



Bid Number/बोली क्रमांक (बिड संख्या):  
GEM/2025/B/5805286  
Dated/दिनांक : 10-01-2025

### Bid Document/ बिड दस्तावेज़

Bid Details/बिड विवरण	
Bid End Date/Time/बिड बंद होने की तारीख/समय	31-01-2025 16:00:00
Bid Opening Date/Time/बिड खुलने की तारीख/समय	31-01-2025 16:30:00
Bid Offer Validity (From End Date)/बिड पेशकश वैधता (बंद होने की तारीख से)	180 (Days)
Ministry/State Name/मंत्रालय/राज्य का नाम	Ministry Of Water Resources River Development And Ganga Rejuvenation
Department Name/विभाग का नाम	Na
Organisation Name/संगठन का नाम	Central Ground Water Board (cgwb)
Office Name/कार्यालय का नाम	Faridabad
क्रेता ईमेल/Buyer Email	shubranshu.sharma@gov.in
Item Category/मद केटेगरी	GIS related Survey Services - Line Kilometer and unit wise; As per tender document; As per Line kilometer and tender specifications; Heliborne Survey, Aerogeophysical Survey, Heliborne Geophysical Survey and Ground TEM and ERT; SHP, GDB, TIFF, GEO-TI..
Contract Period/अनुबंध अवधि	1 Year(s) 3 Month(s)
Minimum Average Annual Turnover of the bidder (For 3 Years)/बिडर का न्यूनतम औसत वार्षिक टर्नओवर (3 वर्षों का)	1966 Lakh (s)
Years of Past Experience Required for same/similar service/उन्हीं/समान सेवाओं के लिए अपेक्षित विगत अनुभव के वर्ष	5 Year (s)
Past Experience of Similar Services required/इसी तरह की सेवाओं का पिछला आवश्यक अनुभव है	Yes
MSE Exemption for Turnover/टर्नओवर के लिए एमएसई को छूट प्राप्त है	Yes
Startup Exemption for Years of Experience and Turnover/ अनुभव के वर्षों से स्टार्टअप छूट	No

<b>Bid Details/बिड विवरण</b>	
<b>Document required from seller/विक्रेता से मांगे गए दस्तावेज़</b>	Experience Criteria,Bidder Turnover,Certificate (Requested in ATC),OEM Authorization Certificate,OEM Annual Turnover,Additional Doc 1 (Requested in ATC),Additional Doc 2 (Requested in ATC),Additional Doc 3 (Requested in ATC),Additional Doc 4 (Requested in ATC) *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
<b>Do you want to show documents uploaded by bidders to all bidders participated in bid?/</b>	Yes
<b>Bid to RA enabled/बिड से रिवर्स नीलामी सक्रिय किया</b>	Yes
<b>RA Qualification Rule</b>	H1-Highest Priced Bid Elimination
<b>Type of Bid/बिड का प्रकार</b>	Two Packet Bid
<b>Time allowed for Technical Clarifications during technical evaluation/तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय</b>	2 Days
<b>Estimated Bid Value/अनुमानित बिड मूल्य</b>	655414085
<b>Evaluation Method/मूल्यांकन पद्धति</b>	Total value wise evaluation
<b>Financial Document Indicating Price Breakup Required/मूल्य दर्शाने वाला वित्तीय दस्तावेज़ ब्रेकअप आवश्यक है</b>	Yes
<b>Arbitration Clause</b>	No
<b>Mediation Clause</b>	No

#### **EMD Detail/ईएमडी विवरण**

Advisory Bank/एडवाइजरी बैंक	State Bank of India
EMD Amount/ईएमडी राशि	13108282

#### **ePBG Detail/ईपीबीजी विवरण**

Advisory Bank/एडवाइजरी बैंक	State Bank of India
ePBG Percentage(%) /ईपीबीजी प्रतिशत (%)	3.00
Duration of ePBG required (Months)/ईपीबीजी की अपेक्षित अवधि (महीने).	27

(a). EMD EXEMPTION: The bidder seeking EMD exemption, must submit the valid supporting document for the relevant category as per GeM GTC with the bid. Under MSE category, only manufacturers for goods and Service

Providers for Services are eligible for exemption from EMD. Traders are excluded from the purview of this Policy./जेम की शर्तों के अनुसार ईएमडी छूट के इच्छुक बिडर को संबंधित केटेगरी के लिए बिड के साथ वैध समर्थित दस्तावेज़ प्रस्तुत करने हैं। एमएसई केटेगरी के अंतर्गत केवल वस्तुओं के लिए विनिर्माता तथा सेवाओं के लिए सेवा प्रदाता ईएमडी से छूट के पात्र हैं। व्यापारियों को इस नीति के दायरे से बाहर रखा गया है।

(b). EMD & Performance security should be in favour of Beneficiary, wherever it is applicable./ईएमडी और संपादन जमानत राशि, जहां यह लागू होती है, लाभार्थी के पक्ष में होनी चाहिए।

**Beneficiary/लाभार्थी :**

DDO

Faridabad, NA, Central Ground Water Board (CGWB), Ministry of Water Resources River Development and Ganga Rejuvenation

(Ddo, Cgwb, Chq, Faridabad)

**MII Compliance/एमआईआई अनुपालन**

MII Compliance/एमआईआई अनुपालन	Yes
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**MSE Purchase Preference/एमएसई खरीद वरीयता**

