(s)	The Technical Bid and Financial Bid together shall be referred to as the Bid(s).
Bidder(s)	Parties that submit their Bids for a particular Project in accordance with this RFP.
Bidding Documents	As defined in <u>Clause 2.6</u>
Bid Due Date	As defined in DATA SHEET
Bidding Process	As defined in <u>Clause 1.3</u>
Bid Security	As defined in <u>Clause 2.19</u>
Companies Act	Shall mean the Companies Act, 1956 and / or the Companies Act, 2013. Provided that references to any repealed provision contained in the Companies Act, 1956 shall be read as references to the corresponding provision contained in the Companies Act, 2013 or as per amended articles and act.
Conflict of Interest	As defined in <u>Clause 2.1.13</u>
Crore	Ten million (10,000,000)
Financial Bid	As defined in Financial Bid Format
Financial Capacity	As defined in <u>Clause 2.2.2</u>
Lakh	Hundred thousand (1,00,000)
LOA	As defined in <u>Clause 3.3.6</u>
Minimum Eligibility Criteria	As defined in <u>Clause 2.2.2</u>
Minimum Technical Score	As defined in <u>Clause 2.2.2</u>
Net Worth	As defined in <u>Clause 2.2.2</u>
Project	As defined in <u>Clause 1</u>
Qualified Bidder(s)	As defined in <u>Clause 1.3.3</u>
Re. or R.S. or INR or Rs.	Indian Rupee
RFP	Collection, Compilation and Verification of water utilization through Private Pumping Schemes (PPS) across all three seasons from the Narmada River and its major tributaries in Madhya Pradesh
Rules & Regulations	As per deemed approval, with updates on date and time from the Government of India
Selected Bidder	As defined in <u>Clause 3.3.3</u>

Scheduled Bank	As defined in <u>Clause 2.19</u>
Technical Bid	Technical Document Submitted by Bidder
Technical Capacity	As defined in Clause 2.2.2
Technical Score	As defined in Clause 2.2.2

The words and expressions beginning with capital letters and defined in this document shall, unless repugnant to the context, have the meaning ascribed thereto herein.

## **DISCLAIMER**

The information contained in this Request for Proposal document (hereafter referred as the “RFP”) or subsequently provided to Bidder(s), whether verbally or in documentary or any other form by or on behalf of the Authority or any of its employees or advisors, is provided to Bidder(s) on the terms and conditions set out in this RFP and such other terms and conditions subject to which such information is provided.

This RFP is not an agreement and is neither an offer nor invitation by the Authority to the prospective Bidder(s) or any other person. The purpose of this RFP is to provide interested parties with information that may be useful to them in submitting Bids pursuant to this RFP. This RFP includes statements, which reflect various assumptions and assessments arrived at by the Authority in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. This RFP may not be appropriate for all persons, and it is not possible for the Authority, its employees, or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this RFP. The assumptions, assessments, statements, and information contained in the Bidding Documents may not be complete, accurate, adequate, or correct. Each Bidder should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements, and information contained in this RFP and obtain independent advice from appropriate sources.

Information provided in this RFP to the Bidder(s) is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. The Authority accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.

The Authority, its employees and advisors make no representation or warranty and shall have no liability to any person, including any Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the RFP and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way for participation in this Bid Stage.

The Authority also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this RFP.

The Authority may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this RFP.

The issue of this RFP does not imply that the Authority is bound to select a Bidder or to appoint the Selected Bidder for the Project and the Authority reserves the right to reject all or any of the Bidders or Bids without assigning any reason whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by the Authority, or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and the Authority shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of the Bidding Process.

The statements and explanations contained in this RFP are intended to provide a better understanding to the Bidders about the subject matter of this RFP and should not be construed or interpreted as limiting in any way or manner the scope of work and obligations of the Selected Bidder set forth in the Contract or the Authority's rights to amend, alter, change, supplement or clarify the scope of work or the Project, to be awarded pursuant to this RFP. Consequently, any omissions, conflicts or contradictions in the Bidding Documents including this RFP are to be noted, interpreted, and applied appropriately to give effect to this intent, and no claims on that account shall be entertained by the Authority.

## INTERPRETATION

**In this RFP, unless the context otherwise requires:**

- i. The singular includes the plural and vice versa, and any word or expression used in the singular has the corresponding meaning used in the plural and vice versa.
- ii. Reference to any gender includes the other genders.
- iii. Unless otherwise stated, a reference to a Clause, Sub-Clause, Paragraph, Sub paragraph, Annex, Exhibit, Attachment, Schedule, or Recital is a reference to a Clause, Sub-Clause, Paragraph, Sub paragraph, Annex, Exhibit, Attachment, Schedule, or Recital of this RFP.
- iv. A reference to any agreement is a reference to that agreement and all annexes, attachments, exhibits, schedules, appendices, and the like incorporated therein, as the same may be amended, modified, supplemented, waived, varied, added to, substituted, replaced, renewed, or extended, from time to time, in accordance with the terms thereof.
- v. The terms "include" and "including" shall be deemed to be followed by the words "without limitation", whether so followed, or mentioned in this RFP.
- vi. A reference to a "writing" or "written" includes printing, typing, lithography and other means of reproducing words in a visible form.
- vii. Any date or period outlined in this RFP shall be such date or period as may be extended by the Authority, in its absolute discretion.
- viii. A reference to "month" shall mean a calendar month, a reference to "week" shall mean a calendar week and a reference to "day" shall mean a calendar day, unless otherwise specified.
- ix. The terms "hereof", "herein", "hereto", "hereunder" or similar expressions used in this RFP mean and refer to this RFP and not to any Article, Clause or Section of this RFP.
- x. The terms "Article", "Clause", "Paragraph" and "Schedule" mean and refer to the Article, Clause, Paragraph and Schedule of this RFP so specified.
- xi. the words "other", "or otherwise" and "whatsoever" shall not be construed ejusdem generis or be construed as any limitation upon the generality of any preceding words or matters specifically referred to.
- xii. In the event of any disagreement or dispute between the Authority and a Bidder regarding the materiality or reasonability of any matter including any event, occurrence, circumstance, change, fact, information, document, authorization, proceeding, act, omission, claims, breach, default or otherwise, the opinion of the Authority as to the

materiality or reasonability of any of the foregoing shall be final and binding on the Bidder

- xiii. The descriptive headings of Articles and Sections are inserted solely for convenience of reference and are not intended as complete or accurate descriptions of content thereof and shall not be used to interpret the provisions of the Agreement.
- xiv. Words and abbreviations, which have well-known technical or trade/commercial meanings are used in this RFP in accordance with such meanings; and
- xv. References to any law shall include references to such law as it may, after the date of this RFP, from time to time be amended, supplemented, or re-enacted.
- xvi. In case of any conditions/clause specified in RFP is contradicted by conditions/ clause stipulated in e-procurement website, then RFP shall override the clauses/conditions mentioned on e-procurement website. For any clarification in details, kindly follow the RFP.
- xvii. In the event of any conflict discrepancy or repugnancy between the provisions of the RFP and the provisions of the agreement shall prevail over and supersede the provisions of the RFP.

## DATA SHEET

Name of Non-Consultancy Work	<b>Collection, Compilation and Verification of water utilization through Private Pumping Schemes (PPS) across all three seasons from the Narmada River and its major tributaries in Madhya Pradesh.</b>
Period of completion	15 Months from zero date
Tender documents	The tender can be downloaded from the website
Document Publish Date and Time	18 <sup>th</sup> May, 2026 & 15:00 Hrs
Document Download Starting Date and Time	18 <sup>th</sup> May, 2026 & 16:00 Hrs
Pre-Bid Meeting Date and Time	26 <sup>th</sup> May, 2026 & 11:00 Hrs
Submission of queries by bidders	1 <sup>st</sup> June, 2026 by 17:00 Hrs
Document Download Closing Date and Time with amendments, if required	18 <sup>th</sup> June, 2026 & 14:00 Hrs
Online Bid Submission Starting Date and Time	18 <sup>th</sup> May, 2026 & 16:00 Hrs
Online Bid Submission Closing Date and Time	18 <sup>th</sup> June, 2026 & 15:00 Hrs
Last Date and time of Receipt of relevant document by speed post/Courier	25 <sup>th</sup> June, 2026 by 17:00 Hrs
Date, Time and Venue of opening of Technical Bid	19 <sup>th</sup> June, 2026 & 12:00 Hrs, if possible Bids shall be opened online at the O/o NCA, Indore
Contact details of Nodal Officer	Chief Engineer (Civil), Narmada Control Authority Narmada Sadan, Scheme No.74-C Vijay Nagar, Indore Tel: +919424595426, 8770790229 E-mail: cero.nca@gov.in,
Date, Time and Venue of opening of Financial Bid	To be announced later
The Financial Bids of only the Technical qualified firms would be opened.	

*Note:- The agreement shall be executed with successful bidder within one month of issuance of Letter of Award (LoA) and the 'Zero Date' for the commencement of the assignment shall be determined as per the provisions of Clause 3.3.8. ''.*

## INTRODUCTION

Narmada is the fifth largest river in India and largest west flowing river of Indian peninsula, originating from Maikala ranges at Amarkantak (in Madhya Pradesh) at an elevation of 1057 m. It flows westwards over a length of 1,312 km before draining into the Gulf of Cambay, 50 km west of Bharuch city. The basin lies between the East longitude 72° 32' and 81° 45', and the North latitudes 21° 20' and 23° 45'. The Vindhya Range in the North, the Satpura range in the South, the Maikala range in the East and the Arabian Sea in the West forms the boundaries of the basin.

In the first 1,077 km reach, the river flows in Madhya Pradesh. The next 35 km stretch of the river forms the boundary between the States of Madhya Pradesh and Maharashtra. Again for the next 39 km, it forms the boundary between Maharashtra and Gujarat. The last stretch of 161 Km lies in Gujarat.

The annual utilizable quantity of water of Narmada at Navagam in Gujarat has been assessed as 34,537 Million Cubic Metre (MCM) i.e. 28 Million Acre Feet (MAF) at 75% dependability by NWDT. On full development, the Narmada has a potential of irrigating over 6 million ha (15 Million Acres) of land along with a capacity to generate about 3,460 Mega Watt hydroelectric power. Out of the total catchment area of 98,796 sq. km, 85,115 sq. km (86.15%) lies in Madhya Pradesh, 744 sq. km (0.75%) in Chhattisgarh, 1,538 sq. km (1.56%) in Maharashtra and 11,399 sq. km (11.54%) in Gujarat. The mean annual rainfall in the basin is around 1,180 mm, contributing to an average annual runoff of 41,000 MCM.

### 1. BACKGROUND

The Narmada River Basin is home to major reservoirs such as Bargi, Tawa, Indira Sagar, Omkareshwar, and Sardar Sarovar, which play a vital role in irrigation, hydropower generation, and water supply across multiple states.

In spite of the huge potential, there was hardly any development of the Narmada water resources prior to the independence. Investigations were carried out after 1947 for a number of projects but inter-State differences on sharing of water and the schemes for development of the lower reaches of the river prevented any concrete action. As these could not be resolved through negotiations among the party States, the Central Government, by Notification of the then Ministry of Irrigation & Power No.S.O.4054 dated 6<sup>th</sup> October, 1969, issued under section-4 of the Inter-State Water Disputes Act, 1956 (33 of 1956), constituted the Narmada Water Disputes Tribunal (NWDT) to adjudicate upon the water dispute. The Tribunal investigated the matters referred to it and on 16<sup>th</sup> August, 1978 forwarded to the Central Government its report setting out the facts as found by it and given its decisions on the matters referred to it. Thereupon, the Central Government and the State Governments of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan made references to the Tribunal under sub-section (3) of Section-5 of the Act. The Tribunal considered these references and forwarded its further report to the Central Government on 7<sup>th</sup> December, 1979. The decisions of the Tribunal, as modified by the explanations and guidance given in its further report, were published in the official gazette by the Central Government, under Notification of the then Ministry of Agriculture and Irrigation (Department of Irrigation) No. S.O.792 (E) of the 12<sup>th</sup> December, 1979, where upon the decisions of the Tribunal became final and binding on the parties to the

dispute. As per the NWDT Award, the shares of party States in Narmada water and power generation from SSP are given in the following table:

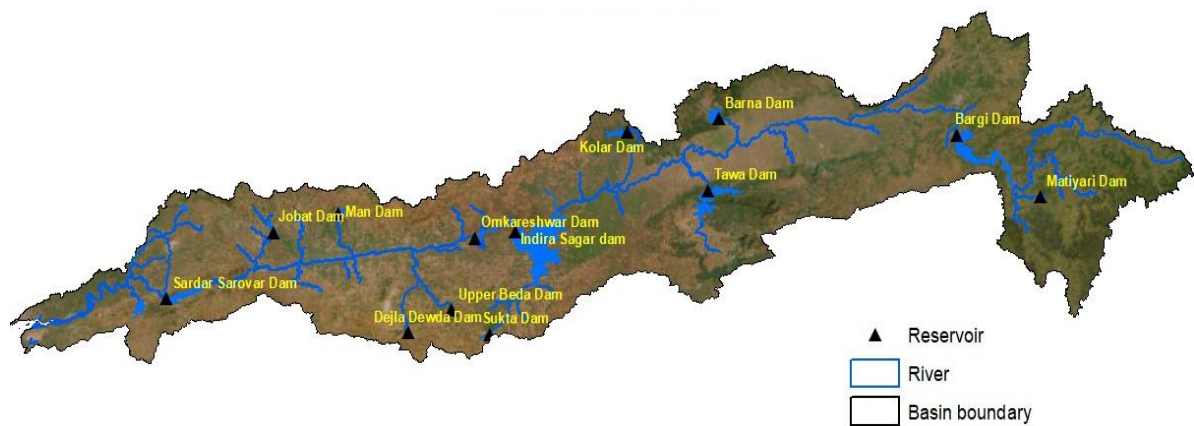
**Share of States in Power Generation & Water**

**Table No. 1**

Party States	Share of Party States as per NWDT Award	
	Power from SSP (%)	Allocated share of utilizable flow in MAF
Madhya Pradesh	57	18.25
Gujarat	16	9.00
Maharashtra	27	0.25
Rajasthan	-	0.50
Total	100	28.00

The basin map showing the details of Narmada River including of all major reservoir is as follows:

Figure No. 1



The Sardar Sarovar Project (SSP), a multi-purpose project incorporating objectives, such as Irrigation, Hydro Power, Industrial and Drinking water benefits, was executed as a joint venture of the four States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan. The project comprises a 1210 m long and 163 m high concrete gravity dam across the river Narmada in Gujarat with a live storage of 5760 MCM (4.73 MAF) water and 458.318 km long concrete lined Narmada Main Canal (NMC) with a head discharge of 1133.55 Cumecs to irrigate 17.92 lakh ha annually in Gujarat and to carry Rajasthan's share of 616 MCM (0.5 MAF) to irrigate 2.46 lakh ha of CCA through 74 km long NMC in Jalore districts of Rajasthan. The project envisages power generation through a River Bed Power House (RBPH) with an installed capacity of 1200 MW (6 x 200 MW) and a Canal Head Power House (CHPH) with an installed capacity of 250 MW (5 x 50 MW).

The Indira Sagar Project (ISP) in Madhya Pradesh, upstream of Sardar Sarovar Dam, is a multipurpose project and comprises a 92 m high, 653 m long concrete gravity dam with a live storage of 9750 MCM (7.9 MAF). A 248.895 km long flow canal with a head discharge of 160 Cumecs has been constructed to provide annual irrigation of 1.69 lakh ha and 74 MCM (0.06 MAF) drinking water to rural areas of Khandwa district. Hydro power generation from the dam is envisaged through a subsurface Power House with an installed capacity of 1000 MW (8 Units of 125 MW each) on the right flank of the dam. The project will also provide regulated

releases of 10,015 MCM (8.12 MAF) to SSP, Ex-Maheshwar Dam, after generation of power at downstream projects viz. Omkareshwar and Maheshwar in Madhya Pradesh.

The Omkareshwar multipurpose Project is situated 50 km downstream of Indira Sagar Project in Madhya Pradesh. It envisages construction of 73 m high & 949 m long concrete dam across river Narmada near village Mandhata in Khandwa district of Madhya Pradesh and is planned to irrigate 2.833 lakh ha in Culturable Command Area of 1.468 lakh ha annually and to generate power with an installed capacity of 520 MW (8x65 MW).

The NVDA is implementing Major Projects in the Narmada Basin. The medium & minor and pumping irrigation projects are under Water Resources Department (WRD). The domestic schemes for drinking water are under the PHE Department. The water use by industries is under Industries Department and the private pumps using surface water for irrigation are handled by the Agriculture Department.

## 1.1 Key Features of the Project

The total length of Narmada River is about 1112 Km (1077+35) in the MP, which needs to surveyed in the jurisdiction of Madhya Pradesh along with major tributaries as mentioned in clause 27.5.

**Comprehensive Seasonal Data Collection:** The project involves the systematic collection and verification of water utilization data in Six Zones across all three agricultural seasons—Kharif (July-Oct), Rabi (Nov-March), and Hot Weather (April-June)—to capture critical seasonal variations in water usage.

### Detail of Six Zones of Narmada Basin

**Table No. 2**

Name of Zone	Designated Length along the River
Zone-1	Amarkantak to Bargi
Zone-2	Bargi to Barmanghat
Zone-3	Barmanghat to Hoshangabad
Zone-4	Hoshangabad to Indira Sagar Project
Zone-5	Indira Sagar Project to Maheshwar
Zone-6	Maheshwar to Sardar Sarovar Project (in this case upto MP-Guj boarder)

*The relevant zone wise maps are shown in Annexure P.*

**Extensive Geographical Scope:** The survey spans the entire Narmada River Basin stretch from Amarkantak, Madhya Pradesh to the Gujarat Border, covering both banks of the main river and its major tributaries.

**Multi-Modal Survey Methodology:** To ensure 100% coverage of difficult-to-access reaches, the survey will utilize a hybrid approach deploying power boats, vehicles, and drones to enumerate pumps and extraction points accurately.

**Drone Regulatory Compliance & Safety:** All aerial surveys will be conducted in strict adherence to the **Drone Rules, 2021** (and subsequent amendments). This includes:

- **Digital Sky Compliance:** ensuring all drones are registered with a Unique Identification Number (UIN) on the Digital Sky Platform.
- **Certified Pilots:** Deployment of DGCA-certified Remote Pilots for all commercial operations.
- **Airspace Authorization:** Strict observance of Green, Yellow and Red zones, with prior permissions obtained for any flights in controlled airspace or near sensitive infrastructure.
- **NPNT Protocol:** Usage of drones compliant with "No Permission, No Takeoff" (NPNT) protocols to ensure authorized flight paths.
- **Third-Party Insurance:** Valid insurance coverage for all aerial assets as mandated by law.

**Technology-Driven Validation:** Field data will be authenticated using **GPS-tagged photography** and **drone-based enumeration** dug wells within a 500-meter belt of the river banks including major tributaries. This ground truth data will be cross-verified against remote sensing databases and power supply records from MPEB.

**Strategic Water Accounting:** The primary objective is to generate a precise, legally defensible dataset to support water budgeting and verify compliance with the Narmada Water Dispute Tribunal (NWDT) award, ensuring fair allocation among party states.

**Project Duration:** The entire data collection, compilation, and reporting exercise is scheduled for completion within a period of **15 months**.

The scope of work, terms and conditions are detailed in RFP. Please note that all the Schedules, Drawings, Reports shall be considered as a part of RFP Documents.

## 1.2 Objectives of this RFP

### Objective 1: Execution of Comprehensive Field Surveys and Data Collection

- To execute the collection of granular water utilization data from private pumps across the Narmada River Basin (Amarkantak to Gujarat Border). This specifically entails:
  - **Recording Technical Specifications:** Documenting the exact number, type, and rated capacity (HP) of pumps.
  - **Capturing Operational Metrics:** accurate recording of running hours and duration of operation for each unit.
  - **Quantifying Extraction:** Calculating the total volume of water utilized based on the pump capacity and operational time.
  - **Conducting Multi-modal Surveys:** Using boats, vehicles and drones to ensure 100% coverage across Kharif, Rabi, and Hot Weather seasons.

## **Objective 2: Compilation, Validation, and Analysis of Water Utilization Data**

- To process the raw field data into a verified, decision-grade database, the following steps are to be followed:
  - **Compilation:** Aggregating data from field surveys into a structured format.
  - **Validation:** Authenticating field findings by cross-referencing with remote sensing imagery and power supply data from MPEB.
  - **Analysis:** deriving season-wise and zone-wise water utilization reports to support the Authority in water budgeting and NWDT compliance.

The contract duration shall be for a period of **15 Months** to complete all surveys, data compilation, and submission of final reports.

The statements and explanations contained in this RFP are intended to provide a better understanding to the Bidders about the subject matter of this RFP and should not be construed or interpreted as limiting in any way or manner the scope of work and obligations of the Selected Bidder set out in detail in the RFP or the Authority's rights to amend, alter, change, supplement or clarify the scope of work or the Project, to be awarded pursuant to the Bidding Documents. Consequently, any omissions, conflicts or contradictions in the Bidding Documents including RFP are to be noted, interpreted, and applied appropriately to give effect to this intent, and no claims on that account shall be entertained by the Authority.

The Authority shall receive Bids pursuant to this RFP and other documents to be provided by the Authority, as modified, altered, amended, and clarified from time to time by the Authority (collectively the "Bidding Documents"). All Bids shall be prepared and submitted in accordance with such terms on or before the time on the date specified in DATA SHEET for submission of Bids (the "Bid Due Date").

### **1.3 Brief description of Bidding Process**

The Authority has adopted a two-stage online bidding process for the selection of the successful bidder (the "Selected Bidder") **based on the Quality-cum-Cost-Based Selection (QCBS) method**. In this process, each bidder (the "Bidder") is required to submit both a Technical Bid (Including all Annexures, Tender Fees and Bid Security) and a Financial Bid simultaneously through the designated e-procurement portal.

The Technical Bid shall include all necessary documents demonstrating the bidder's eligibility, prequalification, technical qualifications, and financial capacity, as specified in the RFP. The Financial Bid shall include the complete financial proposal for executing the defined scope of work.

Only those bidders who qualify in the Technical Evaluation comprising both Pre-Qualification and Technical Qualification Criteria (securing the minimum required Technical Score) will be considered for financial bid opening and subsequent combined evaluation.

### 1.3.1 Step One - Evaluation of Technical Bids

In the first stage, all Technical Bids received shall be evaluated for responsiveness as per Clause 3.2 of this RFP. The evaluation will include a preliminary check to verify whether the Bidders meet the Minimum Eligibility Criteria, including both Technical Capacity and Financial Capacity, as specified in Clause 2.2.2 of this RFP. Only those Bidders who fulfil these Pre-Qualification Criteria shall proceed to the next phase of the technical evaluation.

Subsequently, the technically responsive Bidders will be invited to deliver a Technical Presentation before the Committee. The Technical Bids, including the presentation (which carries significant weight in the scoring), shall be assessed as per the evaluation parameters outlined in the RFP. Marks shall be awarded accordingly.

### 1.3.2 Step Two – Short listing Based on Technical Score

In this stage, Bidders who meet all eligibility and capacity criteria and have participated in the Technical Presentation shall be evaluated based on their overall technical score.

Only those Bidders who secure a **minimum of 60 marks out of 100** in the technical evaluation, including the presentation component, shall be declared Technically Qualified and considered eligible for the opening of their Financial Bids.

### 1.3.3 Qualified Bidders

“**Qualified Bidders**” shall refer to those Bidders whose Technical Bids are found to be responsive, who meet all the eligibility and qualification criteria, and who have obtained a **minimum score of 60 marks** (including the presentation component) in the technical evaluation. Only such Bidders shall be declared "Technically Qualified" and shall have their Financial Bids opened and considered for evaluation, in accordance with the provisions of this RFP.

### 1.3.4 Evaluation Method

All Bidders who are declared Technically Qualified, having met the Pre-Qualification and Technical Qualification Criteria, including securing a minimum of 60 marks out of 100 in the Technical Evaluation (including the Technical Presentation) shall be eligible for the opening of their Financial Bids.

The final selection of the bidder shall be based on the **Quality cum Cost Based Selection** as per formula set forth in the Clause Selection of the Bidder in accordance with the terms and conditions specified herein.

### 1.3.5 Tender Fee and EMD / Bid Security

The Tender fees of an amount of **INR 5,000 (Rupees Five Thousand Only)** shall be mandatory to submit, which shall be on a non-refundable basis in the form of a Demand Draft (DD) drawn in favour of “**Narmada Control Authority**” payable at **Indore**, acceptable to the Authority.

In addition to the Tender Fee, the Bidder is required to deposit, along with its Bid, an Earnest Money Deposit (EMD) of **INR 3,32,000 (Rupees Three Lakh Thirty Two Only)**. The EMD shall be refundable not later than **165 (One Hundred and Sixty Five) days** from the Bid Due Date, except in the case of the Selected Bidder whose EMD shall be retained until they have provided Performance Security under the Contract.

The Bidders must provide the EMD in the form of FDR/Bank Guarantee in the format set out in Annexure E, or in the form of a Demand Draft in favour of “**Narmada Control Authority**” payable at **Indore**. The validity period of the Bank Guarantee shall not be less than **165 (One Hundred and Sixty Five) days** from the Bid Due Date, and may be extended as mutually agreed between the Authority and the Bidder. The Bid shall be summarily rejected if it is not accompanied by the required Tender Fee and EMD.

However, Bidder who is submitting the Bid Online will have to pay the Bid Document Fee/ Tender Fee through Demand Draft only of any Nationalized Bank / Scheduled Commercial bank payable at and in favour of ‘Finance Officer, NCA. Once the Bid is received online, Bid Document / Tender Fee will not be refundable.

The Demand Draft for Bid Document / Tender fee and FDR / Bank Guarantee against Bid Security / EMD shall be submitted in electronic format through online (by scanning) while uploading the bid, this submission shall mean that bid document / tender fee and Bid Security / EMD has been received. Accordingly, the offer of only those shall be opened whose Bid Document / Tender Fee and Bid Security/ EMD have been received electronically. However, for the purpose of realization of Demand Draft, and FDR / Bank Guarantee bidder shall send the same in original through R.P.A.D. /Speed Post/ Courier) only so as to reach to Chief Engineer (Civil), NCA, Indore within **7 Days** from the last day of bid submission.

#### **1.3.5.1 The bid Security/EMD may be forfeited**

- a. If the Bidder withdraws the bid after Bid opening during the period of Bid validity.
- b. If the Bidder does not accept the correction of the Bid Price, if any or
- c. In the case of a successful Bidders, if the Bidder fails the specified time limit to
  - i Sign the Agreement; or
  - ii Furnish the required Performance Security.
- d. If found necessary, the bidder will be intimated for negotiation, He will be intimated maximum three times within the validity period for negotiation, If contractor does not respond in time, his Bid Security (EMD) will be forfeited and his tender will be rejected. Punitive action will be taken on such contractors/Consultants.

#### **1.3.6 Bid Query**

Any queries or request for additional information concerning this RFP shall be submitted in writing by e-mail to the officer designated in the Data Sheet.

The pre-bid queries should be submitted in the format specified below to be considered for response and they should be submitted in **prescribed format**. Pre-bid queries not submitted in the prescribed format may not be responded to.

S. N.	Page No.	Part of RFP	Clause No.	Text provided in RFP	Clarification sought with justification if any
1.	[●]	[●]	[●]	[●]	[●]
2.	[●]	[●]	[●]	[●]	[●]
...	.....	....	.....	.....	.....

It is preferred that the queries should be sent to the Authority at least 2 (two) business days before the scheduled pre-bid conference. The formal email communication shall clearly bear the name of the work.

## 2. INSTRUCTIONS TO BIDDERS

### 2.1 General terms of Bidding

**2.1.1** Each Bidder is permitted to submit only one (1) Bid for the Project and no Bidder shall be part of multiple bids.

**2.1.2** Unless the context otherwise requires, the terms not defined in this RFP, but defined in the Contract shall have the meaning assigned thereto in the Contract.

**2.1.3** The Bidding Documents may be downloaded from the designated procurement portal, CPPP (<https://eprocure.gov.in/eprocure/app>).

For the avoidance of doubt, it is clarified that Bidders must submit their online and offline Bids on or before the Bid Due Date and time, specified in the Data Sheet. The Authority shall not be held responsible for any delays, technical issues, or failures associated with the portal.

For any queries or clarifications regarding the RFP, Bidders may contact the authorised personnel listed in the RFP. Bidders are advised that only written communication—such as those officially documented within the RFP and its annexures—shall be considered valid. Verbal communication or informal discussions, or any information not explicitly included in the official RFP documents, shall be deemed invalid and non-binding. It is strongly recommended that all communications, queries, and requests for clarification be submitted exclusively in email format to ensure traceability and official record.

Please note that the specific **zone demarcations and micro-level survey details** shall be finalized during the execution phase. For bidding purposes, the attached Basin Maps & Details should be referred.

**2.1.4** Notwithstanding anything to the contrary contained in this RFP, the detailed terms and conditions specified under the Scope of Work shall prevail and have overriding effect. However, it is clarified that any obligations or conditions imposed on the Bidder under this RFP shall remain applicable and shall be in addition to the obligations set forth under the Contract

**2.1.5** The Bid shall be furnished as per formats provided in Appendix-I of this RFP. The Bid shall include the following:

<u>ANNEXURE A</u>	:	Letter Comprising the Bid
<u>ANNEXURE B</u>	:	Information of Bidder & Statement of the Legal Capacity
<u>ANNEXURE C</u>	:	Power of Attorney for Signing of Bid
<u>ANNEXURE D</u>	:	Affidavit
<u>ANNEXURE E</u>	:	Bid Security (Bank Guarantee)
<u>ANNEXURE F</u>	:	Undertaking for Bid Validity
<u>ANNEXURE G</u>	:	Technical Capacity of Bidder
<u>ANNEXURE H</u>	:	Financial Capacity of Bidder
<u>ANNEXURE I</u>	:	Bid Checklist
<u>ANNEXURE J</u>	:	Format For Undertaking of The Investment
<u>ANNEXURE K</u>	:	Bid Capacity
<u>ANNEXURE L</u>	:	List of Key Resources to be deployed on The Contract Work (Equipment/Drones/Boats) to be Deployed
<u>ANNEXURE M</u>	:	List of Key Human Resources to Be Deployed for Work
<u>ANNEXURE N</u>	:	Curriculum Vitae (CV) for proposed Key Personnel
<u>ANNEXURE O</u>	:	Joint Venture Agreement
<u>ANNEXURE P</u>	:	Zone Wise Maps

- 2.1.6 The Financial Bid shall be submitted online through the designated procurement portal, strictly in the format specified therein. The Financial Bid shall be submitted online through the designated procurement portal (Central Public Procurement Portal - <https://eprocure.gov.in>), strictly in the format specified therein. The format provided in Appendix-II is for reference and illustrative purposes only. The Financial Proposal (the “Financial Bid”) must clearly state the Financial Quote (the “Contract Fee”) in Indian Rupees terms, expressed in both figures and words, and must be duly signed by the Applicant’s Authorized Representative. In case of any discrepancy between the figures and words, the amount quoted in words shall prevail. In the event of receiving a financial bid either in hard copy/physical document or inclusive within the technical document, the bid shall be summarily considered non-responsive and shall be disqualified and rejected.
- 2.1.7 The Bidder shall deposit a Bid Security in accordance with the provisions of this RFP. The Bidder must provide the Bid Security in the form of a Bank Guarantee, acceptable to the Authority, as per format set forth in Annexure E of Appendix-I.
- 2.1.8 The Bid Security shall be submitted in the form of a Bank Guarantee with a validity period of not less than 165 (One Hundred and Sixty Five) days from the Bid Due Date and may be extended from time to time upon mutual agreement between the Authority and the Bidder. Any Bid not accompanied by the Bid Security shall be summarily rejected. The Bid Security shall be refundable no later than 165 (One Hundred and Sixty Five) days from the Bid Due Date, except in the case of the Selected Bidder(s), whose Bid Security shall be retained until the submission of the Performance Security.
- 2.1.9 The Bidder shall submit a Power of Attorney, in the format prescribed under Annexure C of Appendix-I, authorizing the signatory of the Bid to commit and bind the Bidder for the purposes of this RFP.
- 2.1.10 Any condition, qualification, deviation, or other stipulation contained in the Bid that is inconsistent with the terms and conditions of this RFP shall render the Bid liable to rejection as non-responsive. Conditional tender shall not be accepted.
- Other Information is as under:
- a) Demand Draft purchased by the other than bidder and issued after the last date of submission of Bids, will not be considered or accepted.
  - b) The cost incurred by the contractor for this offer for clarification or attending discussion, conferences or site visits will not be reimbursed by the Employer or Engineer-in-Charge.
  - c) Conditional tender shall not be accepted.
  - d) Any changes, addition, alternation made in the prescribed form attached with tender are liable to be rejected.
  - e) Any change in format or conditional Bank Guarantee will not be accepted and the bidder will be considered non-responsive.
  - f) All the bidders are instructed to fill in information strictly in accordance with the format given in the checklist /qualification document / tender document.
  - g) It is mandatory for the bidders to supply each and every information as asked strictly in electronic format at appropriate places only.

- h) Blank/ insufficient information shall be treated as nil information and shall result in disqualification.
- i) Even if the bidder has been qualified in a similar or larger size of project in the past, it shall not be deemed to be a ground / reason for not giving required information for this work / bid.
- j) Information supplied for earlier projects shall not be considered while evaluation of this bid. The Government will not ask for any other information, unless it is found absolutely necessary by the competent authority.

2.1.11 All communications between the Bidder and the Authority in relation to this Bid and the Bidding Documents shall be in the English language. In the event that any supporting documents submitted by the Bidder are in a regional or any language other than English, the interpretation of such documents shall lie solely with the Authority. The Authority may, at its sole discretion, choose to consider or disregard such documents for evaluation purposes. In case any ambiguity, inconsistency, or deviation arises during interpretation, the Authority reserves the absolute right to reject such non-English documents in full, without placing any reliance on their contents.