MSE Purchase Preference/एमएसई खरीद वरीयता	Yes
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1. If the bidder is a Micro or Small Enterprise as per latest definitions under MSME rules, the bidder shall be exempted from the requirement of "Bidder Turnover" criteria and "Experience Criteria" subject to meeting of quality and technical specifications. If the bidder is OEM of the offered products, it would be exempted from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. In case any bidder is seeking exemption from Turnover / Experience Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer.
2. The minimum average annual financial turnover of the bidder during the last three years, ending on 31st March of the previous financial year, should be as indicated above in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the bidder is less than 3-year-old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.
3. Years of Past Experience required: The bidder must have experience for number of years as indicated above in bid document (ending month of March prior to the bid opening) of providing similar type of services to any Central / State Govt Organization / PSU. Copies of relevant contracts / orders to be uploaded along with bid in support of having provided services during each of the Financial year.
4. Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference for services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered service. If L-1 is not an MSE and MSE Service Provider (s) has/have quoted price within L-1+ 15% of margin of purchase preference /price band as defined in the relevant policy, then 100% order quantity will be awarded to such MSE bidder subject to acceptance of L1 bid price. The buyers are advised to refer to the [OM\\_No.1\\_4\\_2021\\_PPD\\_dated\\_18.05.2023](#) for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017. Benefits of MSE will be allowed only if the credentials of the service provider are validated on-line in GeM profile as well as validated and approved by the Buyer after evaluation of submitted documents.
5. Estimated Bid Value indicated above is being declared solely for the purpose of guidance on EMD amount and for determining the Eligibility Criteria related to Turn Over, Past Performance and Project / Past Experience etc. This has no relevance or bearing on the price to be quoted by the bidders and is also not going to have any impact on bid participation. Also this is not going to be used as a criteria in determining reasonableness of quoted prices which would be determined by the buyer based on its own assessment of reasonableness and based on competitive prices received in Bid / RA process.
6. Past Experience of Similar Services: The bidder must have successfully executed/completed similar Services over the last three years i.e. the current financial year and the last three financial years(ending month of March

prior to the bid opening): -

1. Three similar completed services costing not less than the amount equal to 40% (forty percent) of the estimated cost; or
2. Two similar completed services costing not less than the amount equal to 50% (fifty percent) of the estimated cost; or
3. One similar completed service costing not less than the amount equal to 80% (eighty percent) of the estimated cost.

7. Reverse Auction would be conducted amongst all the technically qualified bidders except the Highest quoting bidder. The technically qualified Highest Quoting bidder will not be allowed to participate in RA. However, H-1 will also be allowed to participate in RA in following cases:

- i. If number of technically qualified bidders are only 2 or 3.
- ii. If Buyer has chosen to split the bid amongst N sellers, and H1 bid is coming within N.
- iii. In case Primary product of only one OEM is left in contention for participation in RA on elimination of H-1.
- iv. If L-1 is non-MSE and H-1 is eligible MSE and H-1 price is coming within price band of 15% of Non-MSE L-1
- v. If L-1 is non-MII and H-1 is eligible MII and H-1 price is coming within price band of 20% of Non-MII L-1

**Excel Upload Required/एक्सेल में अपलोड किए जाने की आवश्यकता :**

BOQ - [1736495866.xlsx](#)

**Additional Qualification/Data Required/अतिरिक्त योग्यता /आवश्यक डेटा**

**Scope of the survey including data model and any formats:**[1736495913.pdf](#)

**Terms and Conditions to be mentioned by Buyer:**[1736495923.pdf](#)

**Pre Bid Detail(s)**

Pre-Bid Date and Time	Pre-Bid Venue
16-01-2025 15:00:00	Bhujal Bhawan, CGWB, CHQ, Faridabad, Haryana, -121001

**GIS Related Survey Services - Line Kilometer And Unit Wise; As Per Tender Document; As Per Line Kilometer And Tender Specifications; Heliborne Survey, Aerogeophysical Survey, Heliborne Geophysical Survey And Ground TEM And ERT; SHP, GDB, TIFF, GEO-TI.. ( 1 )**

**Technical Specifications/तकनीकी विशिष्टियाँ**

Specification	Values
<b>Core</b>	
Unit of Measurement for the Survey	Line Kilometer and unit wise
Type of land parcel	As per tender document
Mapping Scale	As per Line kilometer and tender specifications
Type of technical survey required	Heliborne Survey , Aerogeophysical Survey , Heliborne Geophysical Survey and Ground TEM and ERT
Type of GIS file Format required	SHP , GDB , TIFF , GEO-TIFF , DEM , CSV , PDF , KML , TXT DGPS SPS DAT RWB SKB GEO LIN etc and as per requirement
<b>Addon(s)/एडऑन</b>	

Specification	Values
Georeferencing and Digitization of existing maps	NA

#### Additional Specification Documents/अतिरिक्त विशिष्टि दस्तावेज़

#### Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity as per the UOM selected for the complete contract duration	Additional Requirement/अतिरिक्त आवश्यकता
1	Shubranshu Sharma	121010,Central Ground Water Board, Bhujal Bhawan, NH-IV, Faridabad Haryana 121001	1	N/A

#### Buyer Added Bid Specific Terms and Conditions/क्रेता द्वारा जोड़ी गई बिड की विशेष शर्तें

##### 1. Generic

OPTION CLAUSE: The buyer can increase or decrease the contract quantity or contract duration up to 25 percent at the time of issue of the contract. However, once the contract is issued, contract quantity or contract duration can only be increased up to 25 percent. Bidders are bound to accept the revised quantity or duration

##### 2. Buyer Added Bid Specific SLA

File Attachment [Click here to view the file.](#)

#### Disclaimer/अस्वीकरण

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority in Buyer Organization, whereby Buyer organization is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any eccentricity / restriction arising in the bidding process due to these ATCs and due to modification of technical specifications and / or terms and conditions governing the bid. If any clause(s) is / are incorporated by the Buyer regarding following, the bid and resultant contracts shall be treated as null and void and such bids may be cancelled by GeM at any stage of bidding process without any notice:-

1. Definition of Class I and Class II suppliers in the bid not in line with the extant Order / Office Memorandum issued by DPIIT in this regard.
2. Seeking EMD submission from bidder(s), including via Additional Terms & Conditions, in contravention to exemption provided to such sellers under GeM GTC.
3. Publishing Custom / BOQ bids for items for which regular GeM categories are available without any Category item bunched with it.
4. Creating BoQ bid for single item.