2.1.12 The Bidding Documents, including this RFP and all annexed materials, are and shall remain the exclusive property of the Authority. These documents are provided to the Bidders solely for the purpose of preparing and submitting a Bid in accordance with the terms set forth herein. This provision shall apply mutatis mutandis (i.e., with the necessary changes having been made or with appropriate modifications) to all Bids and any accompanying documents, including presentations, concepts, technical information, and other submissions made by the Bidders. The Authority shall not be under any obligation to return any such documents or materials. Furthermore, no honorarium, travel expenses, survey costs, consultancy fees, or expenses related to stationery or bid preparation shall be reimbursed by the Authority. All such costs incurred in connection with the Bid shall be borne exclusively by the Bidders.

2.1.13 A Bidder shall not have a conflict of interest (the “Conflict of Interest”) that may affect the integrity or fairness of the Bidding Process, as more specifically described in the subsequent provisions of this RFP. Any Bidder determined to have a Conflict of Interest shall be disqualified forthwith. In such an event, the Authority reserves the right to forfeit and appropriate Bid Security or **Performance Security, as applicable.**

**Additionally, Bidders shall provide:**

- (i) Affidavit (**Annexure-D**)
- (ii) Undertaking (**Annexure-J**)

The Bidder expressly acknowledges and agrees that such forfeiture and appropriation of the Bid Security or Performance Security is reasonable and constitutes a genuine pre-estimate of the loss and damage likely to be suffered by the Authority and is not in the nature of a penalty. Such loss and damage may include, without limitation, the time, cost,

and effort incurred by the Authority in evaluating the Bid, as well as considering proposals that are ultimately disqualified due to such Conflict of Interest (“Damages”).

This forfeiture and appropriation shall be without prejudice to any other rights or remedies available to the Authority under this RFP or under applicable law.

Without limiting the generality of the above, a Bidder shall be considered to have a Conflict of Interest that affects the Bidding Process, if:

- (i) the Bidder, its Member or Associate (or any constituent thereof) and any other Bidder, its Member or Associate (or any constituent thereof) have common controlling shareholders or other ownership interest; provided that this disqualification shall not apply in cases where the direct or indirect shareholding of a Bidder, its Member or an Associate thereof or any shareholder thereof having a shareholding is more than 25% (twenty five per cent) of the paid up and subscribed share capital of such Bidder, Member or Associate, as the case may be, in the other Bidder(s), its Member or Associate is not more than 25% (twenty five per cent) of the paid up and subscribed equity share capital thereof; provided further that this disqualification shall not apply to any ownership by a bank, insurance company, pension fund or a public financial institution referred to in section 2(72) of the Companies Act, 2013. For the purposes of this Clause 2.1.13, indirect shareholding held through one or more intermediate persons shall be computed as follows:
  - (aa) where any intermediary is controlled by a person through management control or otherwise, the entire shareholding held by such controlled intermediary in any other person (the “Subject Person”) shall be taken into account for computing the shareholding of such controlling person in the Subject Person.  
and
  - (bb) subject always to sub-clause (aa) above, where a person does not exercise control over an intermediary, which has shareholding in the Subject Person, the computation of indirect shareholding of such person in the Subject Person shall be undertaken on a proportionate basis; provided, however, that no such shareholding shall be reckoned under this sub-clause (bb) if the shareholding of such person in the intermediary is less than 26% (twenty six per cent) of the subscribed and paid up equity shareholding of such intermediary; or
- (ii) a constituent of such Bidder is also a constituent of another Bidder; or
- (iii) such Bidder, its member or any Associate thereof receives or has received any direct or indirect subsidy, grant, concessional loan or subordinated debt from any other Bidder, its member or Associate, or has provided any such subsidy, grant, concessional loan or subordinated debt to any other Bidder, its member or Associate; or
- (iv) such Bidder has the same legal representative for purposes of this Bid as any other Bidder; or

- (v) such Bidder or any Associate thereof has a relationship with another Bidder or any Associate thereof, directly or through common third parties, that puts them in a position to have access to each other's information about, or to influence the Bid of either or each of the other Bidder; or
- (vi) such Bidder has participated as a consultant or sub-consultant to the Authority in the preparation of any documents, design, or technical specifications of the Project.

*Explanation:*

**For the purposes of this RFP**, Associate means, in relation to the Bidder, a person who controls, is controlled by, or is under common control with such Bidder. The expression "control" means, with respect to a person which is a company or corporation, the ownership, directly or indirectly, of more than 50% (fifty per cent) of the voting share capital of such person, and with respect to a person which is not a company or corporation, the power to direct the management and policies of such person, whether by operation of law.

- 2.1.14 Any award of the Project shall be subject to the terms of Bidding Documents and subsequent approval by the Authority. The Authority may amend the rules and regulations outlined in this RFP from time to time and Bidder shall have no right over the decision made by the Authority.
- 2.1.15 A Bidder shall be liable for disqualification and forfeiture of Bid Security if any legal, financial or technical adviser of the Authority in relation to the Project is engaged by the Bidder, its Members or any Associate thereof, as the case may be, in any manner for matters related to or incidental to such Project during the Bidding Process or subsequent to the (i) issue of the LOA or (ii) execution of the Contract.
- In the event any such adviser is engaged by the Selected Bidder or Service Provider, as the case may be, after issue of the LOA or execution of the Contract for matters related or incidental to the Project, then notwithstanding anything to the contrary contained herein or in the LOA or the Contract and without prejudice to any other right or remedy of the Authority, including the forfeiture and appropriation of the Bid Security or Performance Security, as the case may be, which the Authority may have there under or otherwise, the LOA or the Contract, as the case may be, shall be liable to be terminated without the Authority being liable in any manner whatsoever to the Selected Bidder or Service Provider for the same. For the avoidance of doubt, this disqualification shall not apply where such adviser was engaged by the Bidder, its Member or Associate in the past but its assignment expired or was terminated prior to the Bid Due Date. Nor will this disqualification apply where such adviser is engaged after a period of 3 (three) years from the date of completion of the Project Term.
- 2.1.16 If the Bid submitted by the Selected Bidder is found to be seriously unbalanced in relation to the Estimated Project Cost, the Authority reserves the right to seek detailed justification from the Bidder. This justification shall demonstrate the consistency of the quoted prices with the proposed technical approach, survey methodology, staffing schedule, and cost assumptions and other activities defined in the scope of work.

Following the evaluation of such justification and price analysis, the Authority may require the Selected Bidder to increase the amount of the Performance Security, to a level considered adequate to safeguard the Authority against financial risks in the event of default.

In cases where the quoted Financial Bid is lower than the Estimated Project Cost, the Selected Bidder shall, in addition to the standard Performance Security, furnish an irrevocable and unconditional Additional Performance Security from a Nationalized Bank, in the format specified in this RFP, as per the following conditions:

- (a) If the Contract Price offered by the Selected Bidder is lower than 10% but up to 20% below the Estimated Project Cost, the Additional Performance Security shall be calculated at 20% of the difference between:
  - (i) the Estimated Project Cost minus 10% of the Estimated Project Cost, and
  - (ii) the Contract Price offered by the Selected Bidder.
  
- (b) If the Contract Price offered is more than 20% lower than the Estimated Project Cost, the Additional Performance Security shall be calculated at 30% of the difference between:
  - (i) the Estimated Project Cost minus 10% of the Estimated Project Cost, and
  - (ii) the Contract Price offered by the Selected Bidder.

The Additional Performance Security shall be considered part of the overall Performance Security under the Contract. Failure to comply with the requirements of this clause shall constitute grounds for cancellation of the Letter of Award and forfeiture of the Bid Security.

2.1.17 Any Bid that contains multiple items within the Price Schedule / Financial Proposal priced unrealistically low, and for which satisfactory justification cannot be provided by the Bidder during evaluation, may be deemed non-responsive and is liable for rejection at the sole discretion of the Authority.

2.1.18 In case of bidder is a Joint Venture/ Consortium, a formal Joint Venture Agreement must be included as part of the contract (Annexure O).

## **2.2 Eligibility of Bidders**

### **2.2.1 Determining the eligibility of Bidders**

For determining the eligibility of Bidders for technical qualification under this RFP, the following conditions shall apply:

- (i) Any entity that has been barred or blacklisted by the Central Government, any State Government, or any agency or entity under their control, from participating in public

projects, and where such bar remains in effect as on the Bid Due Date, shall be ineligible to submit a Bid under this RFP.

(iii) Eligible Bidders must be legal entities **registered in India** and may include:

- **Companies** registered under the (Indian) Companies Act, 2013 (or the Companies Act, 1956).
- **Sole Proprietorships** operating under a Trade Name, represented by the Proprietor, and possessing a valid registration under:
  - The Shops and Establishments Act (of the respective State); OR
  - The Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 (i.e., Udyam Registration); OR
  - The Goods and Services Tax (GST) Act, 2017.
- **Partnership Firms** registered under the Indian Partnership Act, 1932 or **Limited Liability Partnerships (LLPs)** registered under the Limited Liability Partnership Act, 2008.
- **Societies** registered under the Societies Registration Act, 1860 or under any other applicable law in India.
- **Trusts** registered under the Indian Trusts Act, 1882 or any other law applicable to public trusts in India.
- **Joint Venture/ Consortium:** Any combination of firms/applicants in the form of Joint Venture (JV) or Consortium shall be permitted, typically restricted to a maximum of two or three partners.

In all cases, the Bidder shall be required to submit valid incorporation or registration documents (such as **Certificate of Incorporation, GST Registration, and PAN Card**) as proof of legal status along with the Technical Proposal.

## 2.2.2 Pre-Qualification Criteria & Technical Qualification Criteria

- **Pre-Qualification Criteria**

For the purpose of determining the eligibility of the Bidder and assessing their Technical Capacity, Financial Capacity, and legal status, the following mandatory criteria shall apply:

Sr. No.	Technical Proposal Submission Form as per RFP (Appendix I of this RFP)	As per RFP Format with supporting documents as required.
1	<p><b>Business Incorporation Certificates / Legal Establishment of the Firm:</b>            The Bidder should be a legal entity registered and operating primarily in the in India. The entity may be:</p> <p>(a) a Company registered under the Companies Act of India,1956 or later,</p> <p>(b) a Registered Partnership Firm (including LLP), or</p> <p>(c) a Proprietorship Firm.</p>	<p>1. Copy of Valid Certificate of Incorporation / Registration of Business Entity.</p> <p>2. For a Partnership Firm or LLP, a copy of the duly registered Partnership Deed/ LLP Agreement.</p> <p>3. Any other Supporting document if bidder is (d) Any other establishment as per <u>2.2.1 (iii)</u></p> <p>4. Within the JV, one member must have the authority to conduct all business for and on behalf of any and all members of the JV.</p>

	<p>(d) Any other establishment as per <u>2.2.1(iii)</u></p> <p>(e) Joint Venture (JV) should have no more than three members. Among the members, one must be the Lead Member, holding at least 50% of the interest in the JV. Other members should have a share of at least 25% each in JVs with up to two members.</p>	<p>5. The entities must designate one member to act on their behalf (the "Member in Charge") in exercising all the Consultant's rights and obligations toward the Client.</p> <p><b>Note:</b> All the above-mentioned documents are <b>mandatory</b> to establish clear evidence of the Bidder's existence business operations in India.</p>
2	<p><b>Turnover Certificate of the Bidder:</b> Achieved a minimum annual financial turnover 1.66 Crores (One Crore Sixty Six Lakh) from consultancy/ survey services in any one year, over the last five years. The Certificate (regarding Annual Turnover), issued by Chartered Accountant (in prescribed format as Form-E) shall be considered. <b>(Annexure H)</b></p>	<p>The Bidder shall submit a Turnover Certificate duly signed and certified by the Statutory Auditor of the Bidder, indicating the annual turnover for the last five (5) financial years, in the format specified in the RFP <b>Annexure-H.</b></p> <p><b>In case of Joint Venture,</b> the Lead Partner must independently meet at least 50% of the required turnover and each other partner must meet at least 25% of the turnover criteria. The JV must collectively meet 100% of the turnover specified in the RFP.</p> <p>In case of ambiguity or discrepancy, the Authority reserves the right to directly verify the certificates submitted as part of the Technical Bid by contacting the respective Statutory Auditor or Banker of the Bidder.</p>
3	<p><b>Positive Net Worth Certificate:</b> The Bidder shall submit a Positive Net Worth Certificate, duly certified by the Statutory Auditor or a Chartered Accountant, confirming that the Bidder has a positive net worth as of the end of the latest financial year (i.e., FY 2025 – 26).</p>	<p>The Bidder shall submit a Net Worth Certificate, duly signed and certified by the Statutory Auditor, confirming that the Bidder had a positive net worth as of the end of the Financial Year 2025–26.</p> <p>In case of any ambiguity or discrepancy, the Authority reserves the right to directly verify the certificates submitted as part of the Technical Bid by contacting the respective Statutory Auditor or Banker of the Bidder or bidder.</p>
4	<p><b>Investment of the Cash/ Financial Resource Facility:</b> The bidder shall make Commitment to invest minimum 25% of the contract value in cash during implementation of this project.</p>	<p>Undertaking in the format provided in <b>ANNEXURE J</b>, stating intent to invest required cash contribution during the contract execution phase.</p>
5	<p><b>Eligible Project Experience – Field Survey &amp; Data Collection:</b> Experience in successfully completing or substantially completing at least one contract of similar projects (<b>Drone Surveys, GIS Mapping or Remote Sensing Analysis</b>) within India, for any Government Agency, PSU, or Urban Local Body) of at least 40</p>	<p><b>Qualification Criteria:</b></p> <ul style="list-style-type: none"> <li>• <b>One (1) Similar Project</b> of value not less than <b>40% of the estimated cost;</b></li> </ul> <p>"<b>Similar Project</b>" refers to: Large-scale field surveys involving enumeration of assets (irrigation/ pumps/ agriculture), water utilization studies, or river basin censuses.</p> <ul style="list-style-type: none"> <li>• <b>Required Documents:</b></li> </ul>

	percent of the value of proposed contract within the last 7 years. Substantially completed works means those works which are at least 90 % completed as on the date of submission (i.e. gross value of work done up to the last date of submission is 90 % or more of the original contract price) and continuing satisfactorily.	1. Work Order/ Letter of Award clearly indicating the scope of Survey work. 2. Project Completion Certificate issued by the Client (rank not below Executive Engineer), confirming the value of work done. <b>Note:</b> Similar Project must involve at least three activities out of the scope of the work
6	<p><b>Bid Capacity:</b> The Available Bid Capacity of the Bidder at the time of bidding must be greater than the total estimated cost of the works.</p> <p><b>Calculation Formula: Assessed Available Bid Capacity = (A × N × 2) – B, where:</b>  <b>A</b> = Maximum annual value of work executed in any one year during the last 5 years (updated to current price level)  <b>B</b> = Value at current price level of the existing commitments and ongoing works to be completed during the next 15 months (period of completion of work for which bids are invited) <b>as on 30 days prior to the last date of online submission of tender;</b> and  <b>N</b> = Number of years prescribed for completion of the current work (15 Months)</p>	Supporting project execution records, work orders, and certified statements for A and B values, verified by a Statutory/ Chartered Accountant <b>Annexure L: Bid Capacity Statement, duly certified by a Statutory/ Chartered Accountant</b>
7	<p><b>The following documents bidder needs to submit as a part of the technical bid.</b></p> <p>1) GST Number 2) Pan Number</p>	A copy of the following: 1) GST Certificate 2) Pan Card
8	<b>EMD &amp; Tender Fee (As a part of technical bid submission)</b>	An original copy of DD / BG /FDR in the name of "Narmada Control Authority" payable at <b>Indore</b> . In case of JV, the Bid Security/ EMD should be deposited in the name of the JV by either the JV itself or an authorized representative.

### Key Instructions:

- The Bidders who qualify under the Pre-Qualification Criteria shall be deemed eligible for evaluation under the Technical Qualification stage. All such eligible Bidders shall be notified and invited to deliver a Technical Presentation within a short notice period following the Bid Due Date, in accordance with the terms and conditions set forth in this RFP.
- “Substantially Completed” works shall refer to projects where at least 90% of the original contract value has been completed as on the date of bid submission, and the work is progressing satisfactorily. For such projects to be considered, the Bidder shall submit a **certificate from the Client**, clearly mentioning the name of the project, original contract

value, value of work completed, date of commencement, status of execution, and a statement on the satisfactory performance of the Bidder.

- For the purpose of determining Technical Capacity and assigning Technical Marks, the value of the eligible completed work shall be adjusted to the current price level by applying the enhancement factors listed in the table below, based on the year of project completion relative to the proposal due date:

<b>Year Completed</b>	<b>Financial Year</b>	<b>Enhancement Factor</b>
Base year of inviting tender	20__ -20__	1.00
-1	20__ -20__	1.10
-2	20__ -20__	1.21
-3	20__ -20__	1.33
-4	20__ -20__	1.46
-5	20__ -20__	1.61

- Projects executed outside the territory of India shall not be considered, even if the client is an Indian entity. Only projects physically executed within India will be eligible for evaluation under this RFP.

## Technical-Qualification Criteria Marking System

Sr. No.	Criteria	Evaluation Details	Maximum Marks
1.	<b>Financial Capacity of the Bidder</b> (Annual Turnover for last 5 years)	<b>Marking Scheme:</b> <ul style="list-style-type: none"> <li>• Annual Turnover <math>\geq</math> ₹1.66 Cr and <math>&lt;</math> ₹3.32 Cr: <b>5 Marks</b></li> <li>• Annual Turnover <math>\geq</math> ₹3.32 Cr: <b>10 Marks</b></li> </ul> <b>In case of JV</b> The “financial capacity” of the lead partner of JV shall not be less than 50% of the financial eligibility criteria mentioned in the RFP document.	<b>10 Marks</b>
2.	<b>Eligible Project Experience – Field Survey</b> (Large scale water/ asset enumeration) (Drone/ GIS/ Remote Sensing)	<b>Marking Scheme:</b> <ul style="list-style-type: none"> <li>• Meeting Minimum PQ Criteria (1Project) value <math>&gt;</math> ₹ 80 Lakhs: <b>20 Marks</b></li> <li>• For each <b>Additional</b> eligible project (value <math>&gt;</math> ₹80 Lakhs): <b>10 Marks</b> per project. (<i>Max 2 additional projects considered</i>)</li> </ul>	<b>40 Marks</b>
3.	<b>Key Personnel</b>	Details of Key Personnel & Resource Deployment: Detailed timeline and staffing schedule to ensure completion within the deadline. Team leader: <b>2 marks</b> Six Teams: <b>3 marks each</b>	<b>20 Marks</b>
4.	<b>Technical Presentation</b> (To be delivered by Qualified Bidders)	<b>Presentation Scoring Parameters:</b> <ul style="list-style-type: none"> <li>• <b>Understanding of Scope:</b> Clarity on the Narmada basin geography and survey objectives. <b>(10 Marks)</b></li> <li>• <b>Methodology:</b> Approach to field deployment, use of mobile apps, and drone/ boat survey logistics. <b>(10 Marks)</b></li> <li>• <b>Data Quality Assurance:</b> Mechanisms for validating data accuracy and error checking. <b>(10 Marks)</b></li> </ul>	<b>30 Marks</b>
<b>Total Maximum Marks</b>			<b>100 Marks</b>
<b>Minimum Marks Required to Qualify for Financial Bid Opening:</b>			<b>60 Marks</b>

### 2.2.3 Black-listed / barred

Any entity which has been barred by the Central/ State Government, or any other government institution in India, for any reason, from participating in any project, and the bar subsists as on the date of the Bid, shall not be eligible to submit the Bid.

#### **2.2.4 No alteration / Changes in the bid**

No change in the submitted bids is allowed subsequent to the submission of the Bid during the Bidding Process or in case of the Selected Bidder during the Term of the Project, otherwise the bid shall be disqualified and Bid Security or Performance Security or Performance Guarantee as the case may be forfeited. For any other form of Bidder, than those specified under Clause 2.2, appropriate calculation methods shall be defined by the Authority prior to commencement of evaluation of Technical and Financial Capacity.

#### **2.3 Cost of Bidding**

The Bidders shall be responsible for all the costs associated with the preparation of their Bids and their participation in the Bidding Process. The Authority will not be responsible or in any way liable for such costs, regardless of the conduct or outcome of the Bidding Process.

#### **2.4 Verification of the Information**

It shall be deemed that by submitting a Bid, the Bidder has:

- i. Made a complete and careful examination of the Bidding Documents and visited site in person OR assessment of the detailed parameters for the projects and further, provided self-declaration as per provided annexure(s).
- ii. Received all relevant information requested from the Authority.
- iii. Acknowledged and accepted the risk of inadequacy, error or mistake in the information provided in the Bidding Documents or furnished by or on behalf of the Authority relating to any of the matters referred to in Clause above.
- iv. Satisfied itself about all matters, things and information including matters referred to in RFP, hereinabove necessary and required for submitting an informed Bid, execution of the Project in accordance with the Bidding Documents and performance of all its obligations thereunder.
- v. Acknowledged and agreed that inadequacy, lack of completeness or incorrectness of information provided in the Bidding Documents or ignorance of any of the matters referred to RFP, hereinabove shall not be a basis for any claim for compensation, damages, extension of time for performance of its obligations, loss of profits etc. from the Authority, or a ground for termination of the Contract; and
- vi. Agreed to be bound by the undertakings provided by it under and in terms hereof. The Authority shall not be liable for any omission, mistake, or error on the part of the Bidder in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to the Bidding Documents including the RFP or the Bidding Process, including any error or mistake therein or in any information or data given by the Authority.

## 2.5 Right to accept and to reject any or all Bids

The Authority reserves the right to verify all statements, information and documents submitted by the Bidder in response to the RFP or the Bidding Documents and the Bidder shall, when so required by the Authority, make available all such information, evidence and documents as may be necessary for such verification. Any such verification or lack of such verification by the Authority shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of the Authority thereunder.

Notwithstanding anything contained in this RFP, the Authority reserves the right to accept or reject any Bid and to annul the Bidding Process and / or reject all Bids at any time without any liability or any obligation for such acceptance, rejection, or annulment, and without assigning any reasons thereof. If the Authority rejects or annuls all the Bids, it may, in its discretion, invite all eligible Bidders to submit fresh Bids hereunder.

The Authority reserves the right to reject any Bid and appropriate the Bid Security if, at any time, a material misrepresentation is made or uncovered or the Bidder does not provide, within the time specified by the Authority, supplemental information sought by the Authority for evaluation of the Bid. Such misrepresentation/ improper response shall lead to the disqualification of the Bidder. If such disqualification / rejection occurs after the Bids have been opened and the First Ranked Bidder gets disqualified / rejected, then the Authority reserves the right to:

- to choose the Selected Bidder in accordance with Clause 3; or
- take any such measure as may be deemed fit in the sole discretion of the Authority, including annulment of the Bidding Process.

In case it is found during the evaluation or at any time after selection of Qualified Bidders or Selected Bidders or before/after signing of the Contract or after its execution and during the period of subsistence thereof, one or more of the Minimum Eligibility Criteria have not been met by the Bidder or the Bidder has made material misrepresentation or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith,

Notwithstanding anything to the contrary contained therein or in this RFP, in the Bidding Documents and the Contract (if executed) shall be liable to be terminated, by a communication in writing by the Authority to the Bidder, without the Authority being liable in any manner whatsoever to the Bidder or Selected Bidder, as the case may be. In such an event, the Authority shall have a right to forfeit and appropriate the Bid Security or Performance Security, as the case may be, as compensation and Damages payable to the Authority for, *inter alia*, time, cost, and effort of the Authority, without prejudice to any other right or remedy that may be available to the Authority.

## 2.6 Bidding Documents

This RFP comprises the Disclaimer set forth hereinabove, the contents as listed below and will additionally include any Addendum issued in accordance with Clause 2.8. The draft Contract as part of the Bid Documents shall be deemed to be part of this RFP. Any addenda issued subsequent to this RFP, but on or before the Bid Due Date, will be deemed to form part of the Bidding Documents.

## 2.7 Clarifications

Bidders requiring any clarification on the Bidding Documents including the RFP may notify the Authority in writing or by e-mail in accordance with DATA SHEET. They should send in their queries before the date mentioned in the schedule of Bidding Process specified in DATA SHEET. The Authority shall endeavour to respond to the queries within the period specified therein, but no later than 5(five) days prior to the Bid Due Date. The responses will be uploaded on the Tender Portal.

The Authority shall endeavour to respond to the questions raised or clarifications sought by the Bidders. However, the Authority reserves the right not to respond to any question or provide any clarification, in its sole discretion, and nothing in this clause shall be taken or read as compelling or requiring the Authority to respond to any question or to provide any clarification.

The Authority may also on its own motion, if deemed necessary, issue interpretations and clarifications to all Bidders. All clarifications and interpretations issued by the Authority shall be deemed to be part of the Bidding Documents. Verbal clarifications and information given by Authority, or its employees or representatives shall not in any way or manner be binding on the Authority.

During the evaluation process, the Authority may request the bidder to provide further details, authenticate documents, validate submissions, and furnish additional information for all submitted documents. The bidder shall be responsible for responding to such clarifications and ensuring the accuracy of the provided information until the Authority is satisfied. **The bidders will respond in not more than 7 days of issue of the clarification letter.** The Authority reserves the right to reject any documents that do not meet the requirements of the RFP and the bidding process or not satisfactory submission.

## 2.8 Amendment of RFP

**2.8.1 Issuance of Addenda:** At any time prior to the deadline for submission of Bids, the Authority may, for any reason, whether at its own initiative or in response to clarifications requested by a Bidder, modify the RFP by the issuance of an addendum (“Addendum”).

Any Addendum issued hereunder will be sent in writing / uploaded on procurement portal.

2.8.2 **Extension of Bid Due Date:** In order to afford the Bidders a reasonable time for taking an Addendum into account, or for any other reason, the Authority may, at its own discretion, extend the Bid Due Date. (“Addendum”).

2.8.3 **Amendments Post-Award:** The Authority reserves the right to amend the terms and conditions of the RFP, including but not limited to the Roles and Responsibilities and Scope of Work, even after awarding the bid with prior approval from the Competent Authority. Such amendments, if any, shall be duly communicated to the selected bidder and shall form an integral part of the contract documentation.

## 2.9 **Format and Signing of Bid**

2.9.1 The Bidder shall provide all the information sought under this RFP. The Authority will evaluate only those Bids that are received in the required formats and complete in all respects.

2.9.2 The Bid shall be typed / printed or written in indelible ink and signed by the authorized signatory of the Bidder who shall also initial each page, in ink. In case of printed and published documents (i.e. Partnership Agreement), only the cover shall be initialled. All the alterations, omissions, additions, or any other amendments made to the Bid shall be initialled by the person(s) signing the Bid.

## 2.10 **Sealing and Marking of Bids**

2.10.1 **Online Submission:** The Bidder shall submit the Technical Bid online on the Portal with all scanned pages (in proper resolution) numbered serially and by giving an index of documents. The Authorized Representative of the Bidder shall initiate each page of the documents as per the terms of the RFP.

In case the Proposal is submitted on the document downloaded from Official Website, the Bidder shall be responsible for its accuracy and correctness as per the version uploaded by the Authority and shall ensure that there are no changes caused in the content of the downloaded RFP document. In case of any discrepancy between the downloaded or photocopied version of the RFP and the original RFP issued by the Authority, the latter shall prevail.

2.10.2 **Financial Bid Restriction: The Financial Proposal shall be submitted online on the Portal only.** There shall be no physical hard copy submission of the Financial Proposal under any circumstance. Any submission of the Financial Proposal in hard copy / technical bid shall lead to the Proposal being rejected in its entirety and declared as nonresponsive.

2.10.3 **Physical Submission (Hard Copy of Technical Bid):** In addition to the online submission, One Copy of the Technical Bid shall be placed in binding and the pages shall be numbered serially. Each page thereof shall be initiated by the authorized signatory. This document shall be placed in a separate envelope and marked “COPY OF DOCUMENTS.”

The envelopes, specified in RFP shall be placed in an outer envelope, which shall be sealed. All the envelopes shall clearly bear the following identification:

**“Collection, Compilation and Verification of water utilization through Private Pumping Schemes (PPS) across all three seasons from the Narmada River and its major tributaries in Madhya Pradesh” And shall clearly indicate the name and address of the Bidder along with instructions “Do not open, except in presence of the Authorized Person of the Authority”.**

Each of the envelopes shall be addressed to the address mentioned in the RFP.

If the envelopes are not sealed and marked as instructed above, the Authority assumes no responsibility for the misplacement or premature opening of the contents of the Bid submitted. **Bids submitted by Speed Post/RPAD/Courier only, will be considered. Bids submitted by any other means shall not be entertained and shall be rejected.**

## **2.11 Bid Due Date and Time**

Bids should be submitted on or before the time specified in DATA SHEET on or before the Bid Due Date at the address provided in RFP Document in the manner and form as detailed in this RFP.

The Authority may, in its sole discretion, extend the Bid Due Date and specified time by issuing an Addendum in accordance with Clause 2.8 uniformly for all Bidders.

## **2.12 Late Bids**

Bids received by the Authority after the specified time on the Bid Due Date shall not be eligible for consideration and shall be summarily rejected and returned unopened.

## **2.13 Contents of the Bid**

The Technical Bid for the Project shall be furnished in the formats provided under Appendix– I. The Financial Bid shall be submitted online only on the Portal. The Financial Proposal shall not be submitted physically in hard copy. The opening of Bids and acceptance thereof shall be substantially in accordance with this RFP.

## **2.14 Modifications/ Substitution/ Withdrawal of Bids**

**2.14.1 Online Process:** The Bidder may modify, substitute, or withdraw its Bid after submission, provided that written notice of the modification, substitution or withdrawal is received by the Authority prior to Bid Due Date. No Bid shall be modified, substituted, or withdrawn by the Bidder on or after the Bid Due Date.

- In case of any discrepancy between the Online Modification and the Physical Hard Copy, the **Online Version** shall prevail.

## **2.15 Rejection of Bids**

- 2.15.1 If any Bid received by the Authority is found not signed and/or sealed and/or marked as stipulated in Clauses 2.10, and/or not accompanied by the Bid Security, it may be summarily rejected.
- 2.15.2 Notwithstanding anything contained in this RFP, the Authority reserves the right to reject any Bid and to annul Bidding Process and to reject all Bids at any time without any liability or any obligation for such acceptance, rejection, or annulment, and without assigning any reason whatsoever. In the event that the Authority rejects or annuls all the Bids, it may, in its discretion, invite fresh Bids hereunder.
- 2.15.3 The Authority reserves the right not to proceed with the Bidding Process at any time, without notice or liability, and to reject any Bid without assigning any reasons.

## **2.16 Validity of Bids**

The Bids shall be valid for a period of not less than 120 (One Hundred and Twenty) days from the Bid Due Date. The validity of Bids may be extended by mutual consent of the respective Bidders and the Authority (ANNEXURE-F).

## **2.17 Confidentiality**

Information relating to the examination, clarification, evaluation, and recommendation for the Bidders shall not be disclosed to any person who is not officially concerned with the Bidding Process or is not a retained professional advisor advising the Authority in relation to, or matters arising out of, or concerning the Bidding Process. The Authority will treat all information, submitted as part of the Bid, in confidence and will require all those who have access to such material to treat the same in confidence. The Authority may not divulge any such information unless it is directed to do so by any statutory entity that has the power under law to require its disclosure or is to enforce or assert any right or privilege of the statutory entity and/ or the Authority or as may be required by law or in connection with any legal process.

## **2.18 Correspondence with the Bidder**

The Authority shall not entertain any correspondence with any Bidder in relation to acceptance or rejection of any Bid.

## **2.19 Bid Security**

- 2.19.1 Requirement and Validity:** The Bidder shall furnish as part of its Bid, a Bid Security in the form of a FDR/bank guarantee issued by a Nationalized Bank in India or in the form of DD, in favour of the Authority in the format set forth in Annexure E of Appendix –I (the “Bank Guarantee”) and having a validity period of not less than 165 (One Hundred and Sixty Five) days from the Bid Due Date, as may be extended by the Bidder from time to time.

## 2.19.2 Eligible Banks:

All Nationalized Banks.

The Authority shall not be liable to pay any interest on the Bid Security deposit so made and the same shall be interest free.

As mentioned in RFP, the Authority will return the Bid Security of unsuccessful Bidders, without any interest, as promptly as possible on selection of the Selected Bidder(s) or when the Authority cancels the Bidding process.

The Selected Bidder(s)' Bid Security will be returned, without any interest, upon the Bidder signing the Contract and furnishing the Performance Security in accordance with the provisions thereof. The Authority may, at the Selected Bidder(s)' option, adjust the amount of Bid Security in the amount of Performance Security to be provided by him in accordance with the provisions of the Contract. The Authority shall be entitled to forfeit and appropriate the Bid Security as Damages inter alia in any of the events specified in Clause 2.19. The Bidder, by submitting its Bid pursuant to this RFP, shall be deemed to have acknowledged, and confirmed that the Authority will suffer loss and damage on account of withdrawal of its Bid or for any other default by the Bidder during the Bid validity period. No relaxation of any kind on Bid Security shall be given to any Bidder.

The Bid Security shall be forfeited and appropriated by the Authority as Damages without prejudice to any other right or remedy that may be available to the Authority under the Bidding Documents and/or the Contract, or otherwise, under the following conditions:

- If a Bidder engages in a corrupt practice, fraudulent practice, coercive practice, undesirable practice, or restrictive practice as specified in this RFP.
- If a Bidder withdraws its Bid during the period of Bid validity as specified in this RFP and as extended by the Bidder from time to time.
- In the case of Selected Bidder(s) if it fails within the specified time limit
  - To sign the Letter of Award.
  - Sign the Contract; or
  - To furnish the Performance Security within the period prescribed thereof in the Contract.

In case the Selected Bidder(s), having signed the Contract, commits any breach thereof prior to furnishing the Performance Security.

**The Bid Security of Bidders whose Bid is rejected on account of not meeting the Eligibility Criteria will be returned/refunded within a period of 90 (ninety) days from the date of intimating the rejection of the proposal by Authority to the Bidder. The Authority may amend such time duration from time to time as per internal operations and RFP Conditions. Tender fee shall not be refundable to the bidder.**

### 3. EVALUATION OF BIDS

#### 3.1 Opening and Evaluation of Bids

- 3.1.1 The Authority shall open the Technical Bid at the prescribed date and time in DATA SHEET, at the office of the authority and record the names of the Bidders from whom Bids are received.
- 3.1.2 The Authority will subsequently examine and evaluate the Bids in accordance with the provisions set out in this RFP.
- 3.1.3 To facilitate evaluation of Technical Bid, the Authority may, at its sole discretion, seek clarifications in writing from any Bidder regarding its Technical Bid during evaluation stage.