5. Mentioning specific Brand or Make or Model or Manufacturer or Dealer name.
6. Mandating submission of documents in physical form as a pre-requisite to qualify bidders.
7. Floating / creation of work contracts as Custom Bids in Services.
8. Seeking sample with bid or approval of samples during bid evaluation process. (However, in bids for [attached categories](#), trials are allowed as per approved procurement policy of the buyer nodal Ministries)
9. Mandating foreign / international certifications even in case of existence of Indian Standards without specifying equivalent Indian Certification / standards.
10. Seeking experience from specific organization / department / institute only or from foreign / export experience.
11. Creating bid for items from irrelevant categories.
12. Incorporating any clause against the MSME policy and Preference to Make in India Policy.
13. Reference of conditions published on any external site or reference to external documents/clauses.
14. Asking for any Tender fee / Bid Participation fee / Auction fee in case of Bids / Forward Auction, as the case may be.
15. Any ATC clause in contravention with GeM GTC Clause 4 (xiii)(h) will be invalid. In case of multiple L1 bidders against a service bid, the buyer shall place the Contract by selection of a bidder amongst the L-1 bidders through a Random Algorithm executed by GeM system.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

**All GeM Sellers / Service Providers are mandated to ensure compliance with all the applicable laws / acts / rules including but not limited to all Labour Laws such as The Minimum Wages Act, 1948, The Payment of Wages Act, 1936, The Payment of Bonus Act, 1965, The Equal Remuneration Act, 1976, The Payment of Gratuity Act, 1972 etc. Any non-compliance will be treated as breach of contract and Buyer may take suitable actions as per GeM Contract.**

This Bid is governed by the [General Terms and Conditions/सामान्य नियम और शर्तें](#), conditions stipulated in Bid and [Service Level Agreement](#) specific to this Service as provided in the Marketplace. However in case if any condition specified in General Terms and Conditions/सामान्य नियम और शर्तें is contradicted by the conditions stipulated in Service Level Agreement, then it will over ride the conditions in the General Terms and Conditions.

In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws./जेम की सामान्य शर्तों के खंड 26 के संदर्भ में भारत के साथ भूमि सीमा साझा करने वाले देश के बिडर से खरीद पर प्रतिबंध के संबंध में भारत के साथ भूमि सीमा साझा करने वाले देश का कोई भी बिडर इस निविदा में बिड देने के लिए तभी पात्र होगा जब वह बिड देने वाला सक्षम प्राधिकारी के पास पंजीकृत हो। बिड में भाग लेते समय बिडर को इसका अनुपालन करना होगा और कोई भी गलत घोषणा किए जाने व इसका अनुपालन न करने पर अनुबंध को तत्काल समाप्त करने और कानून के अनुसार आगे की कानूनी कार्यवाई का आधार होगा।

**---Thank You/धन्यवाद---**



**GOVERNMENT OF INDIA**  
**CENTRAL GROUND WATER BOARD**  
 Department of Water Resources RD & GR  
 Ministry of Jal Shakti  
 Bhujal Bhawan, NH-IV, Faridabad-HR (INDIA).

E-mail: [seop-cgwb@nic.in](mailto:seop-cgwb@nic.in)  
 Telephone:.....

**Tender Document**

**Tender/Bid No:-**NIET No. 03/MMS/2024-25/Heliborne

**Dated:**10.01.2025

**Invitation for Engaging agency for Heliborne Geophysical Surveys for High Resolution Aquifer Mapping & Management in Arid Region of North-western India in Phase-II (Package-B)**

On behalf of president of India, **The Chairman, Central Ground Water Board, Bhujal Bhawan, NH-IV, Faridabad-HR (India)** invites bids for engaging Heliborne survey providers to carry out Heliborne geophysical surveys for high resolution aquifer mapping & Management in arid region of North-western India under PIB-Project. These areas are clubbed into two separate groups i.e. Package-A consisting of **parts of Punjab, Haryana, Himachal Pradesh and Rajasthan States** and Package -B consisting of **parts of Rajasthan and Gujarat states**. This tender is for Package-B i.e. for area consisting of **parts of Rajasthan and Gujarat states**

Tendering of these Blocks will be done through two separate but interconnected tenders with the following conditions:

**Condition-1:** Any one bidder / JV / Consortium may submit bid for both the tenders, however, the bidder shall be awarded only one Package. Intention of CGWB is to complete data acquisition of Package -A &Package -B Areas simultaneously within one flying season.

**Condition-2:** Evaluation of tenders will be done sequentially, first will be Package -A and second will be Package -B. The first instance, whenever a bidder / JV / Consortium is selected for the first tender i.e. Package -A, their bid for other tender i.e. Package -B will not be considered. This will ensure parallel and simultaneous execution of both the tender of Package -A &Package -B without any inter-dependency.

1. In order to meet the above conditions, the following process of tendering and evaluation will be followed:

A. Sequence of tender evaluation will be as per the following Table:

SI No.	Tender Package	Area (States)	Total Line-KM	Data acquisition to be completed in	Minimum no. of dedicated Helicopter requirement	Sequence of tender evaluation
1	Package-A	<b>Punjab, Haryana, Himachal Pradesh and Rajasthan</b>	58,432	One Season	2	1

2	Package-B	<b>Rajasthan and Gujarat</b>	51,726	One Season	2	2
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- B. Tender for Package-A consisting of **parts of Punjab, Haryana, Himachal Pradesh and Rajasthan States** will be first opened and evaluated.
- C. The bidder / JV / Consortium who is selected (found L-1 Bidder) for Tender for Package-A, will not be eligible for evaluation for Tender for Package-B.
- D. Subsequently Tender for Package -B consisting of **parts of Rajasthan and Gujarat states** will be evaluated.
- E. Both the tenders will be executed separately and simultaneously. For each tender, there will be separate Work Order/contract, MoA, PSD, etc.

**Details of Package-B**

Estimated Cost of Project (in Rs Including GST)	: <b>65,54,14,085/-</b>
Time Period of Project	: 15 months (up to 31 <sup>st</sup> march 2026)
Area of Survey	: Parts of Rajasthan and Gujarat,
EMD Fee (in Rs)	: 1,31,08,282/-
Total Line Km	: 51,726Km
Total Sq Km	: <b>1,09,472</b> Sq. Km
Total Ground TEM	: 109 nos.
Total ERT/2D-Imaging	: 84 nos.

The interested parties must upload their bids through the e-procurement system of the government of India on GEM-portal ([www.gem.gov.in](http://www.gem.gov.in)).

The invitation to bids is subject to fulfillment of instructions and conditions mentioned in various chapters of the tender document.

This advertisement with details is also displayed on the **CGWB** website [www.cgwb.gov.in](http://www.cgwb.gov.in) subsequent corrigendum/amendments to this tender, if any, shall be posted in the GEMportal ([www.Gem.gov.in](http://www.Gem.gov.in)) and **CGWB** website.

Clarifications pertaining to the tender if any may be sought from:

The Superintendent Engineer (MMS-I), **Central Ground Water Board**, Bhujal Bhawan, NH-IV, Faridabad-HR (India)-121004,

Telephone/fax-no: 0129247721

Email address: [seop-cgwb@nic.in](mailto:seop-cgwb@nic.in)



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**Chapter-1****Important Information**

Pre-bid meeting	: 16.01.2025
Video conferencing ID	: Pre-bid meeting for Tenders of Heliborn Geophysical Survey” <a href="https://cgwb-my.webex.com/cgwb-my/j.php?MTID=m902464cd717f8bd65d3941ab0a1f5b2b">https://cgwb-my.webex.com/cgwb-my/j.php?MTID=m902464cd717f8bd65d3941ab0a1f5b2b</a>
Deadline for pre-bid query	: 16.01.2025
Closing date for uploading the bid	: As per GeM Tender
Date of opening of technical bid	: As per GeM Tender
Date of opening of price bid	:
Venue for pre-bid meeting and bid opening:	
Central Ground Water Board, Bhujal Bhawan, NH-IV, NIT-IV Faridabad-HR (India)-121001	

<u>Description of work</u>
Heliborne geophysical surveys for high-resolution aquifer mapping & Management in arid region of northwestern India in Phase-II under PIB project (Package-B)

## Chapter-2

### 1. GENERAL INSTRUCTIONS TO BIDDERS

- a) The interested parties must upload their bids through the e-procurement system of the government of India on the GEM portal (www.GeM.gov.in).
- b) The bidders have to submit one hard copy of all the documents uploaded in the GEM portal (except price bid) at the office of the Superintendent Engineer (MMS-I), Central Ground Water Board, Bhujal Bhawan, NH-IV, Faridabad-HR (India)-121001, on or before bid closing date. However, if any discrepancy/difference arises between the hard copy and the submitted GEM copy, only the content of the GEM portal will be considered as final.
- c) The bid is to be uploaded under “two bid” system viz. “technical bid” and “price bid”.
- d) On the day of bid opening, only technical bid will be opened. The price bid for only the technically qualified bidders will be opened later. In case of any change in dates, timely information will be provided (on GeM portal)
- e) Authorized representative of the bidder with an authority letter may attend the bid opening.
- f) A pre-bid meeting will be conducted with the prospective bidders on a notified date; the technical and commercial aspects of the bid will be clarified.
- g) **Validity of bid:** The bid shall remain valid for 180 days. The bidder shall submit an undertaking that the bid should be valid for 180 days from the date of opening of tender. If required by CGWB, bid validity may be extended.
- h) **Bid security/ earnest money deposit (EMD):**
  - (i) Bidders shall furnish along with its tender, earnest money amounting to 2% of the estimated cost of tender as mentioned in the tender document. The earnest money is required to protect the employer against the risk of the tender’s unwarranted conduct.
  - (ii) EMD is to be furnished at the office of Superintendent Engineer (MMS-I), Central Ground Water Board, Bhujal Bhawan, NH-IV, Faridabad-HR (India)-121001, in person or by post, on or before the tender closing date failing which the bid would be summarily rejected. Bidders are requested to upload the scan copy of the Bid Security Document with the Technical Bid in the GeM portal as well.
  - (iii) In case bidder (registered with Central Purchase Organization, MSE for the “Heliborne Geophysical Survey” work) is exempted from EMD, the bid security declaration in the format annexed in Annexure-I is required to be submitted.
    - a) The earnest money shall be denominated in Indian rupees.
    - b) The earnest money shall be furnished in one of the following forms:
      - Account payee demand draft
      - Fixed deposit receipt
      - Bank guarantee
  - (iv) The demand draft, fixed deposit receipt shall be drawn on a Scheduled Commercial (i.e. Indian or Foreign Banks included in the Second Schedule of Reserve Bank of India Act, 1934 excluding Co-operative banks or Regional Rural Banks), in favor of the DDO, CGWB, Bhujal Bhawan, NH-IV, Faridabad. In case of bank guarantee, it should be irrevocable and operative Bank Guarantee (BG) as per the format specified under Annexure-XI of this

tender document and should be issued by a Scheduled Commercial (i.e. Indian or Foreign Banks included in the Second Schedule of Reserve Bank of India Act, 1934 excluding Co-operative banks or Regional Rural Banks).