#### 3.2 Tests of responsiveness

3.2.1 As part of the evaluation of Technical Bids, the Authority shall determine whether each Bid is responsive to the requirements of the RFP. A Bid shall be considered responsive only if (**as applicable**):

- it is received as per the format at Appendix – I.
- it is received by the Authority on or before the specified time on the Bid Due Date including any extension thereof pursuant to RFP and Corrigendum (if any).
- it is signed as stipulated in Clauses 2.10.
- it is accompanied by the Tender Fee & Bid Security as specified in RFP.
- it is accompanied by the Power(s) of Attorney as specified in RFP.
- it does not contain any condition or qualification and
- it is not non-responsive in terms hereof.

For the avoidance of doubt, the Technical Bid shall only be considered responsive if the Bidder has submitted and uploaded the soft copy of the Technical Bid on the e-procurement website, including all the Annexures and Appendix the scanned copy of the Bid Security. The Bidder shall also mandatorily submit the hard copies of the Technical Bid in accordance with Clause prior to the Bid Due Date.

- 3.2.2 The Authority reserves the right to reject any Bid which is non-responsive and no request for alteration, modification, substitution, or withdrawal shall be entertained by the Authority in respect of such Bid.
- 3.2.3 Only the Financial Bids of Qualified Bidders for those who have met the Pre-Qualification and Technical Qualification Criteria shall be opened for financial evaluation. The Authority shall consider only those bids that are substantially responsive in accordance with RFP. Any variations or deviations beyond the scope of the Bidding Documents or offering unsolicited advantages to the Authority shall not be taken into account. Similarly, the estimated effect of any price adjustment clause during the contract implementation period shall be excluded from the financial evaluation.
- 3.2.4 If the Financial Bid of the successful bidder is found to be seriously unbalanced compared to the Authority's internal estimate, the bidder may be required to submit a detailed price justification aligned with the proposed methodology and schedule. Based on the review,

the Authority may instruct the bidder to enhance the Performance Security to a level sufficient to safeguard against financial risk. Additionally, any bid containing unrealistically low-priced items in the Bill of Quantities, which cannot be adequately substantiated, may be deemed non-responsive and liable for rejection.

### **3.3 Selection of Bidder**

3.3.1 The Bidders considered as responsive in terms of Bid Submission Guidelines, and fulfilling the Minimum Eligibility Criteria and Technical Eligibility Criteria, score the higher than the threshold set by the Authority as set forth in Clause-2.2.2 shall be further evaluated based on the evaluation criteria set forth in the RFP.

3.3.2 Financial Bids of only Qualified Bidders shall be considered for evaluation and shall be invited for the opening of Financial Bids. For avoidance of doubt, it is clarified that the Bidder must also meet all required submission as per RFP, as mentioned in Clause 2.2.2 to be considered as a Qualified Bidder, and to be eligible for opening and evaluation of Financial Bids in terms hereof.

3.3.3 The Bids shall be evaluated under the Quality-cum-Cost Based Selection (QCBS) method. The Technical Bid will be assessed based on the PowerPoint presentation, as detailed in this RFP. Bidders scoring at least 60 marks in the technical evaluation shall qualify for the opening of Financial Bids.

Financial Score =  $100 \times (\text{Lowest Financial Quote} / \text{Financial Quote Submitted by the Bidder})$

The final selection of the Bidder shall be based on a combined score calculated as:

$$\text{Total Score} = (60\% \times \text{Technical Score}) + (40\% \times \text{Financial Score})$$

3.3.4 The Bidder with the Highest Total Score (H1) shall be declared the Selected Bidder. In the event of a tie in Total Score, the Bidder with the Higher Technical Score (Including Presentation Marks) will be selected. If the tie persists, the Bidder with the Higher Financial Capacity shall be selected.

3.3.5 In the event that the Highest Score Bidder (H1) fails to appear, defaults during the tendering process, is disqualified for any reason, or does not enter into an agreement with the Authority within the stipulated timeline, the Authority reserves the right to declare the Second Ranked Bidder (H2) as the Selected Bidder. In such a scenario, the Second Ranked Bidder (H2) shall be invited for negotiations, and further actions shall be taken in line with the terms and conditions of the RFP.

- 3.3.6 After selection, a Letter of Award (the “LOA”) shall be issued, in duplicate, by the Authority to the Selected Bidder(s) and the Selected Bidder(s) shall, within 7 (seven) days of the receipt of the LOA, sign and return the duplicate copy of the LOA in acknowledgement thereof. In the event the duplicate copy of the LOA duly signed by the Selected Bidder(s) is not received by the stipulated date, the Authority may, unless it consents to extension of time for submission thereof, appropriate the Bid Security of such Bidder as Damages on account of failure of the Selected Bidder(s) to acknowledge the LOA, and the next eligible Bidder may be considered.
- 3.3.7 After acknowledgement of the LOA as aforesaid by the Selected Bidder(s), it shall execute the Contract within the period and time duration outlined in RFP. The Selected Bidder(s) shall not be entitled to seek any deviations in the Contract.
- 3.3.8 The zero date to commence the work shall be reckoned from the date of agreement or providing all requisite NOC’s (refer Schedule 11) to successful bidder whichever is later. Further, the requisite NOC’s shall be provided to successful bidder by Engineer in Charge after receipt of the same from Chief Engineer, Lower Narmada, NVDA, Indore.

#### **3.4 Contacts during Bid Evaluation**

Bids shall be deemed to be under consideration immediately after they are opened and until such time the Authority makes official intimation of award/ rejection to the Bidders. While the Bids are under consideration, Bidders and/ or their representatives or other interested parties are advised to refrain from contacting by any means, the Authority and/ or their employees/ representatives on matters related to the Bids under consideration.

Any effort by a Bidder to influence the Authority in the examination, evaluation, ranking of Bids, or recommendation for award of Contract may result in the **rejection of the Bidder’s Bid**.

#### **4. FRAUD AND CORRUPT PRACTICES**

- 4.1 The Bidders and their respective officers, employees, agents, and advisers shall observe the highest standard of ethics during the Bidding Process and subsequent to the issue of the LOA and during the subsistence of the Contract.

Notwithstanding anything to the contrary contained herein, or in the LOA or the Contract, the Authority shall reject a Bid, withdraw the LOA, or terminate the Contract, as the case may be, without being liable in any manner whatsoever to the Bidder or successful Bidder, as the case may be, if it determines that the Bidder or successful Bidder, as the case may be, has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the Bidding Process.

In such an event, the Authority shall forfeit and appropriate the Bid Security or Performance Security, as the case may be, as Damages without prejudice to any other right or remedy that may be available to the Authority hereunder or otherwise.

- 4.2 Without prejudice to the rights of the Authority under Clause 4.1 hereinabove and the rights and remedies which the Authority may have under the LOA or the Contract, if a Bidder or service provider, as the case may be, is found by the Authority to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Bidding Process, or after the issue of the LOA or the execution of the Contract, such Bidder or service provider shall not be eligible to participate in any tender or RFP issued by the Authority during a period of 2 (two) years from the date such Bidder or service provider, as the case may be, is found by the Authority to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practices, as the case may be.
- 4.3 For the purposes of this Clause 4, the following terms shall have the meaning hereinafter respectively assigned to them:
- a) “Corrupt practice” means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Bidding Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of the Authority who is or has been associated in any manner, directly or indirectly with the Bidding Process or the LOA or has dealt with matters concerning the Contractor arising therefrom, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of the Authority, shall be deemed to constitute influencing the actions of a person connected with the Bidding Process);
  - b) “Fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition.
  - c) “Coercive practice” means impairing or harming, or threatening to impair or harm, directly or indirectly, any person or property to influence any person’s participation or action in the Bidding Process.
  - d) “Undesirable practice” means (I) establishing contact with any person connected with or employed or engaged by the Authority with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Bidding Process; or (ii) having a Conflict of Interest; and
  - e) “Restrictive practice” means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Bidding Process.

#### **4.4 Disqualifications**

Notwithstanding anything to the contrary contained in this RFP, a Bid shall be summarily rejected if the Bidder:

- a) Has made any misleading or false representation in the forms, statements, or attachments submitted as proof of meeting the qualification requirements; and/or
- b) Has a proven record of poor performance, including but not limited to abandoning works, failure to complete contracts satisfactorily, inordinate delays, adverse litigation history, or financial instability; and/or
- c) Had participated in a previous bidding process for the same work and submitted unreasonably high bid prices without furnishing a rational or acceptable justification to the Authority.

#### **5. PRE-BID CONFERENCE**

- 5.1 Pre-bid conferences /webinar of the Bidders shall be convened at the designated date, time and place provided in the DATA SHEET of the RFP. A maximum of 2 (two) representatives of each Bidder shall be allowed to participate on production of authority letter from the Bidder.
- 5.2 During the course of pre-bid conference / webinar, the Bidders shall be free to seek clarifications and make suggestions for consideration of the Authority. The Authority shall endeavour to provide clarifications and such further information as it may, at its sole discretion, consider appropriate for facilitating a fair, transparent, and competitive Bidding Process.
- 5.3 Bidders interested in attending the pre-bid meeting through the webinar (video conference) are also required to register for the same by sending an email to [cero.nca@gov.in](mailto:cero.nca@gov.in). The link for the webinar (video conference) would be shared with the interested agencies via. E-mail or uploaded on the RFP, before the commencement of the Pre-Bid meeting.
- 5.4 The Authority may also organize additional pre-bid meeting and the details regarding the same will be made available on the website of the Authority.

#### **6. MISCELLANEOUS**

- 6.1 The Bidding Process shall be governed by, and construed in accordance with, the laws of India and the Courts at Indore, Madhya Pradesh shall have exclusive jurisdiction over all disputes arising under, pursuant to and/or in connection with the Bidding Process.
- 6.2 The Authority, in its sole discretion and without incurring any obligation or liability, reserves the right, at any time, to.
  - a) suspend and/or cancel the Bidding Process and/or amend and/or supplement the Bidding Process or modify the dates or other terms and conditions relating thereto.

- b) consult with any Bidder in order to receive clarification or further information.
  - c) retain any information and/or evidence submitted to the Authority by, on behalf of, and/or in relation to any Bidder; or
  - d) independently verify, disqualify, reject, and/or accept any and all submissions or other information and/or evidence submitted by or on behalf of any Bidder.
- 6.3 It shall be deemed that by submitting the Bid, the Bidder agrees and releases the Authority, its employees, agents and advisers, irrevocably, unconditionally, fully and finally from any and all liability for claims, losses, damages, costs, expenses or liabilities in any way related to or arising from the exercise of any rights and/ or performance of any obligations hereunder, pursuant hereto and/ or in connection herewith and waives any and all rights and/ or claims it may have in this respect, whether actual or contingent, whether present or future.

## **7. NEGOTIATIONS**

- 7.1 The Authority reserves the right to initiate negotiations with the Selected Bidder (refer clause 3.3.5) in order to achieve the most advantageous outcome in line with the objectives of the project. If considered necessary, the Selected Bidder shall be formally intimated by the Authority and invited to participate in such negotiations prior to the finalization of the contract.

## 8. APPENDIX – I: FORMATS FOR TECHNICAL BID

### ANNEXURE A LETTER COMPRISING THE BID (To be forwarded on the letterhead of the Applicant)

Date:

To

The Chief Engineer,  
Narmada Control Authority (NCA),  
Narmada Sadan, Sector-B,  
Scheme No. 74, Vijay Nagar,  
Indore - 452010 (M.P.), India

**Sub: *Bid for Collection, Compilation and Verification of water utilization through Private Pumping Schemes (PPS) across all three seasons from the Narmada River and its major tributaries in Madhya Pradesh***

Dear Sir,

1. With reference to your RFP document dated \_\_\_\_\_, I/we, having examined the Bidding Documents and understood their contents, hereby submit my/our Bid for the Project. The Bid is unconditional and unqualified.
2. I/ We acknowledge that the Authority will be relying on the information provided in the Bid and the documents accompanying such Bid for selection of the Consultant/Service Provider for the aforesaid Project, and we certify that all information provided in the Bid and in Appendix I and Appendix II is true and correct; nothing has been omitted which renders such information misleading; and all documents accompanying such Bid are true copies of their respective originals.
3. This statement is made for the express purpose of our selection as a service provider / vendor / consultant for undertaking the aforesaid Project.
4. I/ We shall make available to the Authority any additional information it may find necessary, require supplementing, or authenticate the Bid.
5. I/ We acknowledge the right of the Authority to reject our Bid without assigning any reason or otherwise and hereby waive, to the fullest extent permitted by applicable law, our right to challenge the same on any account whatsoever.
6. We certify that in the last 5 (five) years, our Associate have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award, nor been expelled from any project or contract nor have had any contract terminated for breach on our part.

7. I/ We declare that:
  - a) I/ We have examined and have no reservations to the Bidding Documents, including any Addendum issued by the Authority.
  - b) I / We have examined all conditions / conducted site visit and made ourselves familiar with the local conditions / as it is scenario / and carefully understood the work which needs to be carried out by ourselves.
  - c) I/We hereby confirm that we do not have any Conflict of Interest in accordance with the provisions of the RFP.
  - d) I/We have not directly or indirectly or through an agent engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice, or restrictive practice, as defined in Clause 4 of the RFP, in respect of any tender or request for proposal issued by or any agreement entered into with the Authority or any other public sector enterprise or any Authority, Central or State; and
  - e) I/ We hereby certify that we have taken steps to ensure that in conformity with the provisions of the RFP, no person acting for us or on our behalf has engaged or will engage in any corrupt practice, fraudulent practice, coercive practice, undesirable practice, or restrictive practice.
  - f) I I/We hereby certify that neither our firm, partnership, Board of Directors, authorized representatives, nor any individuals holding positions of authority within our organization have been blacklisted, debarred, or terminated from any past work engagements within India or abroad across government, semi- government, private sector, PSUs, NGOs, or any other organizations.
8. I/ We understand that you may cancel the Bidding Process at any time and that you are neither bound to accept any Bid that you may receive nor to invite the Bidders to Bid for the Project, without incurring any liability to the Bidders, in accordance with the provisions of this RFP.
9. I/ We believe that our bid satisfies the Net Worth and Turnover criteria and meet(s) all the requirements as specified in this RFP.
10. I/ We certify that in regard to matters other than security and integrity of the country, I/ we/ Associates have not been convicted by a Court of Law or indicted or adverse orders passed by a regulatory authority which could cast a doubt on our ability to undertake the Project or which relates to a grave offence that outrages the moral sense of the community.
11. I/ We further certify that in regard to matters relating to security and integrity of the country, I/ we/ any of our/their Associates have not been charge-sheeted by any agency of the government/Authority or convicted by a Court of Law for any offence committed by us or by any of our Associates.
12. I/ We further certify that no investigation by a regulatory authority is pending either against us/ or against our Associates or against our CEO or any of our Directors/ Managers/ employees.

13. I/ We undertake that in case due to any change in facts or circumstances during the Bidding Process, we are attracted by the provisions of disqualification in terms of provisions of this RFP, we shall intimate the Authority of the same immediately.
14. I/We undertake that the Statement of Legal Capacity as per format provided at Annexure – B of the RFP document, and duly signed, is enclosed. The Power of Attorney for Signing of Bid and the Power of Attorney, as per format provided at Annexure C respectively of the RFP, are also enclosed.
15. We acknowledge that bid is qualified on the basis of Technical Capacity and Financial Capacity.
16. I/We acknowledge and agree that in the event of a change in control of an Associate whose Technical Capacity and/ or Financial Capacity was taken into consideration for the purposes of selection of the Agency under and in accordance with the RFP, I/We shall inform the Authority forthwith along with all relevant particulars and the Authority may, in its sole discretion, disqualify or withdraw the Letter of Award, as the case may be. I/We further acknowledge and agree that in the event such change in control occurs after signing of the Contract, it would, notwithstanding anything to the contrary contained in the Contract, be deemed a breach thereof, and they shall be liable to be terminated without the Authority/Authority being liable to us in any manner whatsoever.
17. I/ We understand that the Selected Bidder shall be an existing {Company/ Trust/Society/Firm\_\_\_\_\_} incorporated under relevant laws of or from outside India under equivalent laws of India.
18. I/We hereby irrevocably waive any right which we may have at any stage at law or howsoever otherwise arising to challenge or question any decision taken by the Authority in connection with the selection of the Bidder, or in connection with the Bidding Process itself, in respect of the Project and the terms and implementation thereof.
19. In the event of my/ our firm being declared as the Selected Bidder, I/we agree to enter into a Contract in accordance with the draft that has been provided to me/us prior to the Bid Due Date. We agree not to seek any changes in the aforesaid draft and agree to abide by the same.
20. I/We have studied all the Bidding Documents carefully and also surveyed the sites. I/ We understand that except to the extent as expressly set forth in the Contract, I/ we shall have no claim, right or title arising out of any documents or information provided to us by the Authority or in respect of any matter arising out of it.
21. The Contract Fee has been quoted by me/us after taking into consideration all the terms and conditions stated in the RFP, Contract, our own estimates of costs and after a careful assessment of the Site and all the conditions that may affect the Contract Fee and implementation of the Project.

22. The Bid Security in accordance with this RFP and in the form of a Bank Guarantee is attached.
23. I/We agree and understand that the Bid is subject to the provisions of the Bidding Documents. In no case, I/We shall have any claim or right of whatsoever nature if the Project / service are not awarded to me/us or our Bid is not opened.
24. I/We agree and undertake to abide by all the terms and conditions of the RFP.
25. I, the undersigned, do hereby certify that all the statements made in the required attachments are true and correct.
26. The undersigned hereby certify that neither our firm M/s. \_\_\_\_\_ have not abandoned any work of Government of India/Any State Government/any Board or Corporation under any State Government/Government of India nor any contract awarded to us have been rescinded, during last five years prior to the date of this bid.
27. The undersigned hereby authorize(s) and request (s) any bank, person, firm corporation to furnish pertinent information deemed necessary and requested by the Department to verify this statement or regarding any (our) competence and general reputation.
28. The undersigned understand and agree that further qualifying information may be requested and agrees to furnish any such information at the request of the Department/ Project implementing agency.

In witness thereof, I/we submit this Bid under and in accordance with the terms of the RFP.

Yours faithfully,

Date:

Place:

(Signature of the Authorized signatory)  
(Name and designation of the Authorized signatory)  
Name and seal of Bidder

**ANNEXURE B**  
**GENERAL INFORMATION OF BIDDER**

*(To be forwarded on the letterhead of the Applicant)*

1. Bidder's Primary information
  - a) Name<sup>1</sup>:
  - b) Country of incorporation:
  - c) Address of the {corporate headquarters and its branch office(s)/ registered office}, if any, in India:
  - d) Date of incorporation and/ or commencement of business:
  
2. Brief description of the {Company/Trust/ Society} including details of its main lines of business and proposed role and responsibilities in the Project:  
(\_\_\_\_\_)
  
3. Details of individual(s) who will serve as the point of contact/ communication for the Authority:
  - a) Name:
  - b) Designation:
  - c) Company:
  - d) Address:
  - e) Telephone Number:
  - f) E-Mail Address:
  
4. Particulars of the Authorized Signatory of the Bidder:
  - a) Name:
  - b) Designation:
  - c) Address:
  - d) Phone Number:
  
5. A statement by the **Bidder** disclosing material non-performance or contractual non-compliance in past projects, contractual disputes and litigation/ arbitration in the recent past is given below. (Attach extra sheets, if necessary.)  
(\_\_\_\_\_)

**\*Please strike out whichever is not applicable.**

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<sup>1</sup> Relevant documents/ chartered documents/ constitutional documents related to incorporation/ partnership/ proprietorship nature of the company must be attached along with this Annexure.

## Statement of Legal Capacity

*(To be forwarded on the letter head of the Applicant)*

Date:

To

The Chief Engineer,  
Narmada Control Authority (NCA),  
Narmada Sadan, Sector-B,  
Scheme No. 74, Vijay Nagar,  
Indore - 452010 (M.P.), India

**Dear Sir,**

We hereby confirm that we satisfy the terms and conditions laid out in the Bid document.

We, hereby, confirm that we satisfy the terms and conditions laid out in the Bid document.

We have agreed that Mr./Ms.....will function as our representative/ will act as the representative of the company on its behalf\* and has been duly authorized to submit the Bid. Further, the authorized signatory is vested with requisite powers to furnish such letter and authenticate the same.

Furthermore, we confirm that neither our firm, board members, nor officials have been involved in any form of unethical practices, and our company/organization has not been blacklisted by any private entity, public company, or government organization.

We have submitted our bid after carefully and detailed assessment of all site visit / all RFP / conditions / premises and considering of all costs and then we have submitted our bid. In this regard, we will not demand any further relaxations from the authority during entire contract duration.

Thanking you,

Yours faithfully,

(Signature, name, and designation of the authorized signatory)

For and on behalf of.....

**ANNEXURE C**

**POWER OF ATTORNEY FOR SIGNING OF BID**

*(To be executed on Stamp paper of appropriate value)*

Know all men by these presents, We, \_\_\_\_\_(name of the firm and address of the registered office) do hereby irrevocably constitute, nominate, appoint and authorize Mr. \_\_\_\_\_/ Ms. \_\_\_\_\_(Name), son/daughter/wife of \_\_\_\_\_and presently residing at \_\_\_\_\_, who is {presently employed with us and holding the position of \_\_\_\_\_,} as our true and lawful attorney (hereinafter referred to as the “Attorney”) to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our bid **Collection, Compilation and Verification of water utilization through Private Pumping Schemes (PPS) across all three seasons from the Narmada River and its major tributaries in Madhya Pradesh**(“Project”) proposed or being developed by the Narmada Control Authority (the “Authority”) including but not limited to signing and submission of all applications, bids and other documents and writings, participate in bidders’ meetings and other conferences and providing information /responses to the Authority, representing us in all matters before the Authority, signing and execution of all documents and undertakings consequent to acceptance of our bid, and generally dealing with the Authority in all matters in connection with or relating to or arising out of our bid for the Project and/or upon award thereof to us and/or till the entering into of the Contract with the Authority or any entity representing the Authority.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things lawfully done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE, \_\_\_\_\_, THE ABOVE NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS DAY OF \_\_\_\_\_, 20\*\*.

For

.....

Witnesses:

(Name, Title, and Address) 1.

2.

[Notarized]

Accepted.....

(Signature)

(Name, Title, and Address of the Attorney)

Notes:

- The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.

- Wherever required, the Bidder should submit for verification of the extract of the charter documents and documents such as a resolution/ power of attorney in favor of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.
- Power of Attorney should be executed on a non-judicial stamp paper of appropriate value as relevant to the place of execution (if required under Applicable Laws).
- For a Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney is being issued.
- The Power of Attorney is not mandatory in the case of proprietorship firm and bidder will be sole responsible of the firm. However, in case of partnership firm (JV)/ LLP / Limited firm, the all partners register under the partnership deeds are required to sign this power of attorney in order to grant of the power to any designated person.

**ANNEXURE D**

**AFFIDAVIT**

(Refer Clause)

**(To be submitted on Rs.300 non-judicial stamp duly notarized)**

1. I, the undersigned, do hereby certify that all the statements made in the required attachments are true and correct.
2. The undersigned also hereby certifies that neither our firm M/s. \_\_\_\_\_ have not abandoned any work of any State Government/Government of India/any Board or Corporation under any State Government/Government of India nor any contract awarded to us for such works have been rescinded, during last five years prior to the date of this bid.
3. The undersigned hereby authorize(s) and request (s) any bank, person, firm or corporation to furnish pertinent information deemed necessary and requested by the Department to verify this statement or regarding any (our) competence and general reputation.
4. The Undersigned understands and agrees that further qualifying information may be requested, and agrees to furnish any such information at the request of the Department/ Project implementing agency.

\_\_\_\_\_  
(Signed by an Authorized Officer of the Firm)

\_\_\_\_\_  
Title of Officer

\_\_\_\_\_  
Name of Firm

\_\_\_\_\_  
Date

## ANNEXURE E

### FORMAT FOR BID SECURITY (BANK GUARANTEE)

*(To be executed on Stamp paper of appropriate value)*

B.G.No.

Dated:

In consideration of you, the Narmada Control Authority, having its office at Narmada Sadan, Sector-B, Scheme No. 74, Vijay Nagar, Indore - 452010 (M.P.), India (hereinafter referred to as the "Authority", which expression shall unless it be repugnant to the subject or context thereof include its, successors and assigns) having agreed to receive the Bid of .....{a Company registered under the provisions of the Companies Act/a society registered under Society Registration Act, 1860 or any other Indian law for registration of societies/a trust registered under the Indian Trusts Act, 1882 or any other Indian law for registration of public trust} and having its registered office at ..... (hereinafter referred to as the "Bidder" which expression shall unless it be repugnant to the subject or context thereof include its/their executors administrators, successors and assigns), for ..... (hereinafter referred to as the "Project") pursuant to the RFP Document dated \_\_\_\_\_ issued in respect of the Project and other related documents (hereinafter collectively referred to as "Bidding Documents"), we [Name of the Bank] having our registered office at \_\_\_\_\_ and one of its branches at \_\_\_\_\_ (hereinafter referred to as the "Bank"), at the request of the Bidder, do hereby irrevocably, unconditionally and without reservation guarantee the due and faithful fulfilment and compliance of the terms and conditions of the Bidding Documents (including the RFP) by the said Bidder and unconditionally and irrevocably undertake to pay forthwith to the Authority an amount of Rs. .... (Rupees .....only) as bid security (hereinafter referred to as the "Bid Security") as our primary obligation without any demur, reservation, recourse, contest or protest and without reference to the Bidder if the Bidder shall fail to fulfil or comply with all or any of the terms and conditions contained in the said Bidding Documents.

1. Any such written demand made by the Authority stating that the Bidder is in default of the due and faithful fulfilment and compliance with the terms and conditions contained in the Bidding Documents shall be final, conclusive, and binding on the Bank.
2. We, the Bank, do hereby unconditionally undertake to pay the amounts due and payable under this Guarantee without any demur, reservation, recourse, contest or protest and without any reference to the Bidder or any other person and irrespective of whether the claim of the Authority is disputed by the Bidder or not merely on the first demand from the Authority stating that the amount claimed is due to the Authority by reason of failure of the Bidder to fulfil and comply with the terms and conditions contained in the Bidding Documents including interilic the failure of the Bidder to:
  - (a) Keep its Bid valid and open during the Bid validity period, as set forth in the said Bidding Documents, for any reason whatsoever.
  - (b) Sign the Letter of Award and/or the Contract, within the specified time limit.
  - (c) Furnish the Performance Security within the period prescribed thereof in the Contract.

Any such demand made on the Bank shall be conclusive as regards amount due and payable by the Bank under this Guarantee. However, our liability under this Guarantee shall be restricted to an amount not exceeding Rs..... (Rupees ..... only).

3. This Guarantee shall be irrevocable and remain in full force for a period of 165 (One Hundred and Sixty-Five) days from the Bid Due Date exclusive of a claim period of 60 (sixty) days or for such extended period as may be mutually agreed between the Authority and the Bidder, and agreed to by the Bank, and shall continue to be enforceable till all amounts under this Guarantee have been paid.

We, the Bank, further agree that the Authority shall be the sole judge to decide as to whether the Bidder is in default of due and faithful fulfilment and compliance with the terms and conditions contained in the Bidding Documents including, inter alia, the failure of the Bidder to keep its Bid open during the Bid validity period set forth in the said Bidding Documents. The decision of the Authority, that the Bidder is in default as aforesaid shall be final and binding on us, notwithstanding any differences between the Authority and the Bidder or any dispute pending before any court, tribunal, arbitrator, or any other authority.

4. The Guarantee shall not be affected by any change in the constitution or winding up of the Bidder or the Bank or any absorption, merger or amalgamation of the Bidder or the Bank with any other person.
5. In order to give full effect to this Guarantee, the Authority shall be entitled to treat the Bank as the principal debtor. The Authority shall have the fullest liberty without affecting in any way the liability of the Bank under this Guarantee from time to time to vary any of the terms and conditions contained in the said Bidding Documents or to extend time for submission of the Bids or the Bid validity period or the period for conveying acceptance of Letter of Award by the Bidder or the period for fulfilment and compliance with all or any of the terms and conditions contained in the said Bidding Documents by the said Bidder or to postpone for any time and from time to time any of the powers exercisable by it against the said Bidder and either to enforce or forbear from enforcing any of the terms and conditions contained in the said Bidding Documents or the securities available to the Authority, and the Bank shall not be released from its liability under these presents by any exercise by the Authority of the liberty with reference to the matters aforesaid or by reason of time being given to the said Bidder or any other forbearance, act or omission on the part of the Authority or any indulgence by the Authority to the said Bidder or by any change in the constitution of the Authority or its absorption, merger or amalgamation with any other person or any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of releasing the Bank from its such liability.
6. Any notice by way of request, demand or otherwise hereunder shall be sufficiently given or made if addressed to the Bank and sent by courier or by registered mail to the Bank at the address set forth herein.
7. We undertake to make the payment on receipt of your notice of claim on us addressed to [*name of Bank along with branch address*] and delivered at our above branch which shall be deemed to have been duly authorized to receive the said notice of claim.
8. It shall not be necessary for the Authority to proceed against the said Bidder before proceeding against the Bank and the guarantee herein contained shall be enforceable against the Bank, notwithstanding any other security which the Authority may have obtained from

the said Bidder or any other person and which shall, at the time when proceedings are taken against the Bank hereunder, be outstanding or unrealized.

9. We, the Bank, further undertake not to revoke this Guarantee during its currency except with the previous express consent of the Authority in writing.
10. The Bank declares that it has power to issue this Guarantee and discharge the obligations contemplated herein, and the undersigned is duly authorized and has full power to execute this Guarantee for and on behalf of the Bank.

Signed and delivered by \_\_\_\_\_ Bank.

By the hand of Mr./Ms. \_\_\_\_\_, its \_\_\_\_\_ and authorized official.

(Signature of the Authorized Signatory)

(Official Seal)

**ANNEXURE F**  
**(Undertaking For Bid Validity)**  
*(Refer Clause)*

I, the undersigned do hereby undertake that our firm M/s ..... agree to abide by this bid for a period ..... days for date fixed for receiving the same and it shall be binding on us and may be accepted at any time before the expiration of that period.

(Signed by an Authorized officer of the firm)

Title of officer

Name of firm

Date

**ANNEXURE G**  
**TECHNICAL CAPACITY OF BIDDER**  
*(Refer to Clause 2.2.2 of the RFP)*

The information regarding the relevant experience of the firm should be provided in the format below for each experience shown by the bidder.

Name of Bidder:

**Form G-A (Listing of All Experience as index)**

Sr.No	Name of Project	Name of Client	Project Cost (INR Crore)	Nature of Services Provided	Completion Date	Status of Project
1						
2						
3						

**FORM G-B: (For each experience showcased)**

Experience: (Similar nature)	
Project Name:	Location of Project:
Project Brief (Narrative description of Project)	Project Specifications:
Description of actual Contract / services provided:	
Name of Client:	Address of Client:
	Contact phone number and e-mail of Client:
Start date (month/year):	Value of Project:
Completion date (month/year):	Value of Services:

**Signature of Bidder**

The Project Data Sheets should necessarily be accompanied from clients for successful completion of Contract, as proof of experience. The proof of the total Project cost, services offered, extent of completion, completion year and description of the services offered must be provided by the Bidder for consideration as a sufficient proof of experience. Projects without proof of experience shall not be considered for evaluation.

**ANNEXURE H**  
**FINANCIAL CAPACITY OF BIDDER**

(To be certified by the **statutory auditor** of Bidder/ along with the separate certificate of statutory auditor of respective Members)  
(Refer to Clause 2.2.2 of the RFP)

<b>Financial Year</b>	<b>Annual Turnover (In INR)</b>
<b>FY 2021-22</b>	
<b>FY 2022-23</b>	
<b>FY 2023-24</b>	
<b>FY 2024-25</b>	
<b>FY 2025-26</b>	

Name & address of Bidder's business details:

Statutory Auditor's Name & Stamp

UDIN Number

**Instructions:**

1. In case of Joint Ventures, the Lead Partner must independently meet at least 50% of the required turnover and each other partner must meet at least 25% of the turnover criteria. The JV must collectively meet 100% of the turnover specified in the RFP.
2. The Bidder shall attach copies of the balance sheets, financial statements, and Annual Reports in accordance with the RFP.

The statements shall be accompanied by following documents:

- b. Reflect the financial situation of the Bidder.
- c. Be audited by a statutory auditor.
- d. be complete, including all notes to the financial statements; and
- e. Corresponds to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted).
- f. Images of factory / plant / workshop

**ANNEXURE I  
BID CHECKLIST**

S. No	Item (Tick as applicable)	Checked by Bidder	Checked by Authority
1	Letter comprising the Bid. (Appendix – I – <u>ANNEXURE A</u> );		
2	General Information of Bidder & Statement of the Legal Capacity (Appendix – I - <u>ANNEXURE B</u> )		
3	Power of Attorney for signing of Bid in the prescribed format (Appendix – I – <u>ANNEXURE C</u> );		
4	AFFIDAVIT (Appendix – I - <u>ANNEXURE D</u> );		
5	Bid Security in the prescribed format. (Appendix – I - <u>ANNEXURE E</u> );		
6	UNDERTAKING for Bid Validity (Appendix – I - <u>ANNEXURE F</u> );		
7	Technical Capacity of the Bidder (Appendix – I - <u>ANNEXURE G</u> );		
8	Financial Capacity of the Bidder (Appendix – I - <u>ANNEXURE H</u> );		
9	Bid Checklist (Appendix – I - <u>ANNEXURE I</u> ),		
10	Format for Undertaking of Investment (Appendix – I <u>ANNEXURE J</u> )		
11	Bid Capacity (Appendix – I - <u>ANNEXURE K</u> )		
12	List of Key Plant & Equipment to be Deployed (Appendix – I - <u>ANNEXURE L</u> )		
13	List of Key Personal to be Deployed for this Project (Appendix – I <u>ANNEXURE M</u> )		
14	CV/Biodata format for Key (Appendix – I - <u>ANNEXURE N</u> )		
15	Joint Venture agreement (Appendix – I - <u>ANNEXURE O</u> )		
16	A copy of the Contract with each page initially by the person signing the Bid in pursuance of the Power of Attorney.		
17	All Addendum, Corrigendum and responses to Pre Bid Queries published by the Authority with each		

	page initialized by the person signing the Bid in pursuance of the Power of Attorney.		
18	A copy of the RFP each page initialled by the person signing the Bid in pursuance of the Power of Attorney		
19	Copy of proof of payment of the Tender Fee and EMD		

**ANNEXURE J:**

**Format for Undertaking of Investment**

(Undertaking for Commitment to Invest Minimum Cash During Implementation as per Clause 2.2.2 on bidder's letterhead)

To

The Chief Engineer,  
Narmada Control Authority (NCA),  
Narmada Sadan, Sector-B,  
Scheme No. 74, Vijay Nagar,  
Indore - 452010 (M.P.), India

**Subject: Undertaking to Invest Minimum Cash for Project Implementation**

Dear Sir/Madam,

I, the undersigned, hereby undertake that our firm, M/s \_\_\_\_\_, having its registered office at \_\_\_\_\_, shall invest a minimum cash equivalent to 25% (twenty-five percent) of the total contract value during the implementation phase of the contract, if awarded to us.