- (v) The earnest money shall be valid for a period of 60 (sixty) days beyond the validity period of the tender.
- (vi) Unsuccessful tenderers' earnest money will be returned to them without any interest, after expiry of the tender validity period, but not later than 30 days after conclusion of the resultant contract. Successful tenderer's earnest money will be returned without any interest, after receipt of performance security from that tenderer.
- (vii) Earnest money of a tenderer will be forfeited, if the tenderer withdraws or amends its tender or impairs or derogates from the tender in any respect, withdraws its tender, or fails to sign the contract within the period of validity of its tender. The successful tenderers earnest money will be forfeited if it fails to furnish the required performance security within the specified period.
- (viii) The validity of the Bid Security (EMD) should be suitably extended by the Bidder, if need be, beyond validity of the tender.

**i) Performance Security Deposit (PSD)/Performance Guarantee (PG) –**

- i. Performance security deposit / performance guarantee for the value of 3% of the total contract amount is to be deposited by the successful bidder, on selection of the bid, within 21 (Twenty One) days of the receipt of the notification of award (issue of letter of Award: LOA). The successful bidder shall furnish to CGWB, a Performance Security in the form of a Bank Guarantee/FDR/Demand Draft(DD) of an Acceptable Bank (i.e. Scheduled bank as listed in the second schedule of the reserve bank of India act, 1934 excluding those listed under the headings of Gramin banks, urban co- operative banks and state co-operative banks) as per format annexed in annexure-ii for an amount of 3% (Three percent) of the contract price in accordance with the conditions of the contract. The performance security provided by the successful bidder in the form of Bank Guarantee shall be in favour of DDO, CGWB, CHQ, Faridabad should be irrevocable and operative Bank Guarantee (BG) as per format annexed in annexure-ii in these documents and should be issued by a Scheduled Commercial (i.e. Indian or Foreign Banks included in the Second Schedule of Reserve Bank of India Act, 1934 excluding Co-operative banks or Regional Rural Banks).
  - ii. The successful bidder, irrespective of its registration status (i.e. MSE or DGS&D), is to submit Performance Security Deposit (PSD).
  - iii. The validity of the PSD/PG should be twelve (12) months beyond the contract period.
  - iv. In case of non-compliance of terms and conditions of the contract and for any other unsatisfactory performance or/and failure to render contracted service during the period of contract by the bidder to whom order has been awarded, (including the non-completion of the task assigned to bidder as per different milestones within the stipulated period of the respective milestone). The performance security deposit/ performance guarantee will be forfeited.
  - v. If the bidder is unable to complete the contract within the stipulated time, bidder has to renew the performance security deposit/ performance guarantee beyond twelve (12) months according to the extended contract period.
  - vi. On successful completion of the contract, performance security deposit/ performance guarantee will be returned.
  - vii. No interest will be paid on performance security deposits/ performance guarantee.
- j) The bidder has to agree with the integrity pact and sign on the integrity pact contract as per the format provided in chapter 10 in duplicate with the signature of witnesses in full. The authorized official of the bidder who signs the bid should sign the integrity pact with the bidder's rubber stamp and submit the same along with the technical bid.**

- k) The bidder has to provide, along with their bids, an undertaking of acceptance of terms and conditions of the tender in a format as given in annexure-iii and also a check list in a format as given in annexure-iv.
- l) It is made clear to all the bidders that, mere opening of the financial bid cannot be treated as acceptance of the financial bid, even if it is communicated to the bidder through SMS from GEM that their financial bid is accepted. SMS from GEM should only be treated to the extent that the financial bid is considered for evaluation.
- m) Central Ground Water Board reserves the right to accept or reject any bid or all the bids without assigning any reason.
- n) Central Ground Water Board reserves the right to cancel the tender at any point of time before the issue of work order.
- o) The bidder should have technically qualified personnel to carry out the above-mentioned jobs. Also, the bidder shall compulsorily provide the services of these technical personnel at all times during the contract period. Any change in the declared personnel shall be done with the prior approval from CGWB. Also, the new personnel shall be of similar qualification and experience as the one being replaced.
- p) There should not be any change in the key personnel without prior approval from CGWB, as mentioned in the bid, during the complete contract period.
- q) Delay of the final deliverables by the selected bidder will attract financial penalty as defined in the relevant section of this tender.
- r) If the lead consortium partner or partner responsible for geophysical activities including data acquisition, processing, integration and interpretation exits the contract at any given time during the contract period, the contract will stand cancelled and the performance security deposit/ performance guarantee will be forfeited.
- s) ***Pre-bid meeting***

Attendance at the pre-bid meeting, although preferred, is not mandatory by the bidder/representative. The meeting will, however, discuss the questions submitted by emails.

***The objectives of the pre-bid meeting will be to clarify the following:***

- Proposed objective of the tender
- Bid submission process
- Clarification of queries from participants

The questions submitted by email, will be addressed in an addendum/corrigendum/Pre-bid Meeting Minutes to the tender documents and posted on GEM portal ([www.gem.gov.in](http://www.gem.gov.in)). Some of the questions may be answered informally at the pre- bid meeting but definitive and binding answers will only be provided in the addendum/Pre-bid Meeting Minutes. Any clarification sought after pre-bid meeting will not be entertained.

- t) No post-bid clarifications on the initiative of the bidders will be entertained.
- u) Once the pre-bid meeting/conference is over and issues are clarified, no query or objection or complaint shall be entertained in regard to this tender enquiry, terms & conditions and scope of work. Absence in pre-bid meeting/conference shall not be considered as

justification for making query or objection or complaint.

**v) Memorandum of Agreement (MOA)**

A Memorandum of Agreement (MOA) is to be signed soon after the receipt of the acceptance LOA (Letter of Award) from the selected bidder. Subsequently work orders will be issued after submission of the performance security deposit (PSD)/ performance guarantee (PG). MOA will be executed in person. A draft MOA is attached at annexure- IX for reference. All members of consortium should sign the MOA

The MOA will contain all the terms and conditions of the contract as described in the e-tender and will include the following points:

- Termination on the grounds of force majeure
- Termination on the grounds of poor performance by the bidder
- Provisions for arbitration and compensation
- Liquidated damage in case of non-performance causing delay in achieving the set target.

**w) Conflict of interest clause:**

**Conflicting activity:** the bidder or any of his consortium members should not be in any way directly or indirectly affiliated to any other bidder participating in this contract for Heliborne geophysical surveys for high-resolution aquifer mapping & management in arid region of northwestern India under project PIB floated by CGWB.

**Conflicting relationship:** the bidder or his consortium members (including his/its experts) should not have been involved directly or indirectly in preparing the DPR for this project i.e. “Heliborne geophysical surveys for high-resolution aquifer mapping & management in arid region of northwestern India under project PIB”.

**x) Termination of contract:**

This contract may be terminated by CGWB as per provisions set up below:

The CGWB may terminate this contract in case of the occurrence of any of the events specified in paragraphs (a) through (g) of this clause. In such an occurrence the CGWB shall give at least thirty (30) calendar days’ written notice of termination to the bidder in case of the events referred to in (a) through (d); at least sixty (60) calendar days’ written notice in case of the event referred to in (e); and at least thirty (30) calendar days’ written notice in case of the event referred to in (f):

- a) If the bidder fails to remedy a failure in the performance of its obligations hereunder, as specified in a notice of suspension pursuant to the effect that CGWB may, by written notice of suspension to the bidder, suspend all payments to the bidder hereunder, if the bidder fails to perform any of its obligations under this contract, including the carrying out of the services, provided that such notice of suspension:
  - (i) Shall specify the nature of the failure, and
  - (ii) Shall request the bidder to remedy such failure within a period not exceeding thirty (30) calendar days after receipt by the bidder of such notice of suspension.
- b) If the bidder becomes (or, if the bidder consists of more than one entity, if any of its members becomes) insolvent or bankrupt or enter into any agreements with their creditors for relief of debt or take advantage of any law for the benefit of debtors or go into liquidation or receivership whether compulsory or voluntary;
- c) If the bidder fails to comply with any final decision reached as a result of arbitration proceedings pursuant to the effect that any dispute between the parties arising under or related to this contract that cannot be settled amicably may be referred to by either party to the adjudication/arbitration in accordance with the clause 2.2 of chapter 2 (arbitration

clause).

- d) If, as the result of force majeure, the bidder is unable to perform a material portion of the services for a period of not less than sixty (60) calendar days;
- e) If the CGWB, in its sole discretion and for any reason whatsoever, decides to terminate this contract;
- f) If the bidder fails to confirm availability of key experts as required.
- g) Non submission of PSD/PG at the time of signing of Contract Agreement.
- h) If the bidder fails to complete the milestone within the stipulated timeline as described in relevant section of this tender.
- i) Furthermore, if the CGWB determines that the bidder has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the contract, then the CGWB may, after giving fourteen (14) calendar days written notice to the bidder, terminate the bidder's employment under the contract.

**y) Force majeure:**

- A. For the purposes of this contract, "force majeure" means an event which is beyond the reasonable control of a party, is not foreseeable, is unavoidable, and makes a party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible under the circumstances, and subject to those requirements, includes, but is not limited to war, riots, civil disorder, earthquake, fire, explosion, storm, flood or other adverse weather conditions, strikes, lockouts or other industrial action confiscation or any other action like lockdown, international travel restrictions imposed by government due to pandemic situation.

**B. Force majeure shall not include**

- (i) any event which is caused by the negligence or intentional action of a party or such party's experts, sub-bidders or agents or employees, nor
- (ii) any event which a diligent party could reasonably have been expected to both take into account at the time of the conclusion of this contract, and avoid or overcome in the carrying out of its obligations hereunder.
- C. Force majeure shall not include insufficiency of funds or failure to make any payment required hereunder.
- D. The failure of a party to fulfill any of its obligations hereunder shall not be considered to be a breach of, or default under, this contract in so far as such inability arises from an event of force majeure, provided that the party affected by such an event has taken all reasonable precautions, due care and reasonable alternative measures, all with the objective of carrying out the terms and conditions of this contract.
- E. A party affected by an event of force majeure shall continue to perform its obligations under the contract as far as is reasonably practical, and shall take all reasonable measures to minimize the consequences of any event of force majeure.
- F. A party affected by an event of force majeure shall notify the other party of such event as soon as possible, and in any case not later than fourteen (14) calendar days following the occurrence of such event, providing evidence of the nature and cause of such event, and shall similarly give written notice of the restoration of normal conditions as soon as possible
- G. Any period within which a party shall, pursuant to this contract, complete any action or task, shall be extended for a period equal to the time during which such party was unable to perform such action as a result of force majeure.
- H. If the case of disagreement between the parties as to the existence or extent of force majeure, the matter shall be settled according to:
  - (i) The parties shall seek to resolve any dispute amicably by mutual consultation.
  - (ii) If either party objects to any action or inaction of the other party, the objecting party may file a written notice of dispute to the other party providing in detail the basis of the dispute. The party receiving the notice of dispute will consider it and respond in writing within fourteen (14) Days after receipt. If that party fails to respond within fourteen (14) days, or