This commitment is made in accordance with the requirements stipulated in the Request for Proposal (RFP) and shall be fulfilled without fail to ensure the financial sufficiency and timely execution of the project.

I confirm that I am duly authorized to sign this undertaking on behalf of the firm and that this declaration is legally binding on our organization.

\_\_\_\_\_  
Signed by an Authorized officer of the firm

\_\_\_\_\_  
Title of officer

\_\_\_\_\_ Name of  
firm

\_\_\_\_\_  
DATE

**ANNEXURE K:  
Bid Capacity**

*(To be certified by the Statutory Auditor / Chartered Accountant of the Bidder, along with separate certificates)*

**Details of Existing Commitments and Ongoing Works  
(As on the last date of Bid Submission)**

S.No	Description of Works	Location (Place & State)	Contract No.	Name & Address of Employer	Total Contract Value (INR Crore)	Stipulated Period of Completion	Value of Work Remaining (INR Crore)	Anticipated Date of Completion
1								
2								
3								

**\*Attach certificate (s) from the Engineer(s) in-charge**

**Certification by Statutory Auditor / Chartered Accountant**

**I hereby certify that the information presented above is true and correct to the best of my knowledge and belief and is based on the verified records and audited financial statements of the Bidder. Further, the bidder is certified capacity holder to execute this project as per this RFP.**

Name & address of Bidder's business details:

Statutory Auditor's Name & Stamp

UDIN Number

**ANNEXURE L:**  
**List of Key Plant & Equipment to Be Deployed on Contract Work**  
(On letterhead of the firm)

<b>Sr. No</b>	<b>Plant or Machinery</b>	<b>Location</b>	<b>Age of Machinery (Max:15 years)</b>	<b>Make</b>	<b>Capacity</b>	<b>Approx value (INR)</b>	<b>Remarks</b>
<b>1</b>							
<b>2</b>							
<b>3</b>							

## ANNEXURE M:

### **List of Key Personnel to be Deployed for this Project** (To be submitted by the Bidder as part of the Technical Proposal)

#### **Minimum Required Technical Personnel:**

The Contractor shall employ full-time, technically qualified personnel for the execution of the contract work. The minimum key personnel required are as follows:

<b>S. No.</b>	<b>Designation</b>	<b>Minimum Qualification</b>	<b>Minimum Experience</b>	<b>Quantity</b>
1	Team Leader	Postgraduate in any field of Engineering or Graduate in any field of Engineering	15 years (PG) / 20 years (Graduate)	1
2	Water Resources Engineer	Postgraduate in Water Resource Engineering	10 years	1
3	GIS Expert	Postgraduate in Remote Sensing or Computer Science Engineering	10 years	1
4	Data Compiler (CS/Civil/Mechanical Engineer)	Graduate in CS/Civil/Mechanical Engineering	10 years	3
5	Power Boats Surveyors	Any Graduate	5 years	4
6	Vehicle Surveyors	Any Graduate	5 years	4

*CV/bio data of personal to be deployed in a prescribed format may be attached with the tender. (ANNEXURE-N)*

Apart from above list, the following be ensured as minimum requirement:

- a) Drivers for Vehicle: 04 Nos
- b) Power Boat operator: 04 Nos
- c) Drone operator: 02 Nos
- d) Procurement of Satellite Imageries: Area covering Narmada River & Tributaries

**Note:**

- A required number of personnel of all necessary domains (Civil, Mechanical, Water Resources etc.) (as outlined above) shall also be deputed at the site so that all works could be completed by approved methodology & technical specifications to achieve the desired quality.
- The contractor shall submit the names, qualifications, colour photographs, and appointment orders of all designated personnel to the Engineer-in-Charge within 15 days of issuance of LOA.
- Failure to comply within the stipulated 15-day period shall attract a non-refundable penalty of INR 1,000 per personal per day, recoverable from any dues/bills/security deposit of the contractor.
- The above-listed personnel are considered minimum essential technical staff.
- The contractor is required to deploy additional qualified personnel as needed to ensure project completion within the stipulated timeline, scope, and technical specifications outlined in this RFP.

## ANNEXURE - [N]:

### CURRICULUM VITAE (CV) FOR PROPOSED KEY PERSONNEL

(To be submitted on the Letterhead of the Firm)

#### 1. PROPOSED POSITION

[e.g., Project Manager / Senior Consultant / Quality Control Engineer]

#### 2. PERSONAL DATA

- **Name of Personnel:** \_\_\_\_\_
- **Current Designation:** \_\_\_\_\_
- **Date of Birth:** [DD/MM/YYYY]
- **Nationality:** Indian
- **Years with Firm:** [Number] Years

#### 3. EDUCATIONAL QUALIFICATIONS (List from highest degree downwards)

Degree/Diploma	Year of Passing	Institute/University	Specialization

#### 4. TOTAL PROFESSIONAL EXPERIENCE

- **Total Years of Experience:** \_\_\_\_\_ Years
- **Relevant Experience in Similar Projects:** \_\_\_\_\_ Years

#### 5. EMPLOYMENT RECORD (Starting with the current position)

From (Year)	To (Year)	Name of Employer	Position Held

#### 6. RELEVANT PROJECT EXPERIENCE (LAST 10 YEARS) (Highlight projects related to the current Tender / Narmada Basin / PWD Works)

- **Project 1 Name:** \_\_\_\_\_
- **Client Name:** [e.g., CPWD / PWD / NHAI]
- **Project Cost (in Rs. Cr):** \_\_\_\_\_
- **Responsibilities:** \_\_\_\_\_
- **Project 2 Name:** \_\_\_\_\_
- **Client Name:** \_\_\_\_\_
- **Project Cost (in Rs. Cr):** \_\_\_\_\_
- **Responsibilities:** \_\_\_\_\_

## 7. LANGUAGE PROFICIENCY

- **English:** [Read / Write / Speak]
- **Hindi:** [Read / Write / Speak]

## 8. CERTIFICATION

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes my qualifications and my experience. I understand that any willful misstatement described herein may lead to my disqualification or dismissal, if engaged.

**Signature of Personnel:** \_\_\_\_\_

**Date:** [DD/MM/YYYY]

**Counter-signature of Authorized Representative:** \_\_\_\_\_

*(With Seal of the Firm)*

## ANNEXURE - [O]:

### JOINT VENTURE AGREEMENT

#### 1. FORM OF AGREEMENT

This Joint Venture Agreement was made on the        day of 2026 between two parties:

....., with its office  
at..... acting as the First Party.  
....., with its office at  
..... acting as the Second  
Party.

Hereinafter referred to individually as a "Party" and collectively as "Parties". NOW THEREFORE THE PARTIES INTENDING TO BE EXCLUSIVELY BOUND, AGREE AS FOLLOWS:

#### 2. PURPOSE AND SCOPE

The Parties have associated themselves into a Joint Venture for the preparation and submission of proposal for the work “Collection, Compilation and Verification of water utilization through Private Pumps from the Narmada River including major tributaries in Madhya Pradesh, covering all three seasons from Amarkantak to the Gujarat Border” (hereinafter referred to as the "Client").

#### 3. DUTIES AND RESPONSIBILITIES

The form and style of co-operation between the Parties shall be as follows:

- A. The Parties shall use their best efforts to obtain from the Client the award of the Services Agreement for the Proposal and shall enter into such Contracts upon mutual agreement between the three Parties.
- B. Each of the member of Joint Venture shall be jointly and severally responsible for fulfilling the services to be required in terms of Reference.
- C. Alluvium shall be the Lead Partner, and Vassar Labs shall be the Partner of this Joint Venture.
- D. In case the Joint Venture is selected by the Client for the award of the contract, either the representatives of all the Parties or the authorized representative of the Joint Venture shall participate in the contract negotiations and sign the contract with the Client.
- E. In Case the Joint Venture is selected by the Client for the award of the contract, Vassar Labs will raise the invoices on behalf of the Joint Venture

#### 4. RESPONSIBILITY MATRIX

The roles and responsibilities of each party in the JV are defined in the tasks submitted in the final tender.

#### 5. EXCLUSIVITY

The Parties shall co-operate on the basis of exclusivity, i.e., neither of them shall enter into an arrangement with any other firm on matters falling under the scope of this Agreement. Each of the Parties warrants that the principle of exclusivity shall also be adhered to by its subsidiaries, and other firms over which it may exercise control.

#### 6. ASSIGNABILITY

No Party shall assign, sell, transfer or in any way encumber its interests in the Consortium without first obtaining the consent in writing of the other Party.

**7. COST**

Each Party shall bear its own cost incurred during the pre-contract stage unless otherwise any mutual agreements are made between the two Parties.

**8. CONFIDENTIALITY**

This Agreement and any information, data, intellectual property of other material in the possession of or which comes into the possession of a Party pursuant to this Agreement or otherwise in respect of the Proposal, shall maintained in strict confidence and shall not be divulged or disclosed by the recipient Party, directly or indirectly, to any person other than as is necessary to perform that Party's responsibilities under this Agreement. No Party may use any information, data, intellectual property or other material to which this paragraph applies for any purposes other than the purposes contemplated by this Agreement and acceptance of the Proposal by the Client.

**9. DURATION OF AGREEMENT**

The present Agreement shall be in force as per the contract agreement period agreed with the client with respect to the RFP for work “Collection, Compilation and Verification of water utilization through Private Pumps from the Narmada River including major tributaries in Madhya Pradesh, covering all three seasons from Amarkantak to the Gujarat Border”

**10. IP (Intellectual Property)**

The IP for all the work done as a part of this services engagement will be governed by the contract entered to between the client and the JV. This software system will be developed using preconfigured platforms and tools built on open source software, proprietary to M/S Vassar Labs IT Solutions Pvt Ltd which holds complete ownership rights to proprietary tools and platforms used to build the software and DSS. Licensing agreements for open source software used to build the tools and platforms are governed by their respective and appropriate licensing agreements.

**11. COMMERCIAL**

Commercial distributions for the JV are defined in Annexure.....

**12. AMENDMENT**

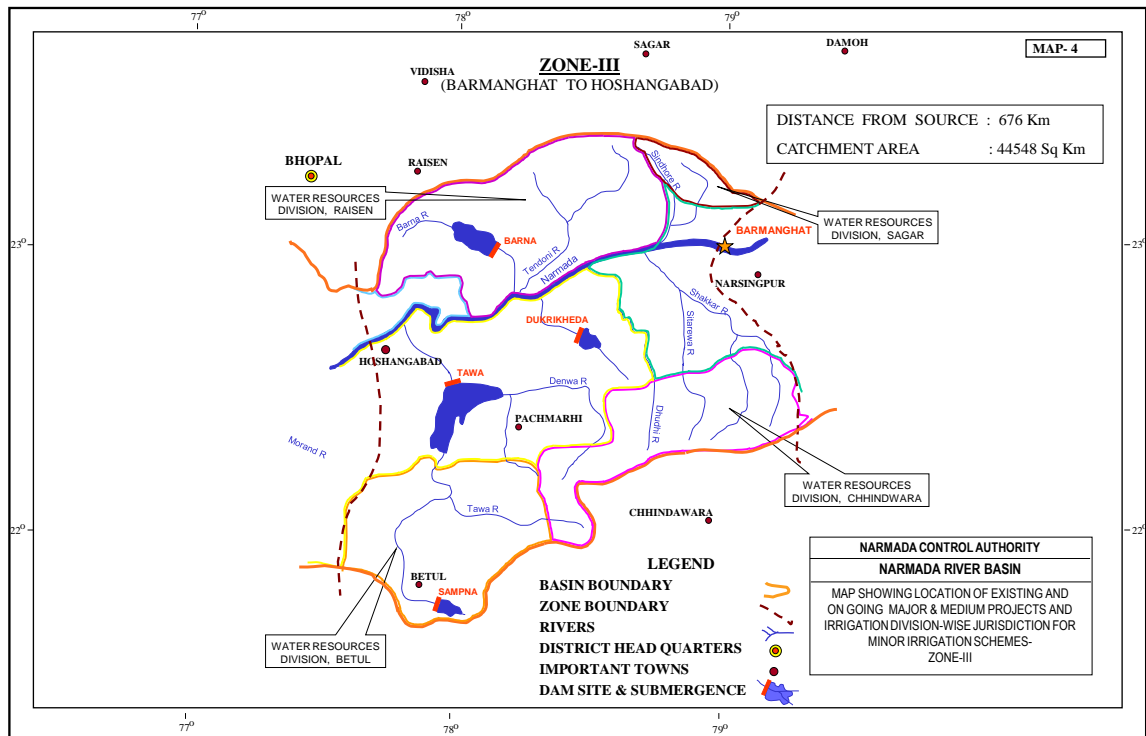
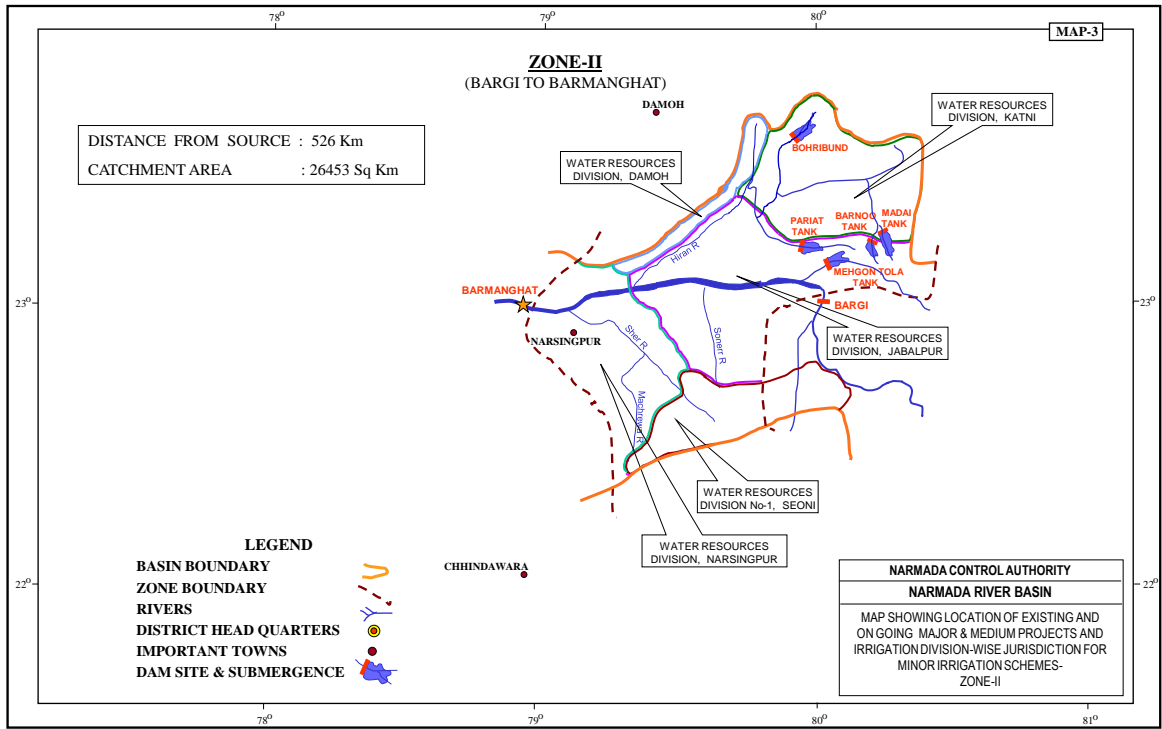
Any amendment or modification to this Agreement must be mutually agreed in writing before it can become effective.

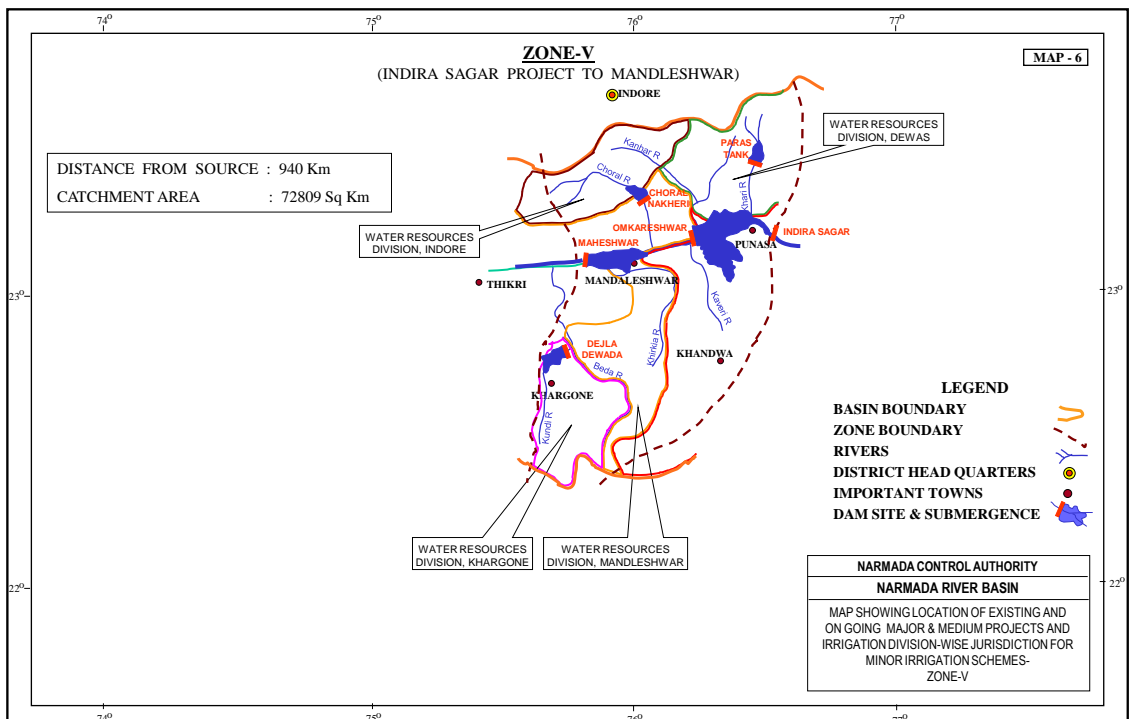
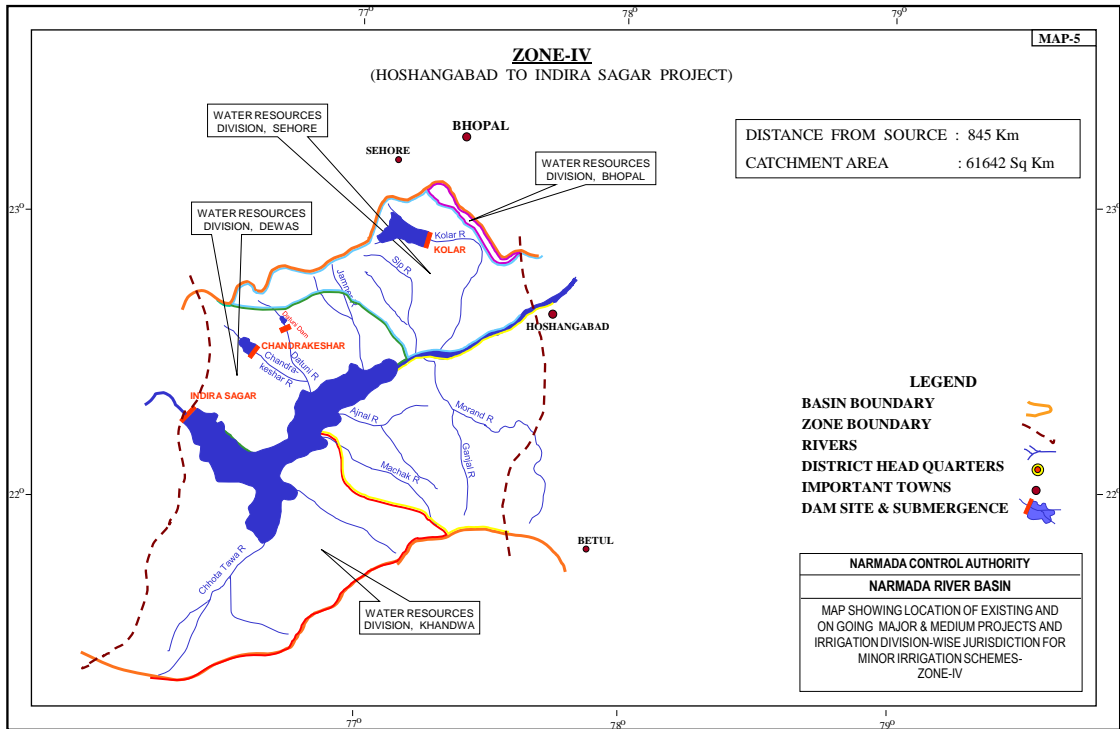
This Joint Venture Agreement is made in one original and its copies are retained by the Parties.

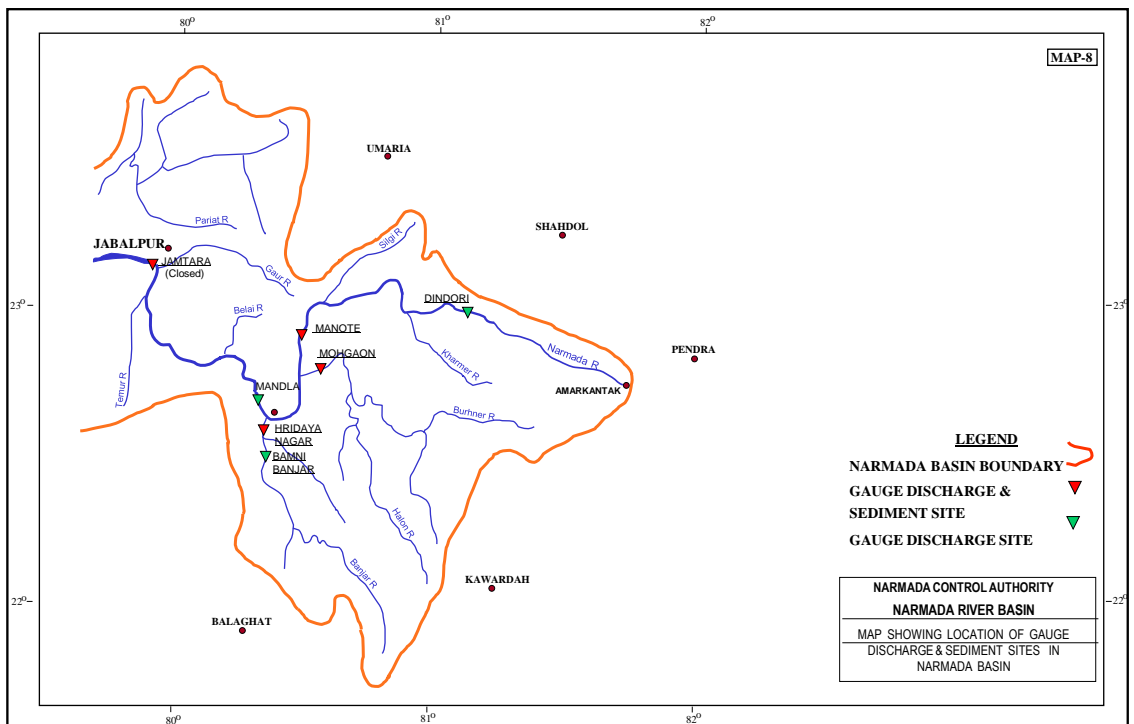
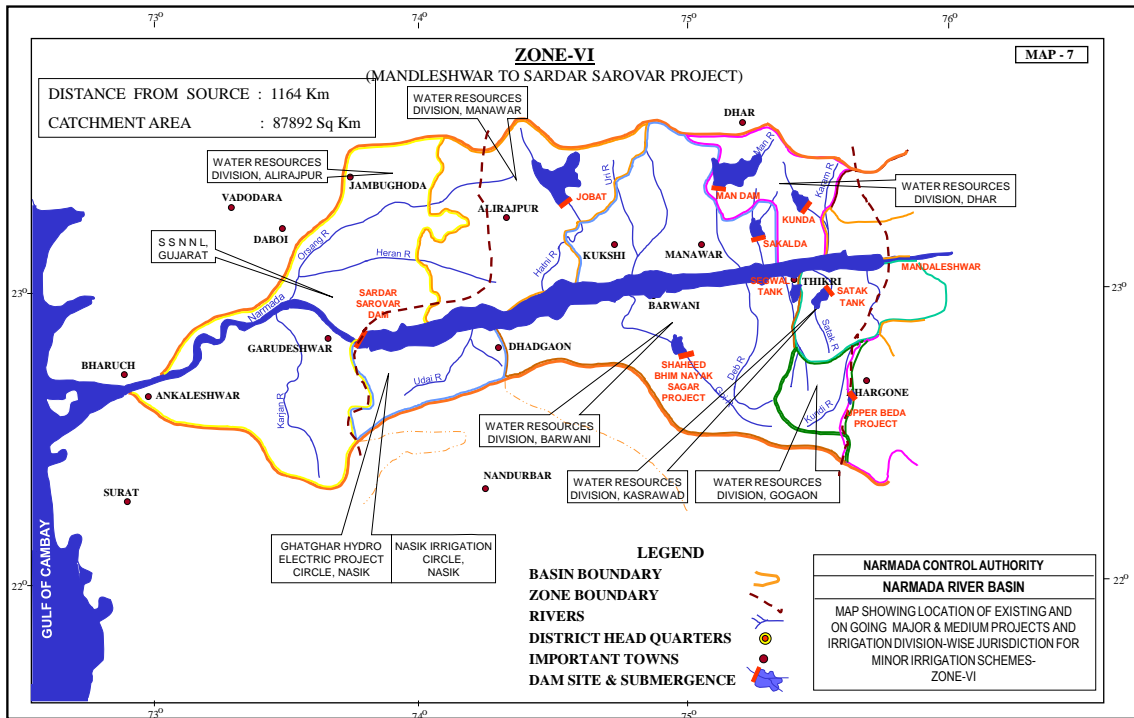
IN WITNESS WHEREOF, the parties hereto have caused this Joint Venture Agreement to be signed in their respective names as of the day and year first above mentioned.

For and on behalf of	For and on behalf of
----------------------	----------------------











## 9. APPENDIX – II: FORMAT FOR FINANCIAL BID

### Financial Proposal

(For indicative and illustrative purposes only- The Financial Proposal shall only be submitted in the online form in e-Procurement Portal)

Sr. No.	Particulars	Unit	Quantity*	Rate (₹)	Amount (₹)
1	Collection, Compilation and Verification of water utilization through Private Pumping Schemes (PPS) across all three seasons from the Narmada River and its major tributaries in Madhya Pradesh	Lump Sum	1	--	<b>Total Project Cost 3.32 Cr approx (Exclusive of GST)</b>

Note:

- **Cost Component:**

The cost shall be inclusive of manpower, equipment (needed at field and office), procurement of data complying of specifications stipulated in the RFP document etc. proposed by bidder as per provisions mentioned in RFP. The details need to be provided for execution of works.

- **Submission Format:**

The Bidder shall upload the Financial Proposal as per Schedule 10 through the designated e-Procurement Portal. The Financial Proposal must be submitted in Indian Rupees (INR) only.

- **Taxes and Duties:**

**The Contract Price shall be exclusive of applicable GST**, which will be paid additionally by the Authority as per the Contract. However, all other applicable taxes, duties, cess, levies, and statutory obligations required for the execution of services under this Contract shall be borne solely by the Bidder. The Authority shall not be liable to pay any amount over and above the quoted price, except GST. TDS and other statutory deductions shall be made as per applicable laws.

- **Basis of Financial Evaluation:**

The total quoted amount, as per online BoQ, shall be considered the sole basis for Financial Bid evaluation. However, the actual payment shall be made based on actual quantities utilized and certified by the Authority during execution.

- **Unreasonable Pricing Clause:**

Any unreasonably low or abnormally high quotes submitted as part of the financial bid may be considered an unfair practice intended to secure the Contract, and such bids may be summarily rejected by the Authority without further consideration.

- **Completeness and Finality of Financial Proposal:**

The Authority will assess whether the Financial Proposal is complete, unqualified, and unconditional. The quoted amount shall be considered final and binding. Any omission in pricing any item shall not entitle the Bidder to additional compensation. The Bidder shall be fully responsible for delivering all components of the scope of work within the quoted price.

## DOCUMENTS TO BE FURNISHED BY BIDDER

<b>❖ Minimum requirements for the evaluation of technical stage:</b>		
Sr. No.	Name of Document	As outlined in RFP
1	Tender Fee	<u>Clause-1.3.5</u>
2	EMD/Bid Security	<u>Clause-1.3.5</u>
3	Registration Certificate	<u>Clause-2.2.1(iii)</u>
4	Joint Venture Agreement (If applicable)	<u>Clause-2.2.1(iii)</u>
<b>Financial Criteria:</b>		
<b>Bid Capacity</b>		
5	Attached Scan Copy of Existing Commitment & On-going Works	<u>Clause-2.2.2</u>
<b>Minimum Annual Financial Turnover</b>		
6	Attached Copy of Annual Financial Turnover Certificate last 5 years	<u>Clause-2.2.2</u>
<b>Similar Work Experience</b>		
7	Attached Copy of Experience Relevant Works/Projects Completed last 5 years	<u>Clause-2.2.2</u>
8	GST Number	<u>Clause-2.2.2</u>
10	Attach Scan Copy of Proposed Work Method & Schedule	
11	Attach Scan Copy of Work Program	
12	Attach Scan Copy of List of Plant & Equipment	
13	Attach Scan Copy of Availability of Key Personnel	
14	Attach Scan Copy of Constitution or Legal Status of Bidder	
15	Attach Scan Copy of Undertaking for Bid Validity	<u>Clause-2.16</u>
16	Attach Scan Copy of Power of Attorney/Partnership Deed	<u>Clause-2.1.9</u>
17	Attach Scan Copy of Litigation History	
18	Attach Scan Copy of Additional Requirements (i) Affidavit	<u>Clause-2.1.13</u>
19	Attach Scan Copy of Additional Requirements (ii) Undertaking	<u>Clause-2.1.13</u>
<b>Minimum requirements for the evaluation of financial stage:</b>		
1	Online submission of rates/quote	<u>Clause-2.1.6</u>

# CONTRACT FOR CONSULTANCY / SURVEY SERVICES

**THIS CONTRACT** (hereinafter referred to as the "**Contract**" or "**Agreement**") is entered into at **Indore, Madhya Pradesh** on this [●] day of [●], 20\_\_ (the "**Effective Date**"),

## **BY AND BETWEEN:**

**1. Narmada Control Authority**, an inter-state administrative body set up by the Government of India, having its office at **Narmada Sadan, Sector-B, Scheme No. 74, Vijay Nagar, Indore - 452010 (M.P.), India** (hereinafter referred to as the "**Authority**", which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors, and assigns) of the **ONE PART**.

## **AND**

**2. {[Insert Name of the Selected Bidder]}**, a Company/Firm incorporated under the provisions of the [**Companies Act, 2013 / Partnership Act, 1932**] and having its registered office at [●], (hereinafter referred to as the "**Consultant**" or "**Service Provider**", which expression shall, unless repugnant to the context or meaning thereof, include its successors, permitted assigns and substitutes) of the **OTHER PART**.)

For the purpose of this Contract, both the "Authority" and the "Consultant" are collectively referred to as the "**Parties**" and individually as a "**Party**".

## **WHEREAS:**

- (A) The **Narmada Control Authority (NCA)** is responsible for the implementation of the directions and decisions of the Narmada Water Disputes Tribunal (NWDT) and for the overall water resource management in the Narmada Basin. In line with this objective, the Authority has envisaged undertaking a project for **Verification of water utilization data from Private Pumping in the Narmada River Basin, covering all three seasons, across the stretch from Amarkantak, Madhya Pradesh to the Gujarat Border including the major tributaries of Narmada**. (Hereinafter referred to as the "**Project**").
- (B) The Authority invited proposals for the selection of an Agency/Consultant for the Project via its Request for Proposal (RFP)
- (C) After the evaluation of the proposals received, the Authority has accepted the Bid of the **{Consultant}** and issued its Letter of Award (LOA) requiring the execution of this Contract.
- (D) The Selected Bidder has requested the Authority to accept it as the entity which shall undertake and perform the obligations and exercise the rights of the Selected Bidder including the obligation to enter into this Contract pursuant to the LOA for executing the Project.

(E) The Authority has agreed to the said request and has accordingly agreed to enter into this Contract with the **Consultant** for execution of the Project, subject to and on the terms and conditions set forth hereinafter.

**NOW THEREFORE**, in consideration of the premises, the covenants set forth herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

## ARTICLE 1: DEFINITIONS AND INTERPRETATION

**1.1 Definitions** All capitalized terms used in this Contract shall, unless the context otherwise requires, have the meanings ascribed to them in **Schedule 1 (Definitions)**.