- the dispute cannot be amicably settled within fourteen (14) days following the response of that party, clause 2.2 of chapter 2 shall apply.
- (iii) Any dispute between the parties arising under or related to this contract that cannot be settled amicably may be referred to by either party to the adjudication/arbitration in accordance with the clause 2.2 of chapter 2 (arbitration clause).
- z)** If the selected bidder fails to initiate/leaves without completing the contractual obligations unilaterally, he will be barred from participating in any subsequent retendering process for that particular area for a period of three years.
- aa)** The selected bidder can also be debarred for reasons like supply of sub-standard material, non-supply of material, abandonment of works, sub-standard quality of work etc., as per the prevailing Government of India guidelines.
- bb)** Any kind of canvassing in regard to the offered services after submitting the bids will be treated as grounds for disqualification.
- cc)** Conditional tender i.e. tender submitted incorporating bidder's own imposed condition(s) will be summarily rejected.
- dd)** Extra or additional price will not be considered.
- ee)** Any charges levied by GeM portal will be borne by the bidder.

## **2. General Conditions**

- a) For participation in the bidding process and submitting bids, the bidder should be:-  
 A partnership firm registered under the registered partnership act 1932  
 or  
 A limited liability partnership under the limited liability partnership act of India, 2008  
 or  
 A company registered in India under Indian companies act 1956 or 2013  
 or  
 A consortium comprising of a maximum of Four companies or a joint venture company.  
 There should be formal agreement identifying the lead partner.
- b) The bidder should submit a notarized power of attorney on a stamp paper of INR 100/- authorizing the signatory of the bid and to commit the bidder, along with the submission of bid.
- c) A bidder that is under a declaration of ineligibility by any other government authority or court of law in India at the date of submission of the bid or during evaluation of bids shall be disqualified.
- d) No current government employee shall be deployed by the selected bidder without the prior written approval by the appropriate authority.
- e) *Fraud and Corruption***
- A. CGWB requires that the bidders observe the highest standard of ethics during their procurement and execution of such contracts. In such pursuance of this policy,
- B. *Defined, for the purposes of this provision, the terms set forth as follows:***
- i. "corrupt practice" means behavior on the part of officials in the public or private sectors by which they improperly and unlawfully enrich themselves and/or those close to them, or induce others to do so, by misusing the position in which they are placed, and it includes the offering, giving, receiving, or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution;



And

- ii. “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 practices 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. Will reject a bid for award if it determines that the bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract;

And

- D. Will declare a firm ineligible, either indefinitely or for a stated period of time for awarding any contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, any contract.

### **3. Dispute Resolution Board**

If any dispute arises between the employer and the contractor in connection with, or arising out of, the contract or the execution of the works, whether during the execution of the works or after their completion and whether before or after the repudiation or other termination of the contract, including any disagreement by either party with any action, inaction, opinion, instruction, determination, certificate or valuation of the engineer, the matter in dispute shall, in the first place, be referred to the dispute resolution board here in after called “the board.”

- The Dispute resolution board shall consist of following members
- The concerned member, CGWB under whose jurisdiction the work is being executed
- The FAO, CGWB
- The Regional Director, CGWB of the concerned region/s.
- The Superintending Engineer, CGWB under the concerned member.

The board at its discretion may co-opt any other officer if in its opinion it may help in resolving the dispute. Either party may refer a dispute to the board. The board shall give a decision in writing within 30 days of reference of dispute.

Either party may refer a written decision of the board. If neither party refers the disputes to arbitration within 30 days, the board’s decision will be final and binding.

Employer at its discretion may change any of the members of the board.

### **4 Arbitration**

- Any dispute in respect of which the recommendation, if any, of the dispute resolution board has not become final and binding shall be finally settled in accordance with the provisions of the arbitration and conciliation act, 1996 or any statutory modifications or re-enactment thereof and the rules made there under and for the time being in force. The arbitrator shall have full power to open up, review and revise any decision, and any recommendation of the conciliator related to the dispute.
- A sole arbitrator shall be appointed by the appointing authority i.e. Chairman, CGWB from the list of arbitrators mutually decided by CGWB and the Contractor within 45 days of receipt of request from either party. If the arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever, another arbitrator shall be appointed in the manner aforesaid. Such person shall be entitled to proceed with same reference from the stage at which it was left by his predecessor.
- It is a term of this contract that the arbitrator shall adjudicate only such disputes as are referred to him by the appointing authority and give separate award against each dispute and claim

referred to him and in all cases the arbitrator shall give reasons for the award. If any fees is payable to the arbitrator, these shall be paid equally by both the parties.

- It is also a term of the contract that the arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counterstatement of claims. The venue of the arbitration shall be such place in India as may be fixed by the arbitrator in his sole discretion.

### **5. MSME Consideration**

- The MSME benefits will be considered for any bidder only if the firm is registered as MSME for the work of “**Heliborne Geophysical Survey**”.
- The MSME benefits will be considered for any consortium only if the lead partner is registered as MSME for the work of **Heliborne geophysical survey**.
- In case of joint venture Company, for availing purchase preference, the firm has to be registered as MSME for the work of **Heliborne geophysical survey**.