1.2 Interpretation In this Contract, unless the context otherwise requires:

1.2.1 Reference to the singular shall include reference to the plural and vice-versa and a reference to any gender shall include a reference to the other genders.

1.2.2 The headings in this Contract are included for ease of reference and shall not affect the meaning or the interpretation of this Contract.

1.2.3 The Schedules to this Contract form an integral part of this Contract and will be of full force and effect.

1.2.4 The preamble and the recitals shall form an integral part of this Contract.

1.2.5 Unless the context otherwise requires, a reference to any clause, recital, schedule shall be to a Clause, Recital, Schedule of this Contract respectively.

1.2.6 Reference to any law or regulation includes a reference to that law or regulation as amended, modified, supplemented, extended, or re-enacted from time to time.

1.2.7 Reference to time shall be construed as a reference to Indian Standard Time. Any reference to calendar shall be construed as reference to the Gregorian calendar.

1.2.8 The words "include" or "including" shall be deemed to be followed by "without limitation" or "but not limited to".

1.2.9 Unless the context otherwise requires, any period of time referred to shall be deemed to expire at the end of the last date of such period.

1.2.10 In case of any discrepancy between words and figures, the words shall prevail over the figures.

1.2.11 Whenever provision is made for the giving of notice, approval, or consent by any Person, unless otherwise specified, such notice, approval or consent shall be in writing.

1.2.12 Provisions including the word "agree", "agreed", "agreement" require the agreement to be recorded in writing.

1.2.13 the terms "written" or "in writing" mean hand-written, type-written, printed or electronically made, and resulting in a permanent record.

1.2.14 any reference to a document is to that document as amended, varied, or negated from time to time.

1.2.15 unless expressly provided otherwise, any documentation required to be provided by the Consultant to the Authority shall be provided free of cost and in three copies.

1.2.16 The rule of construction, if any, that a contract should be interpreted against the parties responsible for the drafting and preparation thereof, shall not apply.

### **1.3 Priority of Documents**

1.3.1 The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence: (a) The Contract Agreement; (b) The Letter of Award (LOA); (c) The Terms of Reference (Scope of Work); (d) The Consultant's Technical and Financial Bid; and (e) All other agreements and documents forming part hereof.

1.3.2 Subject to Clause 1.3.1, in case of ambiguities or discrepancies within this Contract, the following shall apply: (a) Between two or more Clauses of this Contract, the provisions of a specific Clause relevant to the issue under consideration shall prevail. (b) Between the Clauses of this Contract and the Schedules, the Clauses shall prevail. (c) Between the written description in the Terms of Reference and the Financial Proposal, the Terms of Reference shall prevail. (d) Between any value written in numerals and that in words, the latter shall prevail.

1.3.3 In the event that Clause 1.3.1 and Clause 1.3.2 are unable to resolve the discrepancies, the most restrictive provision(s) among the alternatives shall prevail, at the sole discretion of the Authority.

## **ARTICLE 2: REPRESENTATIONS AND WARRANTIES**

### **2.1 Representations and Warranties of the Consultant**

The Consultant hereby represents and warrants to the Authority as follows:

#### **2.1.1 Due Organization**

It is a company/trust/society/firm/sole proprietorship duly organized, validly existing, and in good standing under the Applicable Laws of the jurisdiction where it is incorporated. It has all requisite power and authority to own and operate its business and properties, to carry on its business as such business is now being conducted, and is duly qualified to do business in India.

#### **2.1.2 Due Authorization; Binding Obligation**

It has full power and authority to execute and deliver the Contract and to perform its obligations hereunder. The execution, delivery, and performance of the Contract by it have been duly authorized by all necessary action on its part. This Contract has been duly executed and delivered by it and is such Party's legal, valid, and binding obligation enforceable in accordance with its terms.

#### **2.1.3 No Insolvency**

It is not in liquidation or subject to an administration order, and no administrator, administrative receiver, or receiver has been appointed over the whole or a substantial part of its property, assets, or undertaking. No equivalent or analogous event has occurred.

#### **2.1.4 Non-Contravention**

The execution, delivery, and performance of the Contract by it and the consummation of the transactions contemplated hereby do not and will not contravene the certificate of incorporation, constitutional documents, or by-laws of such Party. They do not and will not conflict with or result in a breach of or default under any agreement, judgment, decree, order, or ruling to which such Party is a party.

#### **2.1.5 Commercial Interest**

The entry into and performance of the Contract by it is in its commercial interest and to its corporate benefit, and it has assessed and satisfied itself as to the existence of such corporate benefit.

#### **2.1.6 Regulatory Approvals**

During the Contract duration, all **Applicable Permits**, authorizations, approvals, orders, or consents required (if any) in connection with the execution, delivery, and performance of the

Contract have been obtained (or will be obtained in a timely manner) to allow the completion of the **Services** during the **Project Period**.

### **2.1.7 Compliance with Applicable Laws**

It has not contravened any Applicable Laws or conditions of any Applicable Permit granted to it, as on the Effective Date, which contravention would have an adverse effect on the Project. Further, it has not violated any intellectual property laws, nor does any infringement of any intellectual property rights of any third party exist.

### **2.1.8 Disclaimer and Consultant's Acknowledgment with Assumption of Risk**

- (a) The Consultant hereby acknowledges and confirms that, prior to the execution of this Agreement; it has conducted an independent evaluation of the **Request for Proposal (RFP)**, the **Terms of Reference (ToR)**, the Project Site, local conditions, physical characteristics of the river/terrain, and all other information provided by the Authority. The Consultant confirms that it has satisfied itself as to the accuracy and completeness of the information and the nature and extent of all difficulties and risks that may arise in performing its obligations.
- (b) The Consultant acknowledges that it has independently satisfied itself as to the correctness and sufficiency of the **Contract Price**, which shall be deemed to include all risks, contingencies, and other circumstances that may arise in connection with the performance of its obligations.
- (c) The Consultant acknowledges that it shall bear all risks relating to any error, omission, or inaccuracy in respect of the matters set forth above, and that the Authority shall have no liability whatsoever for the same.

### **2.2 Representations and Warranties of the Authority**

The Authority represents, warrants, and covenants to the Consultant that: (a) It has full power and authority to execute, deliver, and perform its obligations under this Contract. (b) It has taken all necessary actions under Applicable Laws to authorize the execution, delivery, and performance of this Contract. (c) It has the financial standing and capacity to perform its obligations under this Contract. (d) This Contract constitutes a legal, valid, and binding obligation enforceable against it. (e) It has good, legal, and valid right and title to the Site (where applicable) and has the power to grant access to the Consultant for the execution of the Project.

### **2.3 Continuing Representations**

Each representation and warranty given by the Parties in this Article 2 and elsewhere in the Contract shall be deemed repeated on a continuing basis throughout the term of the Contract.

## **2.4 Disclosure**

In the event that any occurrence or circumstance comes to the attention of either Party that renders any of its aforesaid representations or warranties untrue or incorrect, such Party shall immediately notify the other Party of the same.

## **2.5 Notification of Error or Omission**

In the event that either Party becomes aware of any mistake, omission, or error relating to any of the matters set forth in Clause 2.1.8(a), that Party shall immediately notify the other Party, specifying the mistake or error.

## ARTICLE 3: SCOPE OF SERVICES AND VARIATION OF WORK

### 3.1 SCOPE OF SERVICES

3.1.1 Under this Contract, the scope of the Project (the "**Scope of Services**") shall mean and include:

- a) Execution of the **Field Survey and Data Collection** as set forth in **Schedule 2 (Terms of Reference)** and in conformity with the Technical Specifications and the provisions of this Contract.
- b) Processing of data, preparation of maps, drawings, and reports (Inception, Draft, and Final Reports) as planned for the Project and as set forth in **Schedule 2**.
- c) Mobilization of all necessary qualified personnel, equipment, instruments (DGPS, Echo-sounders, Drones, Boats), and software required for the timely completion of the Project.
- d) Performance and fulfilment of all other obligations of the **Consultant** in accordance with the provisions of this Contract and matters incidental thereto.

3.1.2 Unless otherwise expressly mentioned in this Contract, the execution of the relevant Scope of Services by the Consultant shall be strictly according to the applicable Technical Specifications and/or other directions/requirements of the **Authority**.

3.1.3 Any **Services** or **Deliverables** not found to be as per the relevant Technical Specifications (e.g., inaccurate data, poor quality maps) shall be rejected, and the Consultant shall have to redo, rectify, or remedy the same at its own cost and responsibility.

3.1.4 The Consultant shall not assign or subcontract the whole or part of its Scope of Services to any third party without the prior written approval of the Authority.

### 3.2 VARIATIONS / CHANGE OF SCOPE

3.2.1 The Authority may, at any time, by written order to the Consultant, make changes within the general scope of the Contract, including changes in the:

- a) Specifications or Scope of Work;
- b) Method or manner of performance of the Survey;
- c) Location or extent of the Survey Area (Increase or Decrease in Quantity).

#### 3.2.2 Payment for Variations

If the Authority orders a Variation (additional or reduced work), the payment or deduction shall be calculated as follows:

- a) **Quoted Rates:** If the additional work corresponds to an item for which a Unit Rate is specified in the **Financial Proposal (Bill of Quantities)**, such Unit Rate shall be applied.

- b) **Derived Rates:** If the additional work is not exactly the same but similar to an item in the Financial Proposal, a rate shall be derived based on the comparable item.
- c) **Mutual Agreement:** If the rate cannot be determined by (a) or (b) above, the Parties shall mutually agree upon a reasonable rate based on market norms and a detailed rate analysis submitted by the Consultant.

3.2.3 The Consultant shall not commence any additional work or variation without a written **Change Order** or instruction from the Authority.

## ARTICLE 4: CONDITIONS PRECEDENTS

### 4.1 Conditions Precedent

Save and except as expressly provided in Articles 4 and 8, or unless the context otherwise requires, the respective rights and obligations of the Parties under this Contract shall be subject to the satisfaction in full of the conditions precedent specified in this Clause 4.1 (the "**Conditions Precedent**").

#### 4.1.1 Conditions Precedent for the Authority

The Authority shall be obligated to satisfy the Conditions Precedent set forth under this Clause 4.1.1 within a period of **fifteen (15) days** from the Effective Date, or within such extended period not exceeding thirty (30) days, as may be specified herein. The Conditions Precedent required to be fulfilled by the Authority shall be deemed to have been satisfied upon:

- a) The Authority providing the **Authorization Letter / Permissions** required to access the Survey Site/River Stretch; and
- b) The Authority handing over relevant available historical data/maps (if any) to the Consultant.

#### 4.1.2 Conditions Precedent for the Consultant

The Consultant shall be required to satisfy the Conditions Precedent set forth in this Clause 4.1.2 within a period of **fifteen (15) days** from the Effective Date, or within such extended period not exceeding thirty (30) days as may be mutually agreed in writing by the Authority. The Conditions Precedent shall be deemed to have been fulfilled upon the Consultant providing the following to the Authority:

- a) The **Performance Security** as per Clause 6.1 hereof; and
- b) A confirmation of the **Mobilization of the Key Personnel** (Team Leader) designated for the Project.

#### 4.1.3 Waiver

Upon request in writing by any of the Parties, the other Party may, in its discretion, waive any of the Conditions Precedent set forth in this Article 4, or permit additional time to meet any of the Conditions Precedent set forth in this Article 4.

#### 4.1.4 Appointed Date

The date on which the Conditions Precedent are satisfied by both the Authority and the Consultant shall be the "**Appointed Date**" for the Contract.

## 4.2 Damages for Delay by the Consultant (Conditions Precedent)

In the event that: (i) The Consultant does not procure fulfilment or waiver of any or all of the Conditions Precedent set forth in Clause 4.1.2 within the period specified in respect thereof; and (ii) The delay has not occurred as a result of failure to fulfil the obligations under Clause 4.1.1 or other breach of this Contract by the Authority or due to Force Majeure;

The Consultant shall pay to the Authority **Damages** of an amount calculated at the rate of **0.1% (zero point one per cent)** of the Performance Security for each day's delay until the fulfilment of such Conditions Precedent, subject to a maximum of **10%** of the Performance Security. Provided that in case the Performance Security has not been furnished, the Authority shall be entitled to encash an equivalent amount towards the aforesaid Damages from the **Bid Security**.

## 4.3 Termination of the Contract in Case of Failure to Achieve the Appointed Date

If the Damages specified in Clause 4.3 reach their maximum limit, then the Authority (the non-defaulting Party) shall have the right to immediately terminate this Contract through a written notice to the Consultant. Upon such Termination, this Contract shall cease to be effective and binding on the Parties, and neither Party shall have any further liability to each other, except as provided below.

In the event that this Contract is terminated by the Consultant due to the Authority's failure to satisfy any of its Conditions Precedent, then the Authority shall, within **7 (seven) days** from the date of such termination, return the Bid Security (if not replaced by Performance Security) or the Performance Security (if furnished), as the case may be.

However, where the limit on the Consultant's liability in Clause 4.3 has been reached or exceeded and the Consultant has failed to pay the amount of Damages due and payable by it to the Authority within **7 (seven) days** from the date of the termination notice, the Authority shall be entitled to encash the **Bid Security** or **Performance Security**, as the case may be, and appropriate the proceeds thereof as Damages.

## ARTICLE 5: TERM OF THE CONTRACT

### 5.1 Contract Period

Subject to the terms and conditions contained hereinafter, this Contract shall come into force on the **Effective Date** and shall remain valid for a period of **[15 Months: e.g., 15 (Twelve) Months]** from the **Appointed Date** (hereinafter referred to as the “**Contract Period**” or “**Term**”), unless terminated earlier in accordance with the terms of this Contract.

**The Contract Period shall include the time required for:**

- a) Mobilization of Team and Equipment;
- b) Execution of the Field Survey (Hydrographic / Topographic);
- c) Data Processing and submission of Draft Reports; and
- d) Submission and Approval of the Final Survey Report and Digital Data.

### 5.2 Validity

Unless otherwise terminated, this Contract shall remain valid until the **issuance of the Completion Certificate** by the Authority, signifying the acceptance of all Deliverables (Final Reports, Maps, and Data) by the Authority.

### 5.3 Survival of Obligations

The expiry or termination of this Contract shall not affect any accrued rights, obligations, and liabilities of the Parties from the Appointed Date, nor shall it affect any continuing obligations which this Contract provides (such as Confidentiality, Dispute Resolution, and Indemnity), which are to survive its expiry or termination.

### 5.4 Extension of Contract Period

(i) The Contract Period may be extended if there is a delay due to:

- a) Force Majeure events;
- b) Delay in handing over of the Site or data by the Authority; or
- c) Additional Scope of Services (Variations) ordered by the Authority.

(ii) If the Consultant requires an extension of time, they shall submit a request in writing to the Authority at least **30 (thirty) days** prior to the expiry of the Term, justifying the reasons for the delay.

(iii) The Authority may, at its sole discretion, grant an extension of time on mutually agreed terms. If the delay is attributable to the Consultant, such extension may be granted with the imposition of **Liquidated Damages** (as per Clause 11.15).

## ARTICLE 6: PERFORMANCE SECURITY AND ADVANCE GUARANTEE

### 6.1 Performance Security

6.1.1 The **Consultant** shall provide a Performance Bank Security ("**Performance Security**") to the Authority for a sum equivalent to **(5% (five percent))** of the Contract Price) as per the format specified in **Schedule 8** for due performance of its obligations under this Contract.

6.1.2 The Performance Security shall be valid for a period of **12** months beyond the date of completion of all Services and acceptance of the Final Report by the Authority.

6.1.3 Till the time the Consultant provides the Performance Security pursuant to this Clause 6.1, the Bid Security shall remain in force and effect. Upon provision of the Performance Security, the Authority shall release the Bid Security to the Consultant.

6.1.4 The Performance Security shall be in the form of an unconditional and irrevocable Bank Guarantee from a Nationalize Bank in India, in the format prescribed by the Authority. All costs associated with obtaining and maintaining the Performance Security shall be borne solely by the Consultant.

#### 6.1.5 **Additional Performance Security** (*Optional - primarily for Abnormally Low Bids*)

In the event the Consultant furnishes Additional Performance Security as per the RFP (due to an abnormally low bid), such security shall be treated as part of the Performance Security and shall follow the same validity and release terms.

### 6.2 Release of Performance Security

The Performance Security shall be released to the Consultant within **60 (sixty) days** after the satisfactory completion of the Services and issuance of the **Completion Certificate** by the Authority, provided there are no outstanding claims or disputes.

### 6.3 Appropriation of Performance Security or Advance Guarantee

6.3.1 The Authority shall have the absolute and unqualified right to encash and appropriate the Performance Security or Advance Guarantee, as the case may be, in the following events:

- a) If the Consultant fails to perform any of its obligations under this Contract or observes any breach of terms;
- b) Upon occurrence of a **Consultant's Event of Default** as described in Article 16;
- c) If the Consultant fails to mobilize the Key Personnel and requisite survey equipment/infrastructure in terms of this Contract; or
- d) If the Consultant fails to extend the validity of the Performance Security or Advance Guarantee at least **30 (thirty) days** prior to its expiry.

6.3.2 Upon such encashment, the Consultant shall, within **30 (thirty) days** thereof, replenish the Performance Security to its original level. Failure to do so shall entitle the Authority to terminate the Contract in accordance with Article 16.

## ARTICLE 7: OBLIGATIONS OF THE AUTHORITY

### 7.1 General Obligations

The Authority shall, at its own cost and expense, undertake, comply with, and perform all its obligations set out in this Contract. The Authority shall provide the Terms of Reference (ToR) and Technical Specifications required for the execution of the Project.

### 7.2 Assistance and Approvals

7.2.1 The Authority shall provide all reasonable assistance and support to the Consultant that may be required under law or otherwise for obtaining any specific Permissions or Approvals (e.g., from Forest Department, District Administration, or Dam Safety Officials) required to execute the Survey.

7.2.2 The Authority shall issue Authorization Letters/ Introductory Letters to the Consultant's Team, certifying their engagement for the Project, to facilitate their interaction with local authorities and communities.

### 7.3 Access to Site and Data

7.3.1 The Authority hereby grants to the Consultant, commencing from the Appointed Date, Access Rights to the Survey Area / River Stretch to undertake the Project. This is strictly a "Right of Access" for the purpose of the Survey and does not constitute a lease or transfer of land/property rights.

7.3.2 The Authority shall provide the Consultant with access to relevant Historical Data, maps, benchmark details, and previous survey reports (if available) that are necessary for the Project.

### 7.4 Authority's Representative (Engineer-in-Charge)

7.4.1 The Authority shall appoint a duly authorized representative (the "**Authority's Representative**" or "**Engineer-in-Charge**") to act on its behalf under this Contract.

7.4.2 The Authority's Representative shall carry out the duties assigned to them, including:

- a) Reviewing and approving the Inception Report and Work Plan;
- b) Monitoring the progress of the Field Survey;
- c) Verifying the quality of data collected; and
- d) Certifying the Deliverables and Invoices for payment.

7.4.3 If the Authority wishes to replace the Authority's Representative, it shall notify the Consultant in writing.

## **7.5 Third-Party Monitoring**

The Authority reserves the right to appoint an independent Third-Party Inspection Agency (TPIA) or its own officials to observe, monitor, and verify the accuracy of the Survey work at any time during the Term of the Contract. The Consultant shall extend full cooperation to such officials/agency.

## **7.6 Payment Obligations**

The Authority shall make payments to the Consultant in accordance with **Schedule 6 (Payment Schedule)** in consideration of the Consultant performing the Scope of Services and other obligations under this Contract.

## ARTICLE 8: OBLIGATIONS OF THE CONSULTANT

### 8.1 General Obligations

#### 8.1.1 Performance of Services

The Consultant hereby acknowledges and agrees that it shall perform the Services (Field Survey, Data Collection, Processing, and Reporting) forming part of the Scope of Services in accordance with this Contract, Schedule 2 (Terms of Reference), and Applicable Laws. The Consultant shall provide all necessary personnel, equipment (DGPS, Vehicles, Drones, Boats, echosounders etc), software, and transport required to execute the Project efficiently and within the stipulated timeline.

#### 8.1.2 Site Verification

The Consultant is deemed to have inspected and examined the Survey Area / River Stretch, its surroundings, and available information, and to have satisfied themselves regarding:

- a) The form and nature of the Site, including access routes and river conditions;
- b) The hydrological and climatic conditions (water levels, flow velocity, weather patterns);
- c) The extent and nature of services and logistics necessary for the execution of the Survey; and
- d) The safety risks associated with working in/near water bodies. The Consultant shall be responsible for verifying and interpreting all such data, and the Authority shall have no responsibility for the accuracy, sufficiency, or completeness of any preliminary data provided.

#### 8.1.3 Approvals and Permissions

The Consultant shall:

- a) Make necessary applications to the relevant Government Authorities (e.g., DGCA for Drones, Local Administration, Forest Dept, Dam authorities etc.) for obtaining required **Permissions/Approvals**; and
- b) Keep such permissions in force during the Project duration. While the Authority will provide necessary support letters, the responsibility of **liaison and coordination** lies solely with the Consultant.

#### 8.1.4 Early Warning

The Consultant shall warn the Authority at the earliest opportunity of specific likely future events (e.g., floods, dam releases, and equipment failure) that may adversely affect the quality of the data, increase the cost, or delay the execution of the Survey.

## 8.2 Compliance with Applicable Laws

The Consultant shall undertake the Project in accordance with all Applicable Laws, including **DGCA Guidelines for Drones, Ministry of Defence Guidelines for Surveying, and Dam Safety Regulations**. The Consultant shall indemnify the Authority against any claims arising from the Consultant's negligence or violation of laws.

## 8.3 Conduct and Safety

The Consultant shall at all times take all precautions to maintain the health and safety of the **Consultant's Personnel**. This includes providing **Life Jackets, Safety Boats, and First Aid Kits** during hydrographic surveys. The Consultant shall ensure that its personnel do not engage in any unlawful or disorderly conduct.

## 8.4 Labour and Personnel Obligations

8.4.1 The Consultant shall comply with all Applicable Laws regarding the employment of its staff and labour.

8.4.2 The Consultant shall make their own arrangements for **accommodation and logistics** for their survey teams.

## 8.5 Key Personnel

The Consultant shall ensure that the **Key Personnel** (Team Leader, Senior Surveyor, Hydrologist, etc.) identified in the Bid are engaged for the Project. The Authority's Representative may direct the Consultant to remove any person who is incompetent or negligent. The Consultant shall replace such person immediately with a qualified substitute.

## 8.6 Care of Equipment and Data

The Consultant shall bear full risk and responsibility for the care of:

- a) Their own **Survey Equipment** (Boats, Drones, Sensors); and
- b) The **Data collected** (until the Final Report is accepted). In case of any data loss due to equipment failure or negligence, the Consultant shall re-survey the affected area at their own cost.

## 8.7 Quality Assurance (QA)

The Consultant shall, within **15 (fifteen) days** of the Appointed Date, submit a **Quality Assurance Plan (QAP)** detailing:

- a) Calibration certificates of all instruments
- b) Methodology for data validation and checking; and

- c) Internal audit procedures. The Authority/Engineer-in-Charge shall verify the calibration of equipment on-site before the start of work.

## **8.8 Knowledge Transfer / Training**

Upon submission of the Final Report, the Consultant shall conduct a **Workshop / Training Session** for the Authority's officials to explain:

- a) The methodology used;
- b) How to use the Digital Data (DEM, GIS layers) and Software; and
- c) Interpretation of the Survey results.

## **8.9 Other Obligations**

8.9.1 The Consultant shall coordinate with other agencies (if any) working in the same river stretch.

8.9.2 The Consultant shall perform any additional services reasonably inferred from the Contract to ensure the successful completion of the Project.

## **8.10 Geological and Archaeological Finds**

All fossils, coins, articles of value, or antiquities found on the Site/Riverbed shall be placed under the care and authority of the Authority. The Consultant shall take reasonable precautions to prevent removal or damage to such items and shall inform the Authority immediately upon discovery.

## **8.11 Ethics and Corrupt Practices**

The Consultant represents and warrants that it has not offered any bribe, gift, or inducement to any official of the Authority. Any violation of this clause shall be considered a **Material Breach** and may lead to termination and blacklisting.

## **8.12 Unforeseeable Difficulties**

Except as otherwise specified:

- a) The Consultant accepts complete responsibility for having foreseen all difficulties (e.g., river currents, difficult terrain) and costs of successfully completing the Survey.
- b) The Contract Price shall not be adjusted to take account of any unforeseen difficulties, except for defined **Force Majeure** events.

## **8.13 Obligations Relating to Information**

Without prejudice to the provisions of Applicable Laws and this Contract, upon receiving a notice from the Authority for any information that it may reasonably require or that it

considers necessary to enable it to perform any of its functions, the **Consultant** shall provide such information to the Authority forthwith and in the manner and form required by the Authority. After receiving a notice from the Authority for reasoned comments on the accuracy and text of any information relating to the Consultant's activities under or pursuant to this Contract which the Authority proposes to publish, the Consultant shall provide such comments to the Authority in the manner and form required by the Authority.

#### **8.14 Ethics and Corrupt Practices**

8.14.1 The Consultant acknowledges that the Authority and the Authority's Personnel have a longstanding reputation for honesty and integrity in their business dealings. The Authority is committed to upholding that reputation

8.14.1 The Consultant shall ensure that it does not give or offer to give (directly or indirectly) to any person any bribe, gift, gratuity, commission, or other thing of value, as an inducement or reward:

- a) For doing or forbearing to do any action in relation to the Contract; or
- b) For showing or forbearing to show favour or disfavour to any person in relation to the Contract.

8.14.2 The Consultant represents and warrants that it and the Consultant's Personnel are in compliance in all respects with all Applicable Laws in relation to the performance of the **Services**.

8.14.3 The Consultant represents and warrants that neither it nor any of its directors, officers, agents, or employees has taken any action, directly or indirectly, that would result in a violation of any legislation dealing with bribery or corruption, including making use of any means of commerce corruptly in furtherance of an offer, payment, or promise to pay anything of value to any official, public authority, or political party.

8.14.4 The Consultant's violation of any of the foregoing shall be considered as a **Consultant's Event of Default**, and the Authority shall be entitled to terminate the Contract and recover Damages.

#### **8.15 Unforeseeable Difficulties**

Except as otherwise specified in the Contract:

- a) The Consultant accepts complete responsibility for having foreseen all difficulties and costs of successfully completing the Services.
- b) The Contract Price shall not be adjusted to take account of any unforeseen difficulties or costs.
- c) The Contract Period shall not be extended due to any unforeseen difficulties. For the purposes of this Clause, unforeseeable difficulties include physical conditions like man-made or natural physical conditions, including sub-surface and hydrological

currents/flow conditions, which the Consultant encounters at the Site during the execution of the Services.

#### **8.16 Other Consultants / Agencies**

The Consultant shall cooperate and share access to the Survey Area with other Consultants, public authorities, utilities, and the Authority (e.g., Dredging Consultants, Dam Maintenance Teams). The Authority shall notify the Consultant of any such overlapping activities. The Consultant shall plan its survey lines to minimize interference with such other agencies.

#### **8.17 Reporting of Encroachments**

The Consultant acknowledges that the Site (River/Reservoir) is an open public area. While the Consultant is not responsible for physical security against third-party encroachments, the Consultant shall maintain a vigil during the Field Survey operations. In the event of noticing any fresh encroachment, illegal sand mining, or unauthorized occupation on any part of the Site/Riverbank, the Consultant shall report such encroachment forthwith to the Authority. The Consultant shall not be liable for removing such encroachments.

#### **8.18 Temporary Access / Right of Way**

The Consultant shall bear all costs and charges for any special or temporary Right of Way / Access required by it in connection with access to the Site (e.g., passing through private fields to reach the riverbank). The Consultant shall obtain such permissions at its own cost.

#### **8.19 Access to the Authority**

The Access Rights given to the Consultant hereunder shall always be subject to the right of access of the Authority, the Authority's Representative, and their agents for inspection, viewing, and exercise of their rights under this Agreement. The Consultant shall ensure, subject to relevant safety procedures, that the Authority has unrestricted access to the Consultant's boats/equipment during the Survey for inspection purposes.

#### **8.20 Geological and Archaeological Finds**

It is expressly agreed that mining, geological, or archaeological rights do not form part of this Agreement. The Consultant hereby acknowledges that it shall not have any rights or interest in the underlying minerals, fossils, antiquities, or structures found during the Survey. Such rights shall vest in the Authority or the concerned Government Instrumentality. The Consultant shall take all reasonable precautions to prevent its personnel from removing or damaging such interest or property and shall inform the Authority forthwith of the discovery thereof.

## ARTICLE 9: SUBCONTRACTING

### 9.1 General Provisions

9.1.1 The Consultant shall not subcontract the whole or substantially the whole of its Scope of Services and obligations under this Contract. The Consultant shall remain solely responsible for the execution of the Project.

9.1.2 Subcontracting shall be permitted only for Specialized Tasks (e.g., Hiring of Boats/Logistics, or Specialized Aerial Survey) and shall not exceed **25% (twenty-five percent)** of the Contract Price, unless specifically approved by the Authority in writing.

### 9.2 Procedure for Appointment

The Consultant shall give the Authority not less than **21 (twenty-one) days' notice** of:

- a) The proposed appointment of a Sub-Consultant along with detailed particulars such as the scope of work, company profile, and Curriculum Vitae (CV) of key staff; and
- b) The intended commencement of the Sub-Consultant's work.

The Authority shall review the notice and either approve or reject the proposed Sub-Consultant within **14 (fourteen) days**. The decision of the Authority shall be final.

### 9.3 Liability

The Consultant shall be responsible for the proper performance by, and liable for the acts, defaults, and negligence of its Sub-Consultants, their agents, or employees, as if they were the acts or defaults of the Consultant. The Authority shall not be liable for any payments or disputes between the Consultant and its Sub-Consultants.

### 9.4 Sub-Consultant Requirements

Any Sub-Consultant appointed for specialized survey works must meet the technical eligibility criteria relevant to that specific task (e.g., a NABL-accredited laboratory for water/soil testing). The Consultant is responsible for ensuring the Sub-Consultant complies with all Applicable Laws, Safety Norms, and Confidentiality obligations of this Contract.

### 9.5 Communication

It is clarified that any Sub-Consultant shall not have direct communication, administrative power, or authority over the Authority. The Authority will interact solely with the **Consultant** (Lead Member).

## ARTICLE 10: CONTRACT PRICE AND PAYMENT

### 10.1 Contract Price

10.1.1 The consideration for the Consultant for executing the Scope of Services set out in Schedule 2 (Terms of Reference) and performing its obligations under this Contract shall be the Contract Price as specified in Schedule 6 (Payment Schedule). The Contract Price shall be exclusive of applicable Goods and Service Tax (GST). The Contract Price will be paid in the manner provided in Schedule 6. The Contract Price is fixed and not subject to any adjustment or escalation except in consequence of situations expressly specified in this Contract (e.g., Change in Law or Variation). All payments shall be made by the Authority to the Consultant in Indian Rupees (INR) directly to the bank account designated by the Consultant.

10.1.2 The Consultant shall be deemed to have satisfied themselves as to the correctness and sufficiency of the Contract Price after taking into consideration all unforeseeable difficulties and costs involved in executing the Scope of Services. Unless otherwise stated, the Contract Price covers all the Consultant's obligations, including personnel, equipment, logistics, and all things necessary for the proper execution and completion of the Survey and the remedying of any defects during the Contract Period.

10.1.3 No payment by the Authority shall be deemed to constitute acceptance by the Authority of the Services or any part(s) thereof and shall not relieve the Consultant of any of its obligations under this Contract.

### 10.2 Terms and Procedure of Payment

#### 10.2.1 Manner of Raising Invoices

The Consultant will raise the invoice for its Scope of Services directly to the Authority upon the successful completion of the Payment Milestones as provided in Schedule 6. The invoices shall be accompanied by relevant supporting documents (e.g. Proof of submission of Reports/ Data, Acceptance Note from Engineer-in-Charge) evidencing achievement of the Milestone. The Consultant shall ensure that invoices are raised in accordance with Applicable Laws (GST Compliant) to enable the Authority to avail input tax credit.

#### 10.2.2 Disputed Invoices

In the event the Authority raises any objection to the invoices raised by the Consultant, such matter shall be mutually discussed and settled. Notwithstanding any such objection, the Authority may make payment of the **undisputed amount** under the invoice. The disputed amount shall be paid immediately after the settlement, if required. The Authority has the right to withhold payment if necessary to protect itself from loss due to claims against the Consultant or failure by the Consultant to pay statutory dues.

10.2.3 If an invoice is not accompanied by supporting documents or is disputed, such amounts shall not be due until resolved. Withholding such amounts shall not constitute an Authority's Default.

10.2.4 Other than amounts properly withheld, the Authority shall pay all undisputed payments within **30 (thirty)** days of receipt of the valid invoice.

10.2.5 The submission of an invoice by the Consultant shall be deemed to be a confirmation that it has no additional claims for the period covered by such invoice, except as submitted in writing.

#### **10.2.6 Taxes:**

Each Party shall be responsible for their respective taxes. The Authority shall withhold TDS (Tax Deducted at Source) and other statutory levies as per Applicable Laws. A certificate for such tax deduction will be provided to the Consultant.

#### **10.3 No Payment in Case of Wrong Execution**

In case the Consultant executes Services in violation of the Terms of Reference (Schedule 2) (e.g., poor accuracy, incomplete data), the Authority has the right to withhold payments for said Services. The Consultant shall be required to rectify/ re-survey the said work at its own risk and cost. If the Authority has already paid for defective work, it shall have the right to offset the said payment against subsequent amounts payable.

#### **10.4 Taxes and Duties**

10.4.1 If the Consultant desires tax deduction at a lower rate (e.g., Lower TDS Certificate), it shall provide the necessary authorization from the Income Tax Authority to the Authority.

10.4.2 The Consultant shall be fully responsible for meeting all tax obligations and shall indemnify the Authority in this regard.

10.4.3 The Authority shall deduct tax and issue relevant certificates (Form 16A) in accordance with Applicable Laws.

10.4.4 The Consultant must furnish its PAN and GST Number. Failure to furnish PAN may result in higher TDS deduction as per Section 206AA of the Income Tax Act.

#### **10.5 Discharge**

Upon submission of the Final Payment Statement, the Consultant shall give to the Authority a **Written Discharge (No Claim Certificate)** confirming that the total of the Final Payment Statement represents the full and final settlement of all monies due to the Consultant for the Project.

## **10.6 Correction of Payment Certificates**

The Authority/ Engineer-in-Charge may, by any subsequent payment certificate, make any correction or modification in any previous payment certificate issued. The Authority may also omit or withhold any value in a payment certificate if the previously approved work/data is subsequently found to be defective or inaccurate.

## **10.7 Change in Law**

10.7.1 If, as a result of a **Change in Law** (e.g., introduction of a new tax or change in GST rates) occurring after the Bid Due Date, the Consultant suffers any additional costs or gains any reduction in costs in the execution of the Services, such addition or reduction shall be compensated by or reimbursed to the Authority, as the case may be.

10.7.2 The Consultant shall, within **7 (seven) days** from the date of such Change in Law, notify the Authority with documentary proof.

10.7.3 It is clarified that changes in Income Tax or Corporate Tax rates shall **not** be considered a Change in Law for the purpose of this clause.

10.7.4 Any changes in the tax structure (specifically GST) shall be adjusted on actuals. However, taxes embedded in the cost of doing business (like labour welfare cess, if applicable) are deemed included in the quoted rates and shall not be reimbursed separately.

## **10.8 Retention Money**

10.8.1 From every payment due to the Consultant (Running Bills), the Authority shall deduct 5% (five percent) thereof as Retention Money.

10.8.2 The Retention Money serves as security for the performance of the Consultant and the accuracy of the data submitted.

10.8.3 The total amount of Retention Money shall be released to the Consultant along with the Final Payment, subject to the satisfactory acceptance of the Final Survey Report and all Deliverables by the Authority.

## **10.9 Price Adjustment**

10.9.1 The Contract Price shall remain Fixed and Firm for the entire duration of the Contract.

10.9.2 No Price Adjustment or escalation for labour, fuel, materials, or lubricants shall be applicable, regardless of any fluctuation in market rates.

## **10.10 MEASUREMENT AND VARIATION IN QUANTITIES**

### **10.10.1 Data Verification & Progress Logs**

- a) The Consultant shall submit Weekly Progress Reports and Digital Logs (e.g., Track Logs from DGPS/ Echo-sounder) showing the exact area/ length covered.
- b) The Authority's Representative/ Engineer-in-Charge shall verify these logs against the Draft Maps submitted.
- c) Any overlap, redundant survey lines, or data rejected due to poor accuracy shall **not** be measured for payment.
- d) The verified digital logs shall serve as the primary record for billing purposes.

### **10.10.2 Inadmissible Items**

In case of items claimed by the Consultant but found to be inadmissible (e.g., survey done outside the agreed scope/ boundary), such quantities shall be recorded as zero and shall not be paid.

### **10.10.3 Alterations and Additions**

The Authority/Authority's Representative shall have the power to make any alterations in or additions to the original Terms of Reference (ToR) or Technical Specifications that may appear necessary during the progress of the work. The Consultant shall be bound to carry out the work in accordance with such instructions. If such alterations result in additional costs, the implications shall be mutually agreed upon in accordance with Clause 10.13.2.

## **ARTICLE 11: EXECUTION OF SERVICES**

### **11.1 Commencement of Services**

The execution of the Services by the Consultant shall be deemed to have commenced from the **Appointed Date**.

### **11.2 Work Plan and Schedule**

#### **11.2.1 Submission of Work Plan**

The Consultant shall, within 15 (fifteen) days of the date of issuance of the LOA, submit to the Authority a detailed Work Plan/ Programme Schedule in accordance with Schedule 4. The Work Plan shall detail:

- a) The sequence of survey operations (e.g., Reach-wise plan);
- b) The deployment schedule of Survey Teams and Equipment; and
- c) The timeline for submission of Deliverables.

#### **11.2.2 Approval of Work Plan**

The Authority shall review the Work Plan within 7 (seven) days of receipt and may either approve it or provide feedback. The Consultant shall incorporate the suggested changes and resubmit the revised Work Plan. Once approved, the Work Plan shall become binding. Any delay in achieving milestones that is not caused by Force Majeure or Authority's Default shall be liable for Liquidated Damages as per Clause 11.15.

#### **11.2.3 Adherence to Schedule**

The Consultant shall be solely responsible for ensuring that the Field Survey and Data Processing are carried out in accordance with the approved Work Plan and completed within the **Contract Period**.

#### **11.2.4 Recovery Plan**

If the Authority determines that the rate of progress is too slow to meet the Completion Date, it may notify the Consultant. The Consultant shall, within 7 (seven) days, submit a plan to expedite progress (e.g., by deploying additional boats or survey teams) at no extra cost to the Authority.

#### **11.2.5 Updates**

With the consent of the Authority, the Consultant may revise the Work Plan to reflect actual progress. The Consultant shall promptly give notice of any future events (e.g., Dam water release, heavy rains) that may delay the Survey.

## 11.3 Deployment of Equipment and Personnel

### 11.3.1 Suitability of Equipment

The Consultant shall be responsible for mobilizing all necessary equipment (DGPS, Echo-sounders, Drones, Boats, Safety Gear) required for the execution of the Scope of Services. The Consultant ensures that all survey instruments are of survey-grade accuracy, properly calibrated, and meet the Technical Specifications.

### 11.3.2 Safety Measures

The Consultant shall ensure the proper safety of all its personnel and equipment.

- a) All personnel working on/near water must wear Life Jackets.
- b) The Survey Boats must be stable and equipped with safety rings/buoys.
- c) The Consultant shall follow all safety protocols while operating Drones (UAVs) to avoid accidents.

### 11.3.3 Storage and Watch & Ward

The Consultant shall make their own arrangements for the safe custody and storage of their equipment. The Authority shall not be responsible for any theft, loss, or damage to the Consultant's equipment during the Project.

## 11.4 STAFF AND LABOR

### 11.4.1 Engagement of Personnel

- a) The Consultant shall make its own arrangements for the engagement of all **personnel, surveyors, and boatmen**, whether local or otherwise, and for their payment, feeding, transport, and accommodation.
- b) The Consultant shall verify the **identity and address** (Aadhar/Voter ID) of all its employees and officials deployed for the Project.
- c) **Criminal Record:** The Consultant shall obtain a self-declaration from its employees that they have not been convicted of any criminal offence. The Consultant shall not employ persons with a criminal track record. The Authority reserves the right to deny entry to any person deemed a security risk.
- d) All personnel engaged by the Consultant shall be the sole employees of the Consultant. Under no circumstances shall they be deemed employees of the Authority and the Authority shall not be liable for any claims, compensation, or statutory payments related to them.
- e) The Authority expects all Key Personnel specified in the bid to remain available throughout the duration of the project. Substitution of Key Personnel will not be considered, except under compelling circumstances beyond the control of the Consultant and the concerned Key Personnel. The substitution provided that equally or better qualified and experienced personnel are offered, subject to the satisfaction and

approval of the Authority. Additionally, the CV of the substitution candidate must be submitted at least one month prior to the resigning personnel's last working day and will be subject to the approval of the competent authority.

#### 11.4.2 Safety and Conduct

- a) **Safety Gear:** All personnel working on or near the water shall be required to wear appropriate safety gear, specifically Life Jackets and Safety Shoes/Boots, in accordance with standard hydrographic survey practices.
- b) **Misconduct:** The Consultant shall be responsible for any misconduct or negligence by its team. If the Authority requests the removal of any person for incompetence or misconduct, the Consultant shall replace them immediately.
- c) **Restricted Access:** The Consultant shall ensure that its team does not trespass into restricted areas (e.g., Dam structures, Power Houses) without specific prior permission.

#### 11.4.3 Compliance with Labor Laws

- a) The Consultant shall comply with all relevant Labor Laws (e.g., Minimum Wages Act, Workmen's Compensation Act) applicable to its employees.
- b) The Consultant shall ensure that all salaries and wages are paid on time, preferably through Electronic Bank Transfer to maintain transparency.
- c) The Consultant shall be solely responsible for statutory deductions (PF, ESI, TDS) and their deposit with the appropriate authorities. The Authority shall not be liable for any default in this regard.

#### 11.4.4 Health and First Aid

- a) **First Aid:** The Consultant shall ensure that First Aid Kits (including anti-venom or snake bite kits, if working in remote areas) are available on every survey boat and vehicle.
- b) **Emergency Plan:** The Consultant shall have an emergency evacuation plan in place for medical emergencies (e.g., drowning risk, injury).
- c) **Accident Reporting:** The Consultant shall immediately report any accident or injury occurring during the execution of the Services to the Authority's Representative.

#### 11.5 Suspension of Services by the Authority

- (i) The Authority may, at any time, instruct the Consultant to suspend progress of part or all of the Services for any reason (e.g., adverse weather, dam safety issues, or administrative reasons).
- (ii) During such suspension, the Consultant shall protect and secure their data and equipment.
- (iii) If the suspension is not due to the Consultant's default, the Consultant may claim an Extension of Time and reasonable costs (demobilization/remobilization charges), subject to verification by the Authority.

- (iv) If the suspension continues for more than 90 (ninety) days, the Consultant may request permission to resume work. If permission is not granted, the Consultant may treat the suspended part as an omission from the Scope of Services (Variation).

### **11.6 Suspension of Services by Consultant**

- (i) If the Authority fails to make any undisputed payment within 60 (sixty) days of the due date, the Consultant may, after giving 15 (fifteen) days' notice, suspend performance of the Services until payment is received.
- (ii) Once payment is received, the Consultant shall resume normal working as soon as reasonably practicable.

### **11.7 Monitoring of Services**

The Authority's Representative/ Engineer-in-Charge shall be entitled to monitor the progress of the Survey at any time. The Consultant shall afford every reasonable assistance to the Authority's Representative for doing so, including providing a seat on the survey boat for inspection purposes.

### **11.8 Progress Reports**

The Consultant shall submit **Monthly Progress Reports** to the Authority. The Progress Reports shall include:

- a) **Physical Progress:** Details of River Stretch covered (in km) vs. Planned Schedule.
- b) **Map:** A sketch/ map showing the area surveyed during the reporting period.
- c) **Equipment Status:** Deployment status of Boats, Echo-sounders, Drones, and Base Stations.
- d) **Personnel:** List of Key Personnel present on site.
- e) **Safety & Incidents:** Details of any accidents, near-misses, or weather interruptions.
- f) **Next Steps:** Plan for the upcoming week/month.
- g) **Videography:** Photographs and short video clips of the field work to document the progress.

### **11.9 Consultant's Documents (Deliverables)**

- (i) The Consultant shall prepare and submit the following documents (referred to as "**Consultant's Documents**") as part of the Deliverables:
  - a) **Inception Report:** Methodology, QA/ QC Plan, and Work Schedule.
  - b) **Field Data:** Raw logs from DGPS, Echo-sounders, and Field Books.
  - c) **Survey Reports:** Draft and Final Survey Reports.
  - d) **Maps & Drawings:** Relevant maps showing Location of Pumps, Heat Maps.
  - e) **Digital Data:** CAD drawings & GIS Shape files including all the necessary requirement as per the Scope of Work

**(ii) Review Process:** The Authority shall review the submitted Documents within 15 (fifteen) days. If the Authority finds that the Documents do not comply with the Technical Specifications (e.g., insufficient accuracy, wrong scale), the Consultant shall rectify and resubmit them at its own cost.

**(iii) Execution Protocol:** Execution of subsequent data processing shall not proceed until the Field Data has been verified and approved by the Authority's Representative.

## **11.10 COMPLETION OF SERVICES**

### **11.10.1 Completion Timeline**

Unless there is an extension of time granted by the Authority, the Consultant shall ensure that the Services are completed in accordance with the Work Plan and the Payment Milestones set out in Schedule 6. The entire Project, including the submission and acceptance of the Final Survey Report, shall be completed on or before 15 months from the Appointed Date (the "Completion Date").

### **11.10.2 Extension of Completion Date**

The Consultant shall be entitled to an Extension of Time (EoT) if the completion of any Milestone is delayed by:

- a) A Variation order issued by the Authority;
- b) Delay in handing over necessary permissions/data by the Authority;
- c) A Force Majeure Event (e.g., Floods, Cyclones); or
- d) Any other cause attributable to the Authority.

**11.10.3 Procedure for Extension** If the Consultant considers itself entitled to an extension, it shall give notice to the Authority within 7 (seven) days of the occurrence of the delaying event. The Authority shall determine the extension duration within 15 (fifteen) days of receiving the request. The Consultant shall assist the Authority by providing supporting logs/records.

## **11.11 QUALITY CONTROL AND DATA VALIDATION**

### **11.11.1 Quality Assurance (QA)**

The Consultant shall carry out the Survey in full compliance and Standard Hydrographic Survey Practices. The Consultant shall ensure:

- a) **Calibration:** All DGPS and Echo-sounders must have valid Calibration Certificates from an authorized agency/OEM.
- b) **Check Lines:** The Consultant shall run "Cross-Check Lines" (at least 5% of total length) to verify the accuracy of the main survey lines.

### **11.11.2 Authority's Validation**

The Authority and its representatives shall be entitled to:

- a) Inspect the raw data logs on-site;
- b) Conduct random "**Ground Truthing**" checks (verifying the coordinates of a specific point); and
- c) Request the Consultant to re-survey a specific patch if the data appears inconsistent.

### **11.11.3 Failure of Validation**

If the data fails to meet the accuracy standards, the Authority may reject the specific dataset. The Consultant shall re-survey the affected area at its own cost.

## **11.12 REJECTION OF DEFECTIVE DATA**

If, as a result of inspection or validation, any Data, Map or Report is found to be defective, incomplete, or not in accordance with the ToR, the Authority shall reject the same by giving notice to the Consultant. The Consultant shall then promptly rectify the defect (e.g., by re-processing the data or re-conducting the field work) and resubmit the Deliverable.

## **11.13 RECTIFICATION OF ERRORS**

- (i) Notwithstanding any previous certification, the Authority may instruct the Consultant to:
  - a) Remove and replace any incorrect data from the Final Database;
  - b) Re-execute any part of the Field Survey which was not performed in accordance with the Technical Specifications.
- (ii) If the Consultant fails to comply with the instruction within the specified time, the Authority may get the work corrected by another agency. The cost so incurred shall be recoverable from the Consultant.

## **11.14 COMPLETION CERTIFICATE**

### **11.14.1 Issuance of Certificate**

If the Scope of Services is complete and the Final Survey Report (along with all Digital Data) has been accepted by the Authority, the Consultant may apply for the Completion Certificate.

The Authority shall, within 15 (fifteen) days of the request, either:

- a) Issue the Completion Certificate; or
- b) Notify the Consultant of any defects/missing data that need to be rectified.

### 11.14.2 Effect of Certificate

Upon issue of the Completion Certificate:

- The Contract Period shall be deemed to have ended;
- The Performance Security shall be processed for release (subject to the retention/warranty period); and
- The Consultant shall have no further obligations except for those related to Data Warranty (Clause 11.16), Confidentiality, and Indemnity.

### 11.15 LIQUIDATED DAMAGES (LD)

#### 11.15.1 Delay in Completion

In the event that the Consultant fails to achieve the Completion Date or any of the Milestones as per Schedule 4, the Consultant shall pay Liquidated Damages to the Authority.

The Damages shall be calculated at the rate of 0.1% (zero point one percent) of the Contract Price for each day of delay, subject to a maximum of 10% (ten percent) of the Contract Price.

#### 11.15.2 Deduction of Damages

The Authority may deduct Liquidated Damages from any payment due to the Consultant (Running Bills or Retention Money). Payment of Liquidated Damages does not relieve the Consultant of its obligation to complete the Services.

#### 11.15.3 Termination for Delay

If the Delay Damages exceed 10% (ten percent) of the Contract Price, the Consultant shall be deemed to be in Material Breach, and the Authority shall be entitled to terminate this Contract in accordance with **Article 16**.

### 11.16 PENALTY FOR NON-COMPLIANCE (OTHER DAMAGES)

In the case of inadequate safety measures or non-compliance with the ToR during the Contract Period, the following penalties shall apply:

Sr. No.	Event	Penalty / Damages
1	<b>Safety Violation:</b> Personnel found working on water without <b>Life Jackets</b> .	<b>INR 5,000</b> per instance per person.
2	<b>Report Delay:</b> Non-submission of Weekly/Monthly Progress Reports on time.	<b>INR 2,000</b> per day of delay.

<b>3</b>	<b>Data Integrity:</b> Discrepancy found between Field Logs and submitted Digital Data (Data Manipulation).	<b>INR 25,000</b> per instance + Re-survey at own cost.
<b>4</b>	<b>Absence of Key Personnel:</b> Team Leader or Key Expert absent from the Project without prior approval.	<b>INR 1,000</b> per personal per day.
<b>5</b>	<b>Equipment:</b> Deployment of uncalibrated or faulty equipment.	<b>INR 10,000</b> per instance + Immediate removal of equipment.

## **11.17 DATA WARRANTY PERIOD**

### **11.17.1 Duration**

The Data Warranty Period shall be 12 (twelve) months starting from the date of issuance of the Completion Certificate.

### **11.17.2 Correction of Defects**

During the Data Warranty Period, if any error, discrepancy, or inconsistency is found in the Survey Data, Maps, or Reports, the Consultant shall rectify the errors at its own cost.

### **11.17.3 Failure to Rectify**

The Authority shall give notice in writing about such defects. The Consultant shall rectify the data within 15 (fifteen) days.

If the Consultant fails to rectify the data, the Authority may get the verification/ correction done by another agency. The cost incurred shall be recovered from the Performance Security or Retention Money.

## **11.18 STEPS BEFORE END OF THE CONTRACT**

The Consultant shall, 1 (one) month prior to the expiry of the Contract Period (or along with the submission of the Final Draft Report):

- a) **Transfer of Data & Documents:** Initiate steps for the transfer and delivery of all Consultant's Documents (including Field Books, Raw Data Logs, Digital Maps, and Reports) and transfer the ownership and Intellectual Property Rights (IPR) of the Survey Data to the Authority, free from any encumbrances.

## **ARTICLE 12: DATA RECTIFICATION TIMELINES**

### **12.1 DAMAGES FOR BREACH OF OBLIGATIONS**

12.1.1 In the event that the Consultant fails to perform the Services in accordance with Good Industry Practice, it shall be deemed to be in breach of this Contract.

12.1.2 The Authority shall be entitled to recover Damages for such breach, without prejudice to its right to terminate the Contract. If the breach relates to Safety Violations, the penalties specified in Clause 11.16 shall apply.

### **12.2 DAMAGES FOR BREACH OF OBLIGATIONS**

#### **12.2.1 Assessment of Damages**

The Damages set forth in Clause 11.16 (Penalty for Non-Compliance) and Clause 12.3 (Data Rectification) may be assessed and specified forthwith by the Authority. The Consultant shall pay such Damages within 7 (seven) days of demand. In the event that the Consultant contests such Damages, the Dispute Resolution Procedure (Article 18) shall apply.

#### **12.2.2 Cap on Damages**

The maximum Damages on account of default (excluding Liquidated Damages for delay under Clause 11.15) shall be capped at 10% (ten percent) of the Contract Price. If the penalty limit is reached, or if the Consultant persists in default despite repeated notices, the Authority may initiate Termination as per Article 16.

#### **12.2.3 Recovery of Damages**

If the Consultant fails to pay the Damages within the said period of 7 (seven) days, the Authority shall be entitled to recover the amount by:

- a) Deducting it from the Running Bills or Retention Money; or
- b) Invoking the Performance Security. It is clarified that this clause will survive the termination or expiry of this Contract.

### **12.3 RESTORATION OF LOSS OR DAMAGE**

Save and except for Force Majeure events, in the event that the Survey Equipment, Data, or Deliverables suffer any loss, corruption, or damage during the Term from any cause whatsoever (e.g., boat accident, data loss, theft), the Consultant shall, at its own cost and expense, rectify and remedy such loss or damage forthwith. The Consultant ensures that the Project Data conforms to the provisions of this Contract before final submission.

## **12.4 AUTHORITY'S RIGHT TO TAKE REMEDIAL MEASURES**

12.4.1 In the event the Consultant fails to rectify any defect in the Survey Data or Report within the timeline specified in Clause 12.3 (Data Rectification), and fails to commence remedial works within 7 (seven) days of receipt of notice, the Authority shall be entitled to undertake such remedial measures at the Risk and Cost of the Consultant.

12.4.2 The Authority may hire a third-party agency to verify or correct the data. The cost so incurred by the Authority shall be recovered from the Consultant. In addition to the actual cost, a sum equal to 20% (Twenty percent) of such cost shall be charged as Departmental Charges / Administrative Damages.

## ARTICLE 13: MONITORING AND SUPERVISION

### 13.1 Authority's Right to Monitor

The Authority (or its appointed Engineer-in-Charge) shall be responsible for overseeing and ensuring the proper execution of the Survey Services by the Consultant. The Authority shall have the right to inspect, monitor, and verify the work at any stage.

### 13.2 Scope of Supervision

The Authority's supervision duties shall include, but not be limited to:

- a) **Verification of Methodology:** Reviewing the Consultant's proposed work plan and survey methodology to ensure compliance with the ToR (Schedule 2).
- b) **Field Inspections:** Conducting surprise or scheduled inspections of the survey boats, equipment, and field teams to ensure they are actually present on site and following safety protocols.
- c) **Review of Deliverables:** Reviewing the Inception Report, Draft Report, and Final Report and providing comments/ approvals within the stipulated time.
- d) **Certification of Bills:** Verifying the actual quantities of work done (e.g., Km surveyed) and certifying the invoices for payment.

### 13.3 Obligations of the Consultant towards Supervision

The Consultant shall provide full assistance and cooperation to the Authority's Representative, including:

- a) Providing access to the Survey Boats and Base Stations for inspection.
- b) Sharing raw data logs immediately upon request.
- c) Rectifying any defects or non-compliances pointed out by the Authority during the supervision.

### 13.4 Instructions and Approvals

All technical submissions (Reports/Maps) shall be reviewed by the Authority. Any instruction or approval issued by the Authority shall be binding on the Consultant. However, such approval does not absolve the Consultant of its responsibility for the accuracy of the data.

### 13.5 Dispute on Supervision

If the Consultant disputes any instruction or decision of the Authority's Representative (e.g., rejection of a data set), the matter shall be resolved in accordance with the Dispute Resolution Procedure (Article 18).

## ARTICLE 14: INSURANCE

**14.1 Insurance Covers Requirements** During the entire **Term of the Contract** (and the Data Warranty Period), the Consultant shall, at its sole cost and expense, obtain and maintain the following insurance policies:

- a) **Personnel / Workmen's Compensation Insurance:** Insurance to cover all liabilities under the *Workmen's Compensation Act, 1923* (or equivalent Applicable Law) for death or injury to the Consultant's staff, surveyors, boatmen, and laborers. Given the nature of work (working on water), this policy must explicitly cover accidental drowning.
- b) **Equipment & All-Risk Insurance:** Insurance covering loss or damage to the Consultant's Survey Equipment (DGPS, Echo-sounders, Drones, Total Stations) and Boats/ Vehicles due to theft, fire, water damage, capsizing, or accidents.
- c) **Third-Party Liability Insurance:** Insurance against legal liability to third parties for:
  - i. Accidental death or injury to third parties (public);
  - ii. Damage to third-party property (e.g., fishing nets, river banks, private structures) arising out of the Survey operations.

### 14.2 Proof of Insurance

Not later than **15 (fifteen) days** from the Effective Date (and before deploying any boat/team on site), the Consultant shall submit to the Authority detail of payment of the premiums.

### 14.3 Failure to Insure

If the Consultant fails to effect and keep in force the insurances required, the Authority may (but is not obliged to) pay the premium to keep the policy active and recover the cost from the Consultant's Running Bills or Performance Security.

### 14.4 Authority as Beneficiary / Loss Payee

The Consultant shall ensure that the Third-Party Liability and Equipment Insurance policies are endorsed to note the interest of the Authority. However, the proceeds of any claim (except for Third Party liability) shall be used exclusively for re-instating or replacing the lost/damaged equipment to ensure the work continues without delay.

### 14.5 Accident or Injury to Workers (Indemnity)

The Authority shall not be liable for any damages or compensation payable to any workman or person in the employment of the Consultant. The Consultant shall indemnify and keep indemnified the Authority against all such claims, damages, and costs.

### 14.6 Waiver of Subrogation

The Consultant hereby releases and waives any rights of subrogation or recovery against the Authority and its employees for any loss or liability covered by the insurance policies (except where such loss is caused by the wilful default of the Authority).

## ARTICLE 15: FORCE MAJEURE

### 15.1 DEFINITIONS OF FORCE MAJEURE

**15.1.1 Force Majeure Event** "Force Majeure" means the occurrence of any act or event in India which affects the performance by the Party claiming the benefit (the "Affected Party") of its obligations under this Contract, and which:

- Is beyond the reasonable control of the Affected Party;
- Could not have been prevented or overcome by due diligence; and
- Has a Material Adverse Effect on the Project.

#### 15.1.2 Non-Political Event (Natural)

A Non-Political Event includes:

- Act of God: Epidemic, extreme weather (cyclone, flood, lightning), earthquake, or landslide.
- Strikes or boycotts (other than those involving the Consultant's own staff) interrupting essential services for more than 7 (seven) continuous days.
- Any judgment or order of a Court hindering the Project (unless caused by the Consultant's own fault).

**15.1.3 Indirect Political Event:** An Indirect Political Event includes:

- War, invasion, armed conflict, riot, terrorist action, or civil commotion.
- Industry-wide or State-wide strikes preventing the execution of the Survey.

**15.1.4 Political Event:** Political Event includes acts by a Government Instrumentality, such as:

- Change in Law (only if it materially affects the cost or feasibility).
- Compulsory acquisition or expropriation of Project Assets.
- Unlawful revocation or refusal to grant necessary permissions (e.g., Drone flying permits or Restricted Area permits) despite the Consultant submitting a timely application.

### 15.2 REPORTING REQUIREMENT

**15.2.1** The Affected Party shall notify the other Party in writing of the Force Majeure Event as soon as reasonably practicable, but no later than 7 (seven) days after it knew of the occurrence.

**15.2.2** The notice shall include:

- The nature and estimated duration of the event;
- The impact on the Scope of Services; and
- Mitigation measures proposed.

## **ARTICLE 16: TERMINATION OF THE CONTRACT**

### **16.1 TERMINATION FOR CONSULTANT'S DEFAULT**

#### **16.1.1 Events of Default**

The Authority shall have the right to terminate this Contract if the Consultant commits a material breach. An "Event of Default" shall be deemed to have occurred if the Consultant:

- a) Fails to submit or maintain the Performance Security as per the Contract.
- b) Abandons the Survey or demonstrates an intention not to continue performance (e.g., unauthorized demobilization of boats/ team).
- c) Fails to mobilize the required Key Personnel or Equipment within the stipulated time.
- d) Fails to achieve a Project Milestone within the timeline (including any Cure Period).
- e) Fails to rectify a Defect in Data within the time specified by the Authority.
- f) Subcontracts the whole or part of the Services without prior written consent.
- g) Engages in corrupt, fraudulent, or coercive practices.
- h) Becomes bankrupt, insolvent, or goes into liquidation.
- i) Falsifies data or submits reports known to be inaccurate.

#### **16.1.2 Notice to Cure**

If an Event of Default occurs, the Authority may issue a Notice to Cure to the Consultant. The Consultant shall rectify the default within 15 (fifteen) days (the "Cure Period"). If the Consultant fails to rectify the default within the Cure Period, the Authority may terminate the Contract by issuing a Termination Notice with immediate effect.

### **16.2 CONSEQUENCES OF TERMINATION FOR CONSULTANT'S DEFAULT**

**16.2.1** Upon termination, the Consultant shall:

- a) Immediately stop all Survey operations;
- b) Hand over all Data, Maps, Field Books, and Reports (whether draft or final) prepared up to the date of termination; and
- c) Vacate the site and remove its equipment at its own cost.

#### **16.2.2 Forfeiture of Security**

The Authority shall be entitled to forfeit and encash the Performance Security to cover the losses incurred due to the termination.

#### **16.2.3 Recovery of Additional Costs**

The Authority may appoint another agency to complete the remaining Survey work. Any **extra cost** incurred by the Authority in doing so (Risk and Cost) shall be recoverable from the Consultant.

## **16.3 TERMINATION FOR AUTHORITY'S DEFAULT**

### **16.3.1 Events of Default**

The Consultant shall be entitled to terminate the Contract if:

- a) The Authority fails to pay any Undisputed Payment within 60 (sixty) days after the Due Date.
- b) The Authority suspends the entire Scope of Services for a continuous period of more than 90 (ninety) days (except for Force Majeure).
- c) The Authority becomes bankrupt or insolvent.

### **16.3.2 Notice to Cure**

The Consultant may give a written notice to the Authority to rectify the default within 30 (thirty) days. If the default is not rectified, the Consultant may terminate the Contract.

## **16.4 CONSEQUENCES OF TERMINATION FOR AUTHORITY'S DEFAULT**

### **16.4.1** Upon termination, the Authority shall:

- a) Return the Performance Security to the Consultant (unless there are pending claims); and
- b) Pay the Consultant for all Services completed and Deliverables accepted up to the date of termination.

**16.4.2** The Consultant shall hand over all Data and Reports prepared up to that point and demobilize from the site in an orderly manner.

## **16.5 RELEASE FROM PERFORMANCE UNDER APPLICABLE LAWS**

Notwithstanding any other provision of this Contract, if any event or circumstance outside the control of the Parties (including, but not limited to, a Force Majeure Event) arises which makes it unlawful for any Party to fulfil its contractual obligations:

- a) The Parties shall be discharged from further performance, without prejudice to the rights of either Party in respect of any previous breach; and
- b) The Consultant shall be paid for the Services successfully completed and accepted by the Authority up to the date of discharge, similar to the termination payment terms under **Clause 15.5**.

## 16.6 OTHER RIGHTS AND OBLIGATIONS UPON TERMINATION

Upon Termination for any reason whatsoever, the Authority shall:

- a) **Possession of Data:** Be deemed to have taken full possession and control of all **Survey Data, Field Books, Maps, Reports, and Digital Records** (whether draft or final) prepared by the Consultant up to the date of termination.
- b) **Intellectual Property:** Be entitled to the immediate transfer of all **Intellectual Property Rights (IPR)** and copyrights related to the Survey Data. The Consultant shall execute necessary documents to assign these rights to the Authority absolutely.
- c) **Restrain Entry:** Be entitled to restrain the Consultant and its personnel from entering the Site (River Stretch) or claiming any right to continue the work.
- d) **Approvals:** Take possession and control of all **Permissions and Approvals** obtained by the Consultant (e.g., Drone permissions, Restricted Area permits) to ensure the work can be continued by another agency.
- e) **Rejection of Equipment Seizure:** It is expressly agreed that the Authority shall **not** take possession of the Consultant's **Survey Instruments, Boats, Vehicles, or Computer Hardware**, which remain the property of the Consultant, provided that all debts/damages due to the Authority have been settled.

## ARTICLE 17: LIABILITY AND INDEMNITY

### 17.1 GENERAL INDEMNITY

The Consultant shall indemnify, defend, save, and hold harmless the Authority and its officers, servants, and agents (the "Authority Indemnified Persons") against any and all suits, proceedings, actions, demands, and third-party claims for any loss, damage, cost, and expense of whatever kind and nature, arising out of:

- a) Any breach by the Consultant of any of its obligations under this Contract;
- b) Any negligence, misconduct, or default of the Consultant;
- c) Any errors, deficiencies, or inaccuracies in the Survey Data, Maps, or Reports submitted by the Consultant;
- d) Any violation of Applicable Laws (including drone regulations and environmental norms).

### 17.2 INDEMNIFICATION BY THE CONSULTANT

Without limiting the generality of Clause 17.1, during the Term of this Contract, the Consultant shall indemnify the Authority against all claims, damages, losses, and expenses (including legal fees) arising out of:

- a) **Personal Injury:** Bodily injury, sickness, disease, or death of any person (including the Consultant's staff or third parties) arising out of the execution of the Survey Services (e.g., boat accidents, drowning).
- b) **Property Damage:** Damage to or loss of any property (real or personal) caused by the Consultant's operations.
- c) **Statutory Non-Compliance:** Failure of the Consultant to comply with Applicable Laws, Permits, and Approvals.

### 17.3 CONSULTANT'S LIABILITY FOR DATA ACCURACY

#### 17.3.1 Responsibility for Accuracy

The Consultant acknowledges that the Authority relies on the Survey Data for critical engineering planning. The Consultant unequivocally confirms that it shall be responsible for the accuracy, correctness, and completeness of the Scope of Services set out in Schedule 2 (Terms of Reference).

#### 17.3.2 Remedying Defects

Notwithstanding anything contained in this Contract, if any gap, deficiency, error, or uncertainty arises with respect to the Survey Data or Maps, such deficiency shall be promptly remedied by the Consultant at no cost or expense to the Authority.

### **17.3.3 Guarantee of Performance**

The Consultant agrees that in case of non-performance or inadequate performance (e.g., missing survey lines, incorrect benchmark transfer), the Consultant will re-perform the obligation without any additional cost to the Authority. The Consultant shall not deny liability solely on the ground that the specific error was not explicitly detailed in the Scope if it is implied by Good Industry Practice.

### **17.4 SURVIVAL ON TERMINATION**

The provisions of this Article 17 (Liability and Indemnity) shall survive the Termination or expiry of this Contract.

## **ARTICLE 18: CLAIMS, DISPUTE RESOLUTION & GOVERNING LAW**

### **18.1. Authority's Claim**

18.1.1 The Authority shall be entitled to raise a claim ("**Authority's Claim**") against the Consultant in the following cases:

- (a) If the Authority has paid any amount which is attributable to the breach of any terms and conditions of the Contract by the Consultant; and
- (b) Any other claim otherwise specifically stated so in this Contract.

In the above cases, the Authority shall give notice and particulars to the Consultant as soon as practicable but not later than 7 (seven) days after the date on which the Authority became aware of the event or circumstances giving rise to the Authority's Claim.

18.1.2 The notice of the Authority in terms of Clause 18.1.1, shall specify the particulars which form the basis of the Authority's Claim, and shall include substantiation of the amount and/ or extension to which the Authority considers it is entitled in connection with such Authority's Claim. A notice relating to any extension of the Defect Liability Period shall be given before the expiry of such period. The Authority shall then proceed to agree to determine (i) the amount which the Authority is entitled to be paid by the Consultant and/or (ii) extension in the Defect Liability Period. While determining any such matter the Authority shall consult the Consultant. If an agreement is not achieved, the Authority shall make a fair determination in accordance with this Contract, taking due regard of all relevant circumstances.

18.1.3 The Authority shall give notice to the Consultant of each agreement or determination with supporting particulars. Each Party shall give effect to each agreement or determination unless the Consultant gives a notice to the Authority of its dissatisfaction with a determination within 14 (fourteen) days of receiving it. Either Party may then try to amicably settle the dispute in terms of Clause 18.3.

18.1.4 The Authority may deduct such amount from any moneys due or to become due to the Consultant or otherwise claim against the Consultant under the Contract.

### **18.2 Consultant's Claim**

18.2.1 If the Consultant considers itself entitled to any extension of Completion Date and/ or any additional payment, under any provisions of the Contract, the Consultant shall give notice to that effect to the Authority, describing the event or circumstance giving rise to the claim ("**Consultant's Claim**"). The notice shall be given as soon as practicable but not later than 30 (thirty) days after the date on which the Consultant became aware of the event or circumstances giving rise to the Consultant's Claim.

- 18.2.2 If the Consultant fails to give notice of a claim, there shall be no extension to the Completion Date or entitlement to additional payment, and the Authority shall be discharged from all liability in connection with the Consultant's Claim.
- 18.2.3 The Consultant shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Authority. Without admitting liability, the Authority may after receiving any notice under this Clause, monitor the record-keeping and/or instruct the Consultant to keep further contemporary records. The Consultant shall permit the Authority to inspect all these records and shall (if instructed) submit copies to the Authority.
- 18.2.4 Within 30 (thirty) days after the Consultant became aware (or should have become aware) of the event or circumstance giving rise to the Consultant's Claim, the Consultant shall send to the Authority a fully detailed statement of the Consultant's Claim which shall include full supporting particulars of the basis of all the claims and of the extension of time and/or additional payment claimed. If the events or circumstances giving rise to the Contract's Claim have a continuing effect:
- (a) this fully detailed statement shall be considered as interim.
  - (b) the Consultant shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Authority may reasonably require; and
  - (c) the Consultant shall send a final statement of Consultant's Claim as soon as practicable after the end of the effects of the events or circumstances resulting the Consultant's Claim but not later than 30 (thirty) days from the end of the effects of the events or circumstances resulting the Consultant's Claim.
- 18.2.5 Within 30 (thirty) days after receiving any statement of Consultant's Claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Authority and approved by the Consultant, the Authority shall respond with approval, or with disapproval and detailed comments. The Authority may also request any necessary further particulars but shall nevertheless give its response on the principles of the claim within such time.
- 18.2.6 Each interim payment against the Consultant's Claim shall include such amounts for any claim as have been reasonably substantiated as due under the relevant provision of the Contract. Unless and until the particulars supplied are sufficient to substantiate the whole of the Consultant's Claim, the Consultant shall only be entitled to payment for such part of the claim as he has been able to substantiate.
- 18.2.7 The Authority shall consult with the Consultant in an endeavour to reach an agreement and proceed to determine (i) the extension of the Completion Date (before or after its expiry) and (ii) the additional payment, if any to which the Consultant is entitled to under this

Contract. However, if such agreement is not achieved, the Authority shall make a fair determination in accordance with the Consultant, taking due regard of all relevant circumstances. The Authority shall give notice to the Consultant of each agreement or determination, with supporting particulars. Each Party shall give effect to each agreement or determination, unless the Consultant gives notice, to the Authority, of its dissatisfaction within 14 (fourteen) days of receiving it to amicably settle the dispute in terms of Clause 18.3.

### **18.3 Amicable Settlement**

18.3.1 Any dispute, controversy or claim arising out of or relating to this Contract (whether in tort, contract, under statute or otherwise), including any question regarding its existence, validity, interpretation, breach, or termination and so notified in writing by either Party to the other (the "Dispute") shall in the first instance be attempted to be resolved amicably between the Parties.

18.3.2 Either Party may require such Dispute to be referred to authorized representative of other Party, for amicable settlement. Upon such reference, the authorized representative of the Parties shall meet at the earliest mutual convenience and in any event within 15 (fifteen) days of such reference to discuss and attempt to arrive at an amicable resolution of the Dispute.

18.3.3 If, after such meeting between the Parties in accordance with Clause 18.3.2, the Dispute remains unresolved, either Party may refer such dispute to resolved by way of arbitration in terms of this Contract.

### **18.4 Arbitration**

- (i) If the Consultant is of the view that a decision taken by the Authority's Representative was either outside the authority given to the Authority's Representative by the Contract or that the decision was wrongly taken, the decision shall be referred to highest ranking representative from the Authority within 14 days of the notification of the Authority's decision. If the issue is not resolved, any party can refer the matter for conciliation within 15 days from the decision given by the highest representative from the Authority.
- (ii) If any of the Parties is not satisfied with the decision of the highest-ranking representative from the Authority, both the parties have to refer to the Executive Member of the Narmada Control Authority.
- (iii) If the dispute is not resolved through the conciliation process, the Executive Member of the Narmada Control Authority may refer the dispute to Central Public Works Contract Dispute Arbitration Tribunal. If the Consultant fails to refer a claim / dispute to the higher authority within 14 days of the notification of the Authority's decision, the Consultant shall not be entitled to any additional payment/claim. Additionally, in an event the Consultant fails to comply with the above-mentioned procedure, it shall be deemed that

the Consultant has waived its right to claim such dispute and the Consultant shall continue with his Obligations as per the Contract.

- (iv) The seat of the arbitration shall be Indore. The Parties are free to choose a venue in Indore which may be convenient for different stages of the arbitration proceedings. The language of the arbitration shall be English. The arbitration shall be conducted in accordance with the Arbitration and Conciliation Act, 1996 as amended from time to time (“Arbitration Act”).
- (v) The reference to arbitration proceeding under this clause shall not.
  - (a) affect the right of both the parties under the contract to take possession of all or any tools plants materials and stores in or upon the works of site thereof belonging to the Consultant or procured by him and intended to be used for the execution of the work or any part thereof.
  - (b) Preclude the Authority from utilizing the materials purchased by the Consultant in any work or from removing such materials to other places, during the period the work is stopped or suspended in pursuance of notice given to the Consultant.
  - (c) Entitle the Consultant to stop the progress of the work or the carrying out the additional or altered work in accordance with the provisions of contract.
- (vi) The Parties shall ensure that any arbitrator appointed to act under this Clause 18.4 will agree to be bound to certain confidentiality obligations with respect to the terms of the Contract and any information obtained during the course of the arbitration proceedings.

### **18.5 Continuance of Performance**

Performance of this Contract shall continue during any dispute resolution process referred to in this Clause 18.4.

### **18.6 Governing Law and Jurisdiction**

The Contract shall be construed and interpreted in accordance with and governed by the laws of India, and subject to the provisions of Clause 18.4 and above, the courts at Indore shall have exclusive jurisdiction over Disputes arising out of or relating to this Contract.

## **ARTICLE 19: MISCELLANEOUS PROVISIONS**

### **19.1 CONFIDENTIALITY**

#### **19.1.1 Confidential Information**

All information, maps, data, and documentation provided by the Authority to the Consultant, or generated by the Consultant during the course of the Survey (collectively "**Confidential Information**"), shall be treated as strictly confidential. The Consultant shall not disclose such information to any third party without the prior written consent of the Authority, except to its own employees who need the information to perform the Services.

#### **19.1.2 Survival of Obligation**

The confidentiality obligations under this Article shall remain in force during the Contract Period and for a period of 3 (three) years after the termination or expiry of this Contract.

### **19.2 INTELLECTUAL PROPERTY RIGHTS (IPR)**

#### **19.2.1 Authority's Ownership**

All Survey Data, Maps, Field Books, Digital Models, and Reports prepared by the Consultant under this Contract shall be the absolute property of the Authority. The Consultant shall not use, sell, or distribute this data to any other client or for any commercial purpose without the Authority's permission.

#### **19.2.2 Indemnity against Infringement**

The Consultant shall ensure that the software, equipment, and methodologies used in the Survey do not infringe any third-party Intellectual Property Rights. The Consultant shall indemnify and defend the Authority against any claims or suits arising from such alleged infringement.

### **19.3 NOTICES**

Any notice or communication under this Contract shall be in writing and delivered by hand, post, or email to the following addresses:

#### **To the Authority:**

- **Address:** Narmada Control Authority, Narmada Sadan, Scheme No. 74-C, Vijay Nagar, Indore, 452010
- **Email:** cero.nca@nic.in
- **Attention:** Chief Engineer, NCA

**To the Consultant:**

- **Address:** [Insert Consultant Address]
- **Email:** [Insert Email]
- **Attention:** [Name of Representative]

**19.4 AUTHORITY'S INSTRUCTIONS**

The Authority may issue instructions to the Consultant necessary for the performance of the Services. The Consultant shall comply with such instructions. If an instruction constitutes a Change in Scope, the provisions of Clause 3.5 shall apply.

**19.5 ASSIGNMENT**

The Consultant shall not assign, transfer, or subcontract any part of this Contract or its benefits/ obligations to any third party without the prior written consent of the Authority.

**19.6 AMENDMENTS**

No modification or amendment to this Contract shall be valid unless it is in writing and signed by the authorized representatives of both Parties.

**19.7 ENTIRE AGREEMENT**

This Contract, including its Schedules and Annexures outlined in RFP, constitutes the entire agreement between the Parties and supersedes all prior negotiations, representations, or agreements, whether written or oral.

**19.8 WAIVER**

Failure by either Party to enforce any provision of this Contract at any time shall not be construed as a waiver of its right to enforce such provision later.

**19.9 SEVERABILITY**

If any provision of this Contract is held to be invalid or unenforceable, the remaining provisions shall continue in full force and effect.

**19.10 RELATIONSHIP OF PARTIES**

The Consultant is an Independent Consultant. Nothing in this Contract shall be construed to create a partnership, joint venture, or employer-employee relationship between the Authority and the Consultant.

**19.11 GOVERNING LANGUAGE**

All notices, reports, and communications shall be in the English language.

## **19.12 STAMP DUTY**

The Consultant shall bear the cost of any Stamp Duty and Registration Fees applicable to the execution of this Contract.

**IN WITNESS WHEREOF**, intending to be legally bound hereby, the Parties have executed this Contract as of the date first set forth above.

**SIGNED, SEALED AND DELIVERED**

**For and on behalf of the AUTHORITY:**

---

**(Signature)**

**Name:** .....

**Designation:** Chief Engineer

**For:** Narmada Control Authority, Indore

**In the presence of (Witness):**

1. **Signature:** \_\_\_\_\_
  - o **Name:** \_\_\_\_\_
  - o **Address:** \_\_\_\_\_

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**SIGNED, SEALED AND DELIVERED**

**For and on behalf of the CONSULTANT:**

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**(Signature)**

**Name:** \_\_\_\_\_

**Designation:** [Authorized Signatory]

**For:** [Insert Name of the Consultant Agency]

**In the presence of (Witness):**

1. **Signature:** \_\_\_\_\_
  - o **Name:** \_\_\_\_\_
  - o **Address:** \_\_\_\_\_

## SCHEDULE 1 - DEFINITIONS

In this Contract, the following words and expressions shall have the meanings stated below, unless the context otherwise requires:

“**Affected Party**” Shall have the meaning set forth in **Clause 15.1.1** (Force Majeure).

“**Applicable Laws**” Means all laws, acts, ordinances, rules, regulations, notifications, guidelines, or orders of any Court or Government Instrumentality (Central, State, or Local) in India that are applicable to the Project and the Parties.

“**Applicable Permits**” Means all clearances, licenses, permits, authorizations, no-objection certificates (NOCs), consents, and approvals required for the execution of the Survey Services (e.g., Drone permissions from DGCA, Restricted Area Permits, Boat movement permissions).

“**Appointed Date**” / “**Effective Date**” Means the date on which this Contract is signed by both Parties, or the date of issuance of the **Letter of Award (LOA)**, whichever is earlier. This marks the commencement of the Contract Period.

“**Authority**” Means the **Narmada Control Authority, Indore** acting through its designated officers.

“**Authority’s Representative**” / “**Engineer-in-Charge**” Means the officer designated by the Authority to supervise, monitor, and certify the Services performed by the Consultant.

“**Bank Rate**” Means the rate of interest specified by the Reserve Bank of India (RBI) or State Bank of India (SBI) MCLR rate + 2%.

“**Consultant**” Means [**Insert Name of the Agency**], the entity appointed to provide the Services under this Contract, and includes its legal successors and permitted assigns.

“**Consultant’s Personnel**” Means the Team Leader, Key Experts, surveyors, boatmen, and support staff employed or engaged by the Consultant to perform the Services.

“**Contract**” Means this Agreement, including the Articles, Schedules, Annexures, and the Letter of Award.

“**Contract Period**”/ “**Term**” Means the duration of the Services commencing from the Effective Date and ending on the date of acceptance of the Final Report, unless terminated earlier.

“**Contract Price**”/ “**Consultancy Fee**” Means the total lump-sum or unit-rate consideration payable to the Consultant for the full and proper performance of the Services, as specified in (**Financial Bid**).

**“Data Warranty Period”** Means the period of **12 (twelve) months** commencing from the date of issuance of the Completion Certificate, during which the Consultant is liable to rectify any errors in the Survey Data.

**“Deliverables”** Means the reports, maps, charts, raw data logs, digital models, and other documents to be submitted by the Consultant as per **Schedule 2 (Terms of Reference)**.

**“Dispute”** Shall have the meaning set forth in **Article 18**.

**“Force Majeure”** Shall have the meaning set forth in **Article 15**.

**“Good Industry Practice”** Means the standards, practices, methods, and procedures conforming to the Applicable Laws and the degree of skill and care that would be expected from a skilled and experienced Consultant engaged in river surveys of a similar scope.

**“Government Instrumentality”** Means any department, division, or sub-division of the Government of India or the State Government, including any commission, board, authority, or agency.

**“Intellectual Property Rights” (IPR)** Means all copyright, moral rights, patents, trademarks, design rights, and data ownership rights regarding the Reports, Maps, and Survey Data.

**“Letter of Award” (LOA)** Means the formal letter issued by the Authority to the Consultant accepting its Bid.

**“Milestone”** Means a critical stage of the Project (e.g., Submission of Inception Report, Completion of Field Work) upon which a payment tranche is released.

**“Project”** Means the **Collection, Compilation and Verification of water utilization through Private Pumping Schemes (PPS) across all three seasons from the Narmada River and its major tributaries in Madhya Pradesh** as described in the Terms of Reference.

**“Performance Security”** Means the Bank Guarantee submitted by the Consultant to secure the due performance of its obligations.

**“Services” / “Scope of Services”** Means the work to be performed by the Consultant pursuant to this Contract, as described in **Schedule 2 (Terms of Reference)**, including field surveys, data processing, and reporting.

**“Site”** Means the specific stretch of the river, banks, and adjacent land where the Survey is to be conducted.

**“Survey Data”** Means all raw and processed data collected during the Project, including number of pumps and their geo tagged locations and other relevant specifications, topographic points and digital elevation models.

**“Termination”** Means the early ending of this Contract pursuant to **Article 16**.

## SCHEDULE 2 – SCOPE OF SERVICES

### PART A: TECHNICAL SCOPE & METHODOLOGY

#### Category-I: General & Mobilization

#### 20. Scope of Services - General

**20.1 Objectives of the Assignment** The primary objective of this assignment is to conduct a scientifically rigorous Verification of water extraction by Private Pumping Schemes (PPS) within the Narmada Basin. The Consultant shall establish a verified, transparent, and auditable water account to ensure compliance with the allocation framework mandated by the Narmada Water Disputes Tribunal (NWDT) Award.

To achieve this, the Consultant shall:

- **Establish Accurate Volumetric Data:** Move beyond provisional estimates by implementing a robust measurement regime for Private pumping schemes.
- **Implement Triangulation Methodology:** Utilize three independent data streams—Direct Volumetric Measurement, Energy Consumption Audits, and Geospatial Satellite Imagery/ Drone based Estimation—to cross-validate extraction figures and minimize uncertainty.

#### 20.2 Project Area & Zonal Classification

The Scope of Services covers the entirety of the Narmada Basin within the state of Madhya Pradesh up to Gujarat Border. The verification exercise extends to all identified Private Pumping Schemes (PPS) and Minor Irrigation (MI) schemes.

- **Geographical Scope:** The verification shall cover all six (6) Narmada zones as designated by the Narmada Control Authority.
- **Asset Classification:** The Consultant shall cover the full spectrum of abstraction technologies, including submersible pumps, centrifugal pumps, and lift irrigation schemes, along with their operational status (functional/non-functional) at the time of the survey. Intermittent Usages should also be included. Seasonal, Monthly and Ten daily variations and trends should be reported.
- **Decentralized Nature:** The Consultant acknowledges the dispersed nature of these minor schemes and shall account for logistical planning to reach remote locations.

#### 20.3 Mobilization of Expert Team & Resources

Upon the Effective Date, the Consultant shall mobilize a multidisciplinary team of key experts and support staff to ensure the technical integrity of the TPV.

- **Key Personnel Deployment:** The Consultant must deploy the following core experts:
  - **Team Leader:** A senior expert with minimum 15 years of experience in large-scale water resource management and technical auditing.

- **Hydrologist / Remote Sensing Expert/ Drone imagery Expert:** A specialist (PhD or equivalent) proficient in FAO-56 methodology, Soil Water Deficit Modelling, and satellite imagery analysis.
- **M&V (Measurement & Verification) Engineer:** A certified engineer with demonstrable experience in ISO 4064 metering standards, pump efficiency testing, and telemetry integration.
- **Independence of Auditors:** To ensure data integrity, all field auditors and testing personnel deployed must be fully independent of the entities responsible for the Collection, verification, or validation of PPS infrastructure.
- **Inception Phase:** Within the mobilization period, the Consultant shall establish a local Project Office, arrange necessary equipment's and secure all statutory permissions required for field access.

### 20.3.1 Aviation Regulatory Compliance (DGCA Standards)

The Consultant represents and warrants that all Unmanned Aerial Vehicles (UAVs) deployed for this assignment shall strictly adhere to the **Drone Rules, 2021** and any subsequent amendments.

- **Mandatory Type Certification:** All deployed UAVs must possess a valid **Type Certificate (TC)** issued by the DGCA/QCI. The use of non-compliant or "assembled" drones without TC is strictly prohibited.
- **Unique Identification Number (UIN):** Every individual drone airframe must be registered on the **Digital Sky Platform** and bear a valid UIN. The UIN list for the entire fleet must be submitted as part of the Inception Report.
- **Remote Pilot Certification (RPC):** All drone operations must be conducted by pilots holding a valid **Remote Pilot Certificate (RPC)** issued by a DGCA-authorized Remote Pilot Training Organization (RPTO).

### 20.4 Stratified Sampling Plan Design

Recognizing the scale of Private schemes, the Consultant shall design and submit a statistically robust Stratified Sampling Plan prior to the commencement of field works.

- **Stratification Criteria:** The sampling plan shall not be random but stratified based on critical hydrological and operational parameters, including:
  - **Capacity/Flow Rate:** Categorization of pumps by Horsepower (HP) and discharge capacity.
  - **Geographical Distribution:** Ensuring representative coverage across Head, Middle, and Tail reaches of the river/canal system to capture spatial variations in water availability.
  - **Cropping Intensity:** Correlation with reported agricultural patterns to target high-extraction zones.

## Category-II: Direct Volumetric Measurement (Methodology A)

### 21. Asset Inventory & Physical Verification

#### 21.1 Census of Abstraction Structures

The Consultant shall conduct a comprehensive physical census of Private Pumping Schemes (PPS) within the sampled zones identified in the Stratified Sampling Plan. This exercise aims to create a verified baseline of the actual installed capacity versus the administrative records.

- **Verification of Existence:** The Consultant shall physically verify the existence of pumping machinery and match it against the sanctioned list provided by the Authority or Obtained from concern state government.
- **Operational Status:** The Consultant must record the operational status of each asset (Functional, Non-Functional, Abandoned, or Seasonal) to prevent the skewing of data by non-operational schemes.
- **Discrepancy Recording:** Any deviation observed between the sanctioned horsepower (HP) / discharge capacity and the actual installed capacity on the ground must be documented and flagged in the Asset Inventory Report. The period reporting should be Ten daily, Monthly and Seasonal.

#### 21.2 Digital Asset Map & Drone Augmentation

The Consultant shall generate a comprehensive GIS-based **Digital Asset Map** overlaying the verified Private Pumping Schemes (PPS) locations onto the Narmada Basin command area map. This map shall serve as the foundational "Ground Truth" layer for the subsequent Remote Sensing analysis.

- **Drone Deployment Strategy:** In areas where satellite imagery resolution is insufficient to visually identify small-scale pumping machinery or obscured intake structures, or where cloud cover persists, the Consultant **shall deploy Unmanned Aerial Vehicles (UAVs/Drones)** to generate high-resolution orthomosaics.
- **Resolution Specifications:** The drone imagery must be captured at a **Ground Sampling Distance (GSD) of 5 cm or better**. This pixel density is mandatory to ensure that:
  - (a) Physical machinery (pump sets, starter boxes, and delivery pipes) can be visually identified and inventoried from the base layer.
  - (b) The specific "**Serving Area**" (command area) of each pump is demarcated with precision, enabling the independent identification of every field feature and irrigation channel connected to the asset.

## Category-III: Energy Consumption (Methodology B)

### 22. Energy Consumption Audit

#### 22.1 Pump Efficiency ( $\eta$ ) Testing (Field Testing)

Recognizing that assumed pump efficiency leads to significant errors in draft estimation, the Consultant shall not rely on theoretical nameplate ratings.

- **In-Situ Testing:** The Consultant shall conduct verified field testing of individual pump set efficiency for a statistically significant sub-sample of the PPS.
- **Derivation of Efficiency Curve:** The verified efficiency ( $\eta$ ) derived from these field tests shall be used to calibrate the power-to-discharge conversion formula, replacing standard assumptions with empirical field data.

#### 22.2 Power Consumption Analysis

The Consultant shall aggregate and analyze electricity consumption data to derive gross water extraction volumes.

- **Data Collection:** The Consultant shall collect historical and current power consumption logs (kWh) for the verified schemes from the distribution utility or local metering points.
- **Adjustment for Unmetered Supply:** In cases of unmetered electricity supply (flat rate), the Consultant shall estimate consumption based on verified "Run-Hours" logged during the physical monitoring period.

#### 22.3 Correlation of Energy vs. Discharge (Q)

The Consultant shall establish a scientifically defensible correlation between Energy Input (kWh) and Water Output (Discharge Q) using the inputs from Section 3.1.

- **Volumetric Calculation:** The Consultant shall calculate the total draft volume for unmetered pumps using the formula:

$$\text{Volume (m}^3\text{)} = \frac{\text{Energy (kWh)} \times 3600 \times \eta_{\text{field}}}{\text{Total Head (m)} \times 9.81}$$

#### 22.4 System Efficiency (Distribution Uniformity) Testing

To distinguish between "Gross Extraction" and "Net Consumptive Use" the Consultant must quantify system losses.

- **Field Tests:** The Consultant shall conduct field tests, such as the "catch-can method," to measure the application efficiency of the irrigation systems connected to the PPS.

- **Distribution Uniformity (DU):** The Consultant shall verify the Distribution Uniformity (DU) and Irrigation Efficiency (IE) of the sampled systems.
- **Threshold Verification:** The Consultant shall report whether the systems meet the recommended Lower Quarter Distribution Uniformity ( $DU_{LQ}$ ) benchmark of 65% or greater for spray-irrigated areas. This data will be used to reconcile the difference between water pumped and water actually available for crop use.

#### Category-IV: Remote Sensing & Historical Analysis (Methodology C)

### 23. Geospatial Satellite Imagery/ Drone based Estimation & Consumptive Use

#### 23.1 Satellite Data Acquisition (Sentinel/Landsat)

To ensure an independent quantification of water use across the vast and dispersed Project Area, the Consultant shall utilize high-resolution Earth Observation data.

- **Sensor Requirements:** The Consultant must acquire and process time-series imagery from modern satellite constellations, specifically **Sentinel-2** (10m resolution) and **Landsat 8/9** (30m resolution), to ensure adequate spatial detail for fragmented land holdings.
- **Temporal Resolution:** The imagery acquisition frequency must be sufficient (e.g., 5-10 day revisit cycle) to capture phenological stages of crops throughout the Rabi, Kharif, and Zaid seasons.
- **Pre-processing:** The scope includes geometric correction, radiometric calibration, and the generation of cloud-free composites to ensure data quality.

#### 23.1.1 Unmanned Aerial Vehicle (UAV / Drone) Deployment Strategy

Recognizing the limitations of satellite resolution (10m/30m) in identifying small-scale assets, the Consultant shall deploy **Survey-Grade Drones** to generate a high-precision "Ground Truth" layer.

- **Operational Trigger:** Drones shall be mandatorily deployed in "**Shadow Zones**" where satellite imagery is compromised by persistent cloud cover (especially during Kharif), dense tree canopy, or where the command area of individual pumps is too fragmented for satellite demarcation.
- **Asset Identification & Base Layer:** The Consultant shall generate high-resolution **Orthomosaics** with a **Ground Sampling Distance (GSD) of 5 cm or better**. This resolution must be sufficient to visually identify and geo-tag micro-assets such as:
  - Physical Pump Sets and Starter Boxes.
  - Intake Wells and Delivery Pipe Networks.
- **Command Area Demarcation:** The drone imagery shall be used to precisely delineate the "**Serving Area**" of each verified pump. The Consultant must map the micro-irrigation channels to attribute specific field parcels to specific pumps, ensuring that the "Consumptive Use" calculation is linked to the correct abstraction source.

**23.1.2 Hybrid Sensor Deployment Strategy (RGB + LiDAR)** Recognizing the diverse agricultural profile of the Narmada Basin, the Consultant shall adopt a hybrid sensor approach:

- **Tier 1: Open Agriculture (RGB):** For areas with open canopy crops (e.g., Wheat, Gram, Soy), the Consultant shall utilize **RGB Photogrammetry** with a Ground Sampling Distance (GSD) of **5 cm or better**.
- **Tier 2: Horticulture & Riparian Zones (LiDAR):** In "Shadow Zones" characterized by dense canopy (specifically **Banana Plantations, Orchards**) or obscured riverbanks, the Consultant shall mandatorily deploy **UAV-LiDAR (Light Detection and Ranging)** sensors.
  - **Specification:** The LiDAR sensor must be capable of **Multi-Return (minimum 3 returns)** to penetrate vegetation gaps and generate a "Bare Earth" Digital Terrain Model (DTM) revealing the pumping assets hidden beneath the canopy.
- **Thermal Imaging:** In areas suspected of illegal night-time pumping, the Consultant shall utilize **Thermal (Infrared) Sensors** to detect heat signatures of active motors.

### **23.2 Calculation of Crop Coefficient ( $K_c$ ) & Evapotranspiration ( $ET_c$ )**

The Consultant shall derive the actual crop water demand from the satellite data using spectral indices.

- **Vegetation Indices:** The Consultant shall compute the **Normalized Difference Vegetation Index (NDVI)** and/or **Soil Adjusted Vegetation Index (SAVI)** for the entire command area.
- **Crop Coefficient ( $K_c$ ):** The verified NDVI values shall be utilized to derive the spatial Crop Coefficient ( $K_c$ ) for each pixel, dynamically adjusting for the crop growth stage (initial, mid-season, late-season)<sup>4</sup>.
- **Calculation of  $ET_c$ :** The Consultant shall calculate the Crop Evapotranspiration ( $ET_c$ ) using the formula:

$$ET_c = ET_0 \times K_c$$

Where  $ET_0$  is the Reference Evapotranspiration derived from local meteorological station data (Penman-Monteith equation).

### **23.3 Soil Water Deficit Modelling (FAO-56 Standards)**

To transition from "Crop Demand" to "Irrigation Requirement," the Consultant must account for soil moisture and rainfall.

- **Standard Compliance:** The modelling methodology must strictly adhere to the protocols outlined in the **FAO Irrigation and Drainage Paper No. 56 (FAO-56)**.
- **Soil Water Balance:** The Consultant shall integrate digital soil maps (defining Field Capacity and Wilting Point) and daily precipitation data to model the **Soil Water Deficit**.

- **Net Irrigation Requirement (NIR):** The final output shall be the Net Irrigation Requirement (NIR), representing the actual volume of water required from the PPS to maintain crop health, independent of ground-reported pumping figures.

## **PART B – DATA INTEGRATION & ANALYTICS**

### **24. Data Reconciliation (Triangulation Model)**

#### **24.1 Cross-Verification of Methodologies (A vs. B vs. C)**

The Consultant shall not treat the three methodologies as isolated exercises. The core deliverable is the Triangulation Matrix, which mathematically reconciles the data streams to derive a single, legally defensible extraction figure.

##### **24.1.1 Validation via Remote Sensing & Drone Verification (Methodology C)**

- **Volumetric Comparison:** The Consultant shall compare the **Gross Extraction Volume** derived from Energy Audits A with Remote Sensing & Historical Analysis B against the **Net Irrigation Requirement** (derived from Satellite & Drone Methodology C).
- **Reconciliation & Variance:** The Consultant must demonstrate that the *Gross Extraction* minus *System Losses* (verified via Field Efficiency Tests) aligns with the *Remote Sensing-derived Crop Water Demand* within an acceptable variance margin (e.g.,  $\pm 10\%$ ).
- **Forensic Drone Deployment:** In the event of **Significant Deviations** (variance  $> 10\%$ ), the Consultant is strictly required to deploy **UAVs/Drones** to conduct a forensic investigation. This targeted drone survey must:
  - (a) Verify the actual "Wetted Area" vs. the "Satellite Footprint" to rule out classification errors due to mixed-cropping or resolution limits.
  - (b) Identify potential "Non-Irrigation Abstraction" (e.g., water diverted for washing, construction, or brick kilns) that satellites cannot detect.
  - (c) Conclusively classify the discrepancy as either a "Data Anomaly" or "Unaccounted Consumption" based on the high-resolution (5 cm GSD) drone evidence.

##### **24.1.2 Hierarchy of Evidence (Conflict Resolution)**

In the event of a discrepancy between the three methodologies exceeding the permitted variance ( $\pm 10\%$ ), the Final Verified Account shall be determined based on the following Hierarchy of Evidence:

1. **Primary Truth:** Direct Volumetric Measurement (ISO 4064 Certified Meter Data).
2. **Secondary Truth:** Calibrated Energy Audit
3. **Tertiary Truth:** Geospatial Modelling (Satellite-derived Net Irrigation Requirement).

- *Note:* The Consultant must provide a "Forensic Justification Report" whenever the Primary Truth is disregarded in favor of Secondary or Tertiary methods due to suspected meter tampering.

## 24.2 Uncertainty Analysis & Margin of Error Calculation

Recognizing that the verification relies on stratified sampling, the Consultant is strictly required to quantify the statistical reliability of the extrapolated data.

- **Statistical Confidence:** The Consultant shall extrapolate the findings from the sample size to the entire Basin population with a minimum **Confidence Level of 95%**.
- **Margin of Error (MOE):** The Final Report must explicitly state the Margin of Error (e.g.,  $\pm X$  MCM) associated with the total reported volume.
- **Simulation Modelling:** To robustly define the MOE, the Consultant shall employ **Monte Carlo Simulations** (minimum 10,000 iterations) to model the variability of key input parameters (Pump Efficiency, Run Hours, Aquifer Yield) and their impact on the final result. This prevents reliance on "average" values that mask extreme outliers.

## 24.3 Determination of Final Gross Extraction Volume

- **The Verified Account:** The Consultant shall derive the **Final Verified Gross Extraction Volume** for the reporting year. This figure shall serve as the official input for the Narmada Control Authority's (NCA) Annual Water Account.
- **Component Breakdown:** The Final Volume must be disaggregated by:
  - **Zonal Extraction:** Volume per GoMP Zone (1 to 6).
  - **Seasonal Extraction:** Volume per Season (Rabi, Kharif, Hot).
  - **Source Type:** Groundwater (Tube wells) vs. Surface Lift (River/Canal).
- **Forensic Conclusion:** The Consultant shall explicitly state whether the determined volume supports or refutes the historical discrepancy, citing the specific evidence from the Triangulation Model.

## 25. Data Security

### 25.1 Data Privacy & DPDP Act Compliance

The Consultant acknowledges that in collecting farmer-specific usage data, it acts as a "**Data Processor**" under the **Digital Personal Data Protection (DPDP) Act, 2023**.

- **Consent Architecture:** The Consultant shall implement a digital or physical "Consent Mechanism" (in local vernacular) when collecting personal data (Name, GPS Location, Pump ID) from farmers.
- **Data Anonymization:** All data transmitted to the Central Repository must be pseudo-anonymized. The "Key" linking Pump IDs to specific Farmer Names shall be stored offline in a secure, air-gapped server accessible only to the Authority.

- **Indemnity:** The Consultant shall indemnify the Authority against any penalties, fines, or legal proceedings arising from the Consultant's breach of the DPDP Act provisions during the tenure of the assignment.

**25.2 Submission of Final Verified Water Accounts** The culmination of the project is the submission of the "**Final Water Account**," which shall serve as the definitive record for the dispute resolution.

- **Definitive Reconciliation:** The Final Report must present the **Verified Annual Gross Extraction** figure, explicitly stating the divergence from the originally reported figures.
- **Integration with NCA Accounts:** The data must be formatted specifically for seamless integration into the Narmada Control Authority's Annual Water Account, with all supporting raw data logs annexed digitally.

## PART C – DELIVERABLES & APPROVALS

### 26. Schedule of Deliverables

The Consultant shall adhere to the following strict timeline for the submission of deliverables. The timelines are calculated from the **Effective Date (T)** of the Contract.

Sr. No.	Deliverable Name	Timeline	Description / Key Content
1.	<b>Inception Report &amp; Quality Assurance Plan (QAP)</b>	<b>T + 2 Weeks</b>	Detailed Work Plan, Mobilization Status of Key Experts, and Draft QAP for field operations.
2.	<b>Stratified Sampling Plan Monthly/ Seasonal report</b>	<b>T + 4 Weeks</b>	Statistical design of the sample size, location of sample pumps, and stratification logic (Zone/HP/Crop) for Authority approval.
3.	<b>Season wise report</b>	<b>T + 12/24/36 Weeks</b>	<b>Season wise extraction report for each season (Kharif, Rabi, Hot).</b>
3.	<b>Draft Report</b>	<b>T + 40 Weeks</b>	Submission of the Preliminary Water Account including the Triangulation Matrix and Historical Baseline Analysis.
4.	<b>Final Report &amp; Handover</b>	<b>T + 48 Weeks</b>	Final "Certified" Water Account incorporating Authority's comments, Margin of Error analysis, and Handover Certificates for IT/Assets.

*Note: The Authority shall provide comments on draft deliverables within 10 (ten) working days. The Consultant must incorporate these comments before the deliverable is deemed "Approved" for payment processing.*

## **27. Reporting Formats**

### **27.1 Inception Report**

The Inception Report is the foundational document that freezes the methodology. It must contain:

- **Mobilization Report:** Evidence of the deployment of the Team Leader, Hydrologist, and M&V Engineer, along with the establishment of the local project office.
- **Detailed Sampling Strategy:** A specific chapter justifying the sample size to achieve the required **100% Confidence Level**. It must list the specific villages and feeders selected for the Energy Audit.
- **HSE Plan:** Health, Safety, and Environment protocols for field teams working near water bodies and electrical installations.

### **27.2 Monthly Progress Reports**

By the 5<sup>th</sup> of every month, the Consultant shall submit a progress report covering:

- **Physical Progress:** Number of pumps surveyed, meters installed, and efficiency tests conducted against the scheduled targets.
- **Issues & Impediments:** Any resistance faced from local farmers or lack of access to specific zones, requiring Authority intervention.

### **27.3 Season wise Reports**

The Consultant shall submit a season wise report for each crop season (Kharif, Rabi and Hot) report covering:

- **Physical Progress:** Number of pumps surveyed, meters installed, and efficiency tests conducted against the scheduled targets.
- **Volumetric extraction:** Total volume is extracted through the pumps, well etc.

### **27.4 Draft & Final Reports**

The Final TPV Report is the primary legal product of this assignment. It must be structured to withstand judicial scrutiny by the Tribunal.

- **Triangulation Matrix:** A dedicated chapter explicitly reconciling the results from the data streams, including the mandatory Drone Verification layer:

*(A) Energy Audit Volume (Derated Efficiency Model).*

(B) *Satellite-derived Net Irrigation Requirement* (FAO-56 Model).

(C) *Drone-based Forensic Verification*: Specific inclusion of High-Resolution Orthomosaics used to adjudicate discrepancies where Variance >10% existed between A, B, and C.

*Reconciliation Statement*: A mathematically rigorous statement explaining the variance and deriving the final "**Certified Gross Extraction.**"

- **Forensic Analysis of Discrepancy**: A specific conclusion on the historical data conflict.
  - The Consultant must state whether the historical figures or the revised figures, supported by the **Historical Satellite Reconstruction (2012-13)**.
  - **Visual Evidence Annexure**: The analysis must be substantiated by **Drone Imagery Overlays** of current infrastructure, proving the physical presence (or absence) of the pumping capacity required to achieve the claimed historical extraction.
- **Digital Evidence Repository**: The submission must include a hard drive containing the **Geo-tagged Drone Video/Image Database** of all inspected assets, serving as immutable proof of the "Ground Truth" at the time of audit.

**27.4.1 Legal Admissibility & Section 65B Certification** To ensure the "Final Forensic Water Account" is admissible as evidence before the Narmada Water Disputes Tribunal:

- **Section 65B Certificate**: All digital evidence submitted (including drone imagery, telemetry logs, and meter data) must be accompanied by a certificate under **Section 65B of the Indian Evidence Act, 1872** (or Section 63 of the Bharatiya Sakshya Adhinyam, 2023).
- **Chain of Custody (Hashing)**: The Consultant shall generate a cryptographic hash (**SHA-256**) for every raw data file immediately upon acquisition. This hash log shall be submitted to establish a verifiable, tamper-proof Chain of Custody.

## 27.5 List of Tributaries

Sl. No	Name of Tributary	Distance of Confluence with Narmada from Source (in kms)	Length of Tributary (in kms)	Catchment area (in Sq. kms)
<b>Right Bank</b>				
1	Hiran	463.392	188.253	4808.15
2	Tendoni	601.766	117.457	1637.37
3	Barna	604.984	104.585	1793.31
4	Kolar	1039.414	101.367	1351.48
5	Man	997.58	88.495	1533.41
6	Uri	1034.587	74.014	1819.3
7	Hatni	1074.812	80.45	1949.25
<b>Left Bank</b>				
1	Burhner	247.786	176.99	4132.41
2	Banjar	286.402	183.426	3638.6
3	Sher	497.181	128.72	2910.88
4	Shakkar	545.451	160.9	2300.12
5	Dudhi	574.413	128.72	1546.41
6	Tawa	675.78	172.163	6354.56
7	Ganjal	756.23	88.495	1936.26
8	ChhotaTawa	828.635	168.945	5068.05
9	Kundi	942.874	120.675	3833.53
10	Goi	1037.805	128.72	1897.27

### SCHEDULE 3 – PROJECT SCHEDULE & MILESTONES

The following are the Project Milestones that the Consultant is mandatorily required to adhere to. The timeline is calculated from the **Appointed Date** (Day T).

Milestone No.	Description of Deliverable / Activity	Timeline (Weeks/ Months)	Key Requirements for Achievement
Milestone I	<b>Mobilization &amp; Inception Report</b>	<b>T + 1 Month</b>	<ul style="list-style-type: none"> <li>• Submission and acceptance of the <b>Inception Report</b>.</li> <li>• Mobilization of Survey Team, Boats, and Equipment to the Site.</li> <li>• Establishment of Base Stations/Control Points</li> </ul>
Milestone II	<b>Completion of Field Survey</b>	<b>T + 6 Months</b>	<ul style="list-style-type: none"> <li>• Completion of <b>Topographic Survey</b> for the entire stretch.</li> <li>• Submission of Raw Data Logs and Field Books.</li> <li>• Joint verification of random cross-sections by Engineer-in-Charge.</li> </ul>
Milestone III	<b>Draft Report &amp; Maps</b>	<b>T+12 Months</b>	<ul style="list-style-type: none"> <li>• Submission of <b>Draft Survey Report</b>.</li> <li>• Submission of Draft Charts/Maps (L-Sections and Cross-Sections).</li> <li>• Submission of preliminary Digital Data.</li> </ul>
Milestone IV	<b>Final Report &amp; Handover</b>	<b>T + 15 Months</b>	<ul style="list-style-type: none"> <li>• Submission of <b>Final Survey Report</b> (incorporating Authority's comments).</li> <li>• Submission of Final Hard Copy Maps (bound volumes).</li> <li>• Handover of all <b>Digital Data</b> (XYZ files, DWG, GIS shapefiles) on Hard Drive.</li> <li>• Return of original documents/ permissions.</li> </ul>

**Notes:**

1. **Binding Nature:** These timelines are binding. Failure to achieve Milestone II or IV by the scheduled date may attract **Liquidated Damages** as per **Clause 11.15**.
2. **Review Period:** The Authority shall take **15 (fifteen) days** to review the Draft Report. This review period is excluded from the Consultant's timeline.

3. **Monsoon Allowance:** If the project timeline overlaps with the Monsoon season (June–Sept), an automatic extension of **[Insert Number] months** may be granted for Field Work (Milestone II), subject to the Authority’s approval.
4. **Payment Linkage:** The Payment Schedule (Schedule 6) is directly linked to the achievement of these Milestones.

## SCHEDULE 4: PROJECT COMPLETION SCHEDULE

### SCHEDULE 4: DETAILED WORK PROGRAMME

Within **15 (fifteen) days** of the Appointed Date (and before the commencement of Field Work), the **Consultant** shall submit to the Authority a comprehensive **Work Programme** for the execution of the Survey Services.

This Programme shall include a **Gantt Chart / Bar Chart** (developed using MS Project or similar software) and shall cover the following key components:

**1. Mobilization Plan:**

- Timeline for the deployment of Survey Teams, Boats, and Key Equipment (DGPS, Echo-sounders) etc. to the Site.
- Schedule for establishing the Base Stations / Control Points.

**2. Field Execution Schedule:**

- Detailed timeline for the completion of **Topographic Survey** (Banks) for each specific stretch/sector of the river.
- Planned dates for "Joint Verification" inspections with the Authority's Engineer.

**3. Data Processing & Reporting Plan:**

- Schedule for data downloading, processing, and checking.
- Timeline for the submission of the **Inception Report, Draft Report, and Final Report**.

## **SCHEDULE 5 – AUTHORITY’S REPRESENTATIVE**

**The details in relation to the Authority’s Representative would be shared by the Authority from time to time during the Term of the Contract.**

## SCHEDULE 6 – PAYMENT MILESTONES

### 1. CONTRACT PRICE

The Total Contract Price is INR [●] (Rupees [●] Only), inclusive of all taxes and duties (except GST which shall be paid extra as applicable).

This Contract Price is a Lump Sum amount (based on the Bill of Quantities) and covers all costs incurred by the Consultant for the proper execution of the Services, including mobilization, labor, equipment, data processing, and reporting.

### 2. PAYMENT SCHEDULE

The Authority shall release payments to the Consultant based on the achievement of the following Project Milestones:

Milestone	Description of Deliverable / Activity	Payment (% of Contract Price)
1	<b>Mobilization &amp; Inception report:</b> <ul style="list-style-type: none"><li>• Submission and acceptance of Inception Report.</li><li>• Mobilization of Survey Team and Equipment to Site.</li></ul>	10% (Ten Percent)
2	<b>Completion of Field Work:</b> <ul style="list-style-type: none"><li>• Submission of Raw Data Logs and Field Books.</li><li>• Certification of Field Work by Authority's Engineer.</li></ul>	25% (Twenty Five Percent)
3	<b>Draft Report Submission:</b> <ul style="list-style-type: none"><li>• Submission of Draft Survey Report and Draft Maps.</li><li>• Submission of preliminary Digital Data.</li></ul>	25% (Twenty Five Percent)
4	<b>Final Report Acceptance:</b> <ul style="list-style-type: none"><li>• Submission of Final Survey Report and Bound Maps.</li><li>• Handover of all final Digital Data (HDD).</li><li>• Acceptance of the Report by the Authority.</li></ul>	25% (Twenty Five Percent)
5	<b>Data Warranty / Retention:</b> <ul style="list-style-type: none"><li>• Upon successful completion of the Data Warranty Period (15 Months).</li></ul>	15% (Fifteen Percent)
<b>Total</b>		<b>100%</b>

### 3. TERMS OF PAYMENT

- **Invoice:** The Consultant shall submit a Tax Invoice for each milestone, accompanied by the relevant Deliverables and a specific "**Certificate of Milestone Achievement**" signed by the Team Leader.
- **Verification:** The Authority's Representative shall verify the claim within **15 (fifteen) days** of submission.
- **Deduction:** The Authority shall deduct **TDS (Tax Deducted at Source)**, GST TDS, and any
- **Liquidated Damages** (if applicable) from the bills.

- **Retention Money:** The 10% Retention Money (Milestone 5) shall be retained to ensure the Consultant rectifies any data errors found later. It may be released earlier against an equivalent **Bank Guarantee**.

#### **4. VARIATIONS / EXTRA WORK**

If the Authority instructs the Consultant to survey an additional river stretch (beyond the Scope), payment for such extra work shall be calculated based on the Unit Rates quoted in the Bill of Quantities.

**SCHEDULE 7 – CONSULTANT’S REPRESENTATIVE**

**Name of the Representative:**

**Designation:**

**Company:**

**Address:**

**Telephone No:**

**Fax Number:**

**Email Address:**

**SCHEDULE 8 – PERFORMANCE SECURITY (BANK GUARANTEE)**

*(To be stamped in accordance with Stamp Act)*

**Bank Guarantee No:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Amount:**  
\_\_\_\_\_

**To**

**The Chief Engineer,  
Narmada Control Authority (NCA),  
Narmada Sadan, Sector-B,  
Scheme No. 74, Vijay Nagar,  
Indore - 452010 (M.P.), India**

**WHEREAS:**

(A)[**Insert Name of Consultant**], a company incorporated under the Companies Act, 1956/2013, with its registered office at [Address] (hereinafter called the “**Consultant**”) has entered into a Contract dated ..... (the “**Contract**”) with the [**Insert Name of Authority**] (hereinafter called the “**Authority**”) for the **Verification of water utilization data from Private Pumping in the Narmada River Basin, covering all three seasons, across the stretch from Amarkantak, Madhya Pradesh to the Gujarat Border including the major tributaries of Narmada** (hereinafter called the “**Project**”).

(B) The Contract requires the Consultant to furnish a Performance Security to the Authority for a sum of **Rs. [●] (Rupees [●] Only)** (the “**Guarantee Amount**”) as security for the due and faithful performance of its obligations under the Contract.

(C) We, [**Insert Name of Bank**] through our Branch at [Insert Address] (the “**Bank**”) have agreed to furnish this Bank Guarantee by way of Performance Security.

**NOW, THEREFORE, the Bank hereby, unconditionally and irrevocably, guarantees and affirms as follows:**

1. **Guarantee:** The Bank hereby unconditionally and irrevocably guarantees the due and faithful performance of the Consultant’s obligations during the **Contract Period**, and agrees to pay to the Authority, upon its mere first written demand, and without any demur, reservation, recourse, contest or protest, such sum or sums up to an aggregate sum of the **Guarantee Amount** as the Authority shall claim.
2. **No Proof Required:** Any demand made by the Authority regarding the loss or damage suffered by it due to the Consultant's default shall be conclusive, final, and binding on the Bank. The Bank shall not require the Authority to prove the default or show grounds for its demand.

3. **Principal Debtor:** For the purpose of this Guarantee, the Authority shall be entitled to act as if the Bank were the principal debtor. Any change in the constitution of the Consultant or the Bank shall not affect the liability of the Bank under this Guarantee.
4. **Waiver of Prior Action:** It shall not be necessary for the Authority to proceed against the Consultant before presenting its demand to the Bank.
5. **Variation of Contract:** The Authority shall have the liberty to vary the terms of the Contract or extend the time for performance without affecting the Bank's liability. The Bank shall not be released from its obligations by any exercise of liberty by the Authority or by any indulgence shown to the Consultant.
6. **Additional Security:** This Guarantee is in addition to, and not in substitution of, any other security held by the Authority.
7. **Validity:**
  - This Guarantee shall remain in full force and effect from the date hereof until **[Insert Date]** (which is calculated as: **Contract Period + 60 Days Claim Period**).
  - Or until the issuance of the **Completion Certificate** by the Authority, whichever is later.
  - Unless a demand or claim in writing is made by the Authority on the Bank on or before the expiry date, the Bank shall be discharged from all liabilities under this Guarantee.
8. **Encashment:** This Guarantee shall be encashable at the Bank's branch located at **City, e.g., Indore.**
9. **Authorized Signatory:** The undersigned has full powers to issue this Guarantee on behalf of the Bank.

Signed and Sealed this ..... Day of ....., 202[●] at .....

For and on behalf of the BANK by:

---

(Signature)

Name: \_\_\_\_\_ Designation: \_\_\_\_\_ Code Number: \_\_\_\_\_  
 \_\_\_\_\_ Address: \_\_\_\_\_

**PART B: RETENTION MONEY GUARANTEE**

*(To be used if the Consultant wishes to release the Retention Money against a BG)*

**Bank Guarantee No:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Amount:**  
\_\_\_\_\_

**To,**[Insert Name of the Authority] [Insert Address]

**WHEREAS:**

(A)[Insert Name of Consultant] (the “Consultant”) and the [Insert Name of Authority] (the “Authority”) have entered into a Consultancy Contract dated ..... (the “Contract”) for the [Insert Name of Project].

(B) The Contract provides that the Authority shall retain a certain percentage of the Contract Price as **Retention Money** to cover the Consultant’s liability during the **Data Warranty Period**.

(C) The Contract further provides that the Consultant may opt to release the said Retention Money by furnishing a Bank Guarantee for an equivalent amount (the “**Guarantee Amount**”).

**1. Validity:**

- This Guarantee shall remain in full force and effect until the expiry of the **Data Warranty Period** (which is **12 months** from the date of the Completion Certificate).
- Plus, a claim period of **6 (six) months**.
- Unless a demand is made within this period, the Bank shall be discharged from its liabilities.

**2. Encashment:** This Guarantee shall be encashable at the Bank’s branch located at [Insert City].

**Signed and Sealed this ..... Day of ....., 202[●] at .....**

**For and on behalf of the BANK by:**

\_\_\_\_\_

(Signature)

**Name:** \_\_\_\_\_ **Designation:** \_\_\_\_\_ **Code Number:**  
\_\_\_\_\_ **Address:** \_\_\_\_\_

**PART C: ADVANCE PAYMENT GUARANTEE (FORMAT)**

*(To be submitted only if Mobilization Advance is applicable)*

**Bank Guarantee No:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Amount:**  
\_\_\_\_\_

To, [Insert Name of the Authority] [Insert Address]

**WHEREAS:**

(A) [Insert Name of Consultant] (the “Consultant”) and the [Insert Name of Authority] (the “Authority”) have entered into a Consultancy Contract dated ..... (the “Contract”) for the [Insert Name of Project].

(B) The Contract provides for the payment of an **Advance Payment** (Mobilization Advance) to the Consultant of **Rs. [●] (Rupees [●] Only)** (the “Guarantee Amount”), being [10%] of the Contract Price, to facilitate the mobilization of survey teams and equipment.

(C) The Contract requires the Consultant to furnish an unconditional and irrevocable Bank Guarantee to secure the said Advance Payment.

1. **Waiver:** It shall not be necessary for the Authority to proceed against the Consultant before presenting its demand to the Bank.
2. **Variation:** The Authority allows the Consultant time to repay the advance through deductions from Running Bills. Any extension of time granted to the Consultant shall not relieve the Bank of its liability.
3. **Validity:**
  - This Guarantee shall remain in full force and effect until the **Advance Payment has been fully adjusted/recovered** by the Authority from the Consultant’s Running Bills.
  - The Guarantee Amount shall be automatically reduced by the amount of the Advance recovered by the Authority, as evidenced by a certificate/letter from the Authority.
  - Unless a demand is made on or before [Insert Date], the Bank shall be discharged from its liabilities.
4. **Encashment:** This Guarantee shall be encashable at the Bank’s branch located at [Insert City].

Signed and Sealed this ..... Day of ....., 202[●] at .....

**For and on behalf of the BANK by:**

\_\_\_\_\_

(Signature)

**Name:** \_\_\_\_\_ **Designation:** \_\_\_\_\_ **Code Number:**  
\_\_\_\_\_ **Address:** \_\_\_\_\_

**PART D: ADDITIONAL PERFORMANCE SECURITY (FORMAT)**

*(To be submitted if the Bid is Abnormally Low)*

**Bank Guarantee No:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Amount:** \_\_\_\_\_

**To,**[Insert Name of the Authority] [Insert Address]

**WHEREAS:**

(A)[Insert Name of Consultant] (hereinafter called the “**Consultant**”) has undertaken, in pursuance of Contract No. \_\_\_\_\_ dated \_\_\_\_\_ to execute the [Insert Name of Project] (hereinafter called the “**Contract**”).

(B) It has been stipulated by the Authority in the said Contract (and the Letter of Award) that the Consultant shall furnish an **Additional Performance Security** by a recognized bank for the sum specified therein as security for compliance with its obligations, specifically due to the **Abnormally Low Rate** quoted by the Consultant.

(C) We, [Insert Name of Bank], through our Branch at [Insert Address] (the “**Bank**”), have agreed to give the Consultant such a Bank Guarantee.

**NOW, THEREFORE, we hereby affirm that we are the Guarantor and responsible to you on behalf of the Consultant, up to a total of:**

**Amount:** Rs. \_\_\_\_\_ (Amount in Figures) (**Rupees**  
\_\_\_\_\_ **Only**) (Amount in Words)

1. **Guarantee:** We undertake to pay the Authority, upon its mere first written demand and without cavil or argument, any sum or sums within the limits of the Guarantee Amount as aforesaid, without the Authority needing to prove or to show grounds or reasons for its demand.
2. **Waiver:** We hereby waive the necessity of the Authority demanding the said debt from the Consultant before presenting us with the demand.
3. **No Release:** We further agree that no change, addition, or other modification of the terms of the Contract or of the Services to be performed, or of any of the Contract documents, shall in any way release us from any liability under this guarantee. We hereby waive notice of any such change, addition, or modification.
4. **Validity:** This guarantee shall be valid until [Insert Date], which is **28 (twenty-eight) days** after the **Project Completion Date** (issuance of the Final Completion Certificate).
5. **Encashment:** This Guarantee shall be encashable at the Bank’s branch located at [Insert City].

**Signature and Seal of the Guarantor:**

(Signature)

**Name of Bank:** \_\_\_\_\_ **Address:** \_\_\_\_\_ **Date:** \_\_\_\_\_

## PART E: BANK GUARANTEE FOR RETENTION MONEY WITHDRAWAL

*(To be submitted if the Consultant wants to claim the Retention Money before the Warranty Period ends)*

**Bank Guarantee No:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Amount:**  
\_\_\_\_\_

To,

[Insert Name of the Authority] [Insert Address]

### WHEREAS:

(A)[Insert Name of Consultant] (hereinafter called the “Consultant”) has executed a Contract (hereinafter called the “Contract”) with the [Insert Name of Authority] (hereinafter called the “Authority”) for **Verification of water utilization data from Private Pumping in the Narmada River Basin, covering all three seasons, across the stretch from Amarkantak, Madhya Pradesh to the Gujarat Border including the major tributaries of Narmada.**

subject to and in accordance with the provisions of the Contract.

(B) In accordance with **Schedule 6 (Payment Milestones)** of the Contract, the Authority retains a certain percentage of the Contract Price (Retention Money). The Consultant has requested to withdraw this Retention Money by furnishing a Bank Guarantee for an equivalent amount.

(C) We, [Insert Name of Bank], through our Branch at [Insert Address] (the “Bank”) have agreed to furnish this Bank Guarantee (the “Guarantee”) for the amount of **Rs. [●] (Rupees [●] Only)** (the “Guarantee Amount”).

**NOW, THEREFORE, the Bank hereby unconditionally and irrevocably guarantees and affirms as follows:**

1. **Undertaking to Pay:** The Bank hereby unconditionally and irrevocably undertakes to pay to the Authority, upon its mere first written demand, any sum up to the **Guarantee Amount** without any demur, reservation, recourse, contest or protest, and without any reference to the Consultant.
2. **Conclusive Evidence:** A letter from the Authority stating that the Consultant has committed a default (e.g., failure to rectify data defects during the Warranty Period) shall be conclusive, final, and binding on the Bank. The Bank shall not require the Authority to prove the default.
3. **Principal Debtor:** The Authority shall be entitled to act as if the Bank were the principal debtor.

4. **Waiver:** It shall not be necessary for the Authority to proceed against the Consultant before presenting its demand to the Bank.
5. **No Release:** The Authority may grant time or indulgence to the Consultant, or vary the terms of the Contract, without affecting the Bank's liability under this Guarantee.
6. **Validity:**
  - o This Guarantee shall remain in force and effect until the expiry of the **Data Warranty Period** (which is **12 (twelve) months** from the date of the Completion Certificate).
  - o Plus a claim period of **60 (sixty) days**.
  - o Unless a demand or claim in writing is made by the Authority on the Bank on or before **[Insert Date]**, all rights of the Authority under this Guarantee shall be forfeited.
7. **Encashment:** This Guarantee shall be encashable at the Bank's branch located at **[Insert City]**.
8. **Authorized Signatory:** The undersigned has full powers to issue this Guarantee on behalf of the Bank.

Signed and Sealed this ..... Day of ....., 202[●] at .....

For and on behalf of the BANK by:

\_\_\_\_\_

(Signature)

Name: \_\_\_\_\_ Designation: \_\_\_\_\_ Code Number: \_\_\_\_\_  
 \_\_\_\_\_ Address: \_\_\_\_\_

## **SCHEDULE 9 – PRICE ADJUSTMENT**

**1. FIRM AND FIXED PRICE** The Contract Price quoted by the Consultant in Bill of Quantities shall remain FIRM and FIXED for the entire duration of the Contract Period.

**2. NO ESCALATION** No Price Adjustment or Escalation shall be payable to the Consultant on account of any increase in the cost of fuel, labor, materials, equipment, foreign exchange rate fluctuations, or any other input costs. The Consultant is deemed to have accounted for all potential market fluctuations in their quoted Lump Sum Price.

**3. EXCEPTION FOR TAXES** Adjustments to the Contract Price shall only be made in the event of a Change in Law specifically regarding the rate of Goods and Services Tax (GST), as provided in Clause 10.10 of the Main Contract Agreement.

## SCHEDULE 10 – FINANCIAL PROPOSAL (BoQ)

### 1. PREAMBLE

1.1 The Total Contract Price is a Lump Sum derived from the unit rates quoted below.

1.2 This Schedule covers the Triangulation Methodology required to verify the Private Pumps on the Narmada River including its major tributaries.

### 2. SCHEDULE OF RATES

Item No.	Description of Services	Unit	Est. Qty*	Total Amount (INR)
1	Collection, Compilation and Verification of water utilization through Private Pumping Schemes (PPS) across all three seasons from the Narmada River and its major tributaries in Madhya Pradesh by deployment of experts, Power Boat/Vehicle surveyors for Physical inspection of Private Pumping Schemes, recording GPS location, HP rating, running hours and calculate volume of extraction. (As per <b>Schedule 2</b> )	1 Job	1	[•]
	<b>TOTAL CONTRACT PRICE (Excl. GST)</b>			

## SCHEDULE 11: APPLICABLE PERMITS

(Refer Clause 3.3.8)

### 1. OBLIGATION TO OBTAIN PERMITS

The Consultant shall obtain and maintain, at its own cost, all necessary Applicable Permits required under Applicable Laws to undertake the Survey Services.

### 2. LIST OF APPLICABLE PERMITS

The permits required may include, but are not limited to:

- 1) **Access Permissions:** Permission from the **Water Resources Department (WRD)** or **Narmada Control Authority (NCA)** to enter the river, canal banks, and reservoir areas.
- 2) **Boat/Launch Permissions:** License or permission from the **Inland Waterways Authority of India (IWAI)** or the State Maritime Board for plying survey boats on the river.
- 3) **Drone/UAV Permissions:**
  - **UIN (Unique Identification Number)** for the Drone.
  - **Flight Permits** from the **DGCA (Digital Sky Platform)** for aerial mapping.
  - **Local Police Clearance** for flying drones in the specific zone.
- 4) **Restricted Area Permits:** Clearance from the **Ministry of Defence** or **Home Department** if the survey area falls near any dam structure, vital installation, or restricted zone.
- 5) **Forest Clearance:** Permission from the **Forest Department** if any part of the river stretches passes through a Wildlife Sanctuary or Reserved Forest.
- 6) **Labour License:** Registration under the Contract Labour (Regulation and Abolition) Act, if applicable.
- 7) Clearance from other department viz Agriculture Department, Power Supply Department, Dam Authorities and District Administrations are also required.

### 3. GENERAL

The aforesaid list is illustrative. All the requisite NOC's shall be provided to successful bidder by Engineer in Charge after receipt of the same from Chief Engineer, Lower Narmada, NVDA, Indore.

## SCHEDULE 12 – TESTS ON COMPLETION (DATA VALIDATION)

### 1. NOTICE OF READINESS

The Consultant shall, no later than **7 (seven) days** prior to the likely completion of the Field Work, notify the Authority and the Authority's Representative of its intent to subject the Survey Works to **Joint Verification / Tests**.

### 2. TESTS TO BE CONDUCTED

The "Tests on Completion" for this Survey Project shall consist of the following three levels of checks:

#### 1) **Joint Verification (Random Check Lines):**

- The Authority's Representative shall select **random river stretches** (aggregating to at least 5% of the total scope) for re-survey.
- The Consultant shall re-survey these stretches in the presence of the Representative.
- The new data shall be compared with the originally recorded data. If the deviation exceeds the permissible limit (Horizontal:  $\pm 1\text{m}$ ; Vertical:  $\pm 10\text{cm}$ ), the "Test" shall be deemed **Failed**, and the Consultant shall re-survey the entire sector at its own cost.

#### 2) **Cross-Over Analysis (Data Processing Check):**

- The Consultant shall demonstrate that the depth values at the intersection of **Longitudinal Lines** and **Cross-Section Lines** match.
- Significant discrepancies at these intersections will indicate data errors, requiring re-processing or re-survey.

### 3. DELIVERABLE AUDIT

The Authority's Representative shall conduct a physical check of the **Draft Maps** and **Data Logs** to ensure they conform to the "Technical Specifications" outlined in **Schedule 2 (Scope of Services)**. This includes checking:

- Correct georeferencing (UTM/WGS-84).
- Presence of all required layers (bank line, structures, spot levels).
- Labelling and cartographic standards.

#### 4. CERTIFICATION

- **Successful Completion:** Upon successful completion of the Field Tests and Data Validation, the Authority's Representative shall recommend the issuance of the **Completion Certificate**.
- **Failure:** If the Survey fails the Joint Verification, the Authority shall issue a **Defect Notice**, specifying the errors. The Consultant shall rectify the defects (re-survey) and request a second round of Tests.

**SCHEDULE 13 – FORM OF CERTIFICATIONS  
FORM A: FORM OF PROVISION CERTIFICATE**

<b>Sr. No.</b>	<b>Particulars</b>	<b>Details</b>
1.	Name of Contractor	
2.	Name of Work	
3.	Estimated Cost of Work	
4.	Tendered Amount	
5.	Date of Starting the Work	
6.	Date of Completion of the Work (As per Contract Agreement)	
7.	Actual Date of Completion of the Work	
8.	Amount of Work Done Up to	
	Signature of Contractor	
9.	Are the above details given by the contractor, correct? If not, state the correct information.	
10.	Has the contractor executed/completed the work satisfactorily as per specifications? If not, give the correct position of the work.	
11.	Any other remarks	
	Date	
	Signature (Verifying Authority)	

**FORM B (i): PROJECT WORK COMPLETION CERTIFICATION**

<b>Clause Details</b>	
<b>1.</b>	I, ..... (Name of the Authority / Authority’s Representative), acting as the Authority / Authority’s Representative under and in accordance with the Agreement dated ..... (“Agreement”) for [project details to be inserted], through ..... (Name of Consultant), hereby certify that the Tests in accordance with Article ___ of the Agreement have been successfully undertaken to determine compliance of the Project with the provisions of the Agreement; and am satisfied that the Project can be safely and reliably placed in service of the Users thereof.
<b>2.</b>	It is certified that, in terms of the aforesaid Agreement, all works forming part of the Project have been completed, and the Project is hereby declared fit for entry into operation on this the ..... day of ..... 20.....

**SIGNED, SEALED AND DELIVERED**

**For and on behalf of the Authority / Authority’s Representative by:**

**(Signature)**

**FORM B (ii): WORKWISE DETAILS OF WORK COMPLETED OR IN PROGRESS  
BY**

**THE CONSULTANT**

<b>Sr. No.</b>	<b>Particulars</b>	<b>Details</b>
1.	Name of Contractor	
2.	Name of Work	
3.	Estimated Cost of Work	
4.	Tendered Amount	
5.	Date of Starting the Work	
6.	Date of Completion of the Work (As per Contract Agreement)	
7.	Actual Date of Completion of the Work	
8.	Amount of Work Done Upto	
	Signature of Contractor	
9.	Are the above details given by the contractor, correct? If not, state the correct information.	
10.	Has the contractor executed/completed the work satisfactorily as per specifications? If not, give the correct position of the work.	
11.	Any other remarks	
	Date	
	Signature (Verifying Authority)	

**FORM C: NOTICE TO PROCEED**

**Issue of Notice to Proceed with the Work**

**(On the Letterhead of the Authority)**

Date: \_\_\_\_\_

To,

[Name of the Consultant]

[Address Line 1]

[Address Line 2]

[City, State, PIN]

**Dear Sirs,**

Pursuant to your furnishing the requisite performance security / guarantee and signing of the Contract for the construction of \_\_\_\_\_ at a bid price of Rs. \_\_\_\_\_, you are hereby instructed to proceed with the execution of the said works in accordance with the Contract.

Yours faithfully,

(Signature)

(Name of Authorized Signatory )

(Designation)

(Authority Name)

## SCHEDULE 15: FORMS OF PAYMENT STATEMENTS

The Interim Payment Statement for Works shall state:

Section	Description	Amount (INR)
<b>a</b>	Estimated amount for the Works executed in accordance with Clause 10.2 (since last claim)	
<b>b</b>	Adjustment in price for the above work	
<b>c</b>	Estimated amount for Change of Scope Orders executed since last claim	
<b>d</b>	Adjustment in price (if any) for Change of Scope Orders as per Clause 10.11	
<b>e</b>	<b>Total (a + b + c + d)</b>	
<b>f</b>	<b>Deductions:</b>	
f(i)	Amounts to be deducted as per Agreement (excluding taxes)	
f(ii)	Any amount payable by the Contractor to the Authority as per the Agreement	
f(iii)	Amount towards deduction of taxes at source under Applicable Laws	
<b>Total (f)</b>	<b>Total off(i) + f(ii) + f(iii)</b>	
<b>g</b>	<b>Net Claim (e – f)</b>	
<b>h</b>	<b>Amounts Received by Contractor up to Last Claim:</b>	
h(i)	For Works executed (excluding Change of Scope Orders)	
h(ii)	For Change of Scope Orders	
h(iii)	Taxes deducted at source under Applicable Laws	
h(iv)	Other claims such as damages, reimbursements, etc.	

Note:

- The Consultant shall submit its claims in a form acceptable to the Authority.
- Formats and requirements mentioned above are tentative in nature and are subject to change as per direction from the Authority.