**Note:-** For proof of registration, Bidders must furnish photocopy of their registration certificate along with their offer bid. Apart from this, it is mandatory that the bidder has to claim in GeM portal that their company is MSE Registered Firm for the work of “**Heliborne Geophysical Survey**”.

### **6. Timeline for completion of project:**

- Hiring/import of Helicopter/instruments, field reconnaissance and inspections, data compilation, conceptualization and obtaining all permissions & mobilization to survey area – within 3 months of issuance of work order.
- 100% completion of data acquisition & demobilization of Helicopter/aircraft from the survey area – within 14 months of issuance of work order.
- Ground Geophysics- ERT&TEM and training and capacity building of CGWB scientists- – within 14 months of issuance of work order.
- Data processing, compilation, integration & interpretation and validation and finalization of geophysical results – within 15 months of issuance of work order.
- Submission of all deliverables and final Reports – within 15 months of issuance of work order.
- Reviewing and approval of all final deliverables and reports by TS-QC consultant and CGWB – within 15 months of issuance of work order.

### **7. Liquidity Damages (Penalty):**

- If the bidder is not carrying out the work as per the memorandum of agreement (MOA) guidelines, the delays in delivery of the final deliverables (of the complete project) will attract Liquidity Damages (financial penalty) at the rate of 1% of the contract amount per month. The total penalty will be capped at 10% of the total contract amount.
- In case of any deficiency/delay/unsatisfactory/non-performance by the bidder, the appropriate action will be taken by CGWB, against the delinquent bidder as per prevailing Govt. of India rules/guidelines on procurement.

## **8.Public Procurement (Preference To Make In India)**

### **A. Definitions: for the purposes of this tender:**

- ‘Local Content’ means the amount of value added in India which shall, unless otherwise prescribed by the nodal ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.
- ‘Class-I Local supplier’ means a supplier or service provider, whose goods, services or works offered for procurement, has local content equal to or more than 50%, as defined under this order.
- ‘Class-II Local Supplier’ means a supplier or service provider, whose goods, services or works offered for procurement has local content more than 20% but less than 50%, as defined under this order.
- ‘Non - Local supplier’ means a supplier or service provider, whose goods, services or works offered for procurement, has local content less than or equal to 20%, as defined under this order.
- ‘L1’ means the lowest tender or lowest bid or the lowest quotation received in a tender, bidding process or other procurement solicitation as adjudged in the evaluation process as per the tender or other procurement solicitation.
- ‘Margin of purchase preference’ means the maximum extent to which the price quoted by a “class-I local supplier; may be above the L1 for the purpose of purchase preference.
- ‘Nodal ministry’ means the ministry or department identified pursuant to this order in respect of a particular item of goods or services or works.
- ‘Procuring entity’ means a ministry or department or attached or subordinate office of, or autonomous body controlled by, the government of India and includes government companies as defined in the companies act.

### **B. Eligibility of ‘Class-I Local Supplier’/ ‘Class-II Local Supplier’/ ‘Non-Local Suppliers’ for this tender:**

- In procurement of all goods, services or works in respect of which the nodal ministry / department has communicated that there is sufficient local capacity and local competition, ‘class-i local supplier’ / ‘class-ii local supplier’, as defined shall be eligible to bid irrespective of purchase value.

### **C. Purchase Preference:**

Subject to the provisions of this order and to any specific instructions issued by the nodal ministry or in pursuance of this order, purchase preference shall be given to ‘class-I local supplier’ in procurements undertaken by procuring entities in the manner specified here under.

In the procurements of goods or works, which are covered by Para 2(b) above and which are not divisible in nature, and in procurement of services where the bid is evaluated on price alone, the ‘class-I local supplier’ shall get purchase preference over ‘class-ii local supplier’ as well as ‘non-local supplier’, as per following procedure:

- i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'class-I local supplier', the contract will be awarded to L1.
- ii. If L1 is not 'class-I local supplier', the lowest bidder among the 'class-I local supplier', will be invited to match the L1 price subject to class-I local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such 'class-I local supplier' subject to matching the L1 price as the project is not in divisible nature.
- iii. In case such lowest eligible 'class-I local supplier' fails to match the L1 price, the 'class-i local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the 'class-i local supplier' within the margin of purchase preference matches the L1 price, the contract may be awarded to the L1 bidder.
- iv. "Class-II local supplier" will not get purchase preference in any procurement, undertaken by procuring entities.

**D. Margin of purchase preference:** the margin of purchase preference shall be 20%.

**E. Verification of local content:**

- a) The 'class-I local supplier'/'class-II local supplier' shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.
- b) False declarations will be in breach of the code of integrity under rule 175(1)(i)(h) of the general financial rules for which a bidder or its successors can be debarred for up to two years as per rule 151 (iii) of the general financial rules along with such other actions as may be permissible under law.
- c) A supplier who has been debarred by any procuring entity for violation of this order shall not be eligible for preference under this order for procurement by any other procuring entity for the duration of the debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of other procurement entities.
- d) The bidder has to furnish/submit the following documents with their technical bid:
  - i. Declaration of local content by local supplier i.e. Class-I or class-II supplier shall be submitted as per the format enclosed in annexure-VIII.
  - ii. Details of local content for class-I or class-II supplier shall be submitted with the technical bid.

**Chapter-3****Eligibility criteria**

The bidders who fulfill the following criteria shall be treated as eligible for this tender.

Bidder should keep the following points in mind in the context of eligibility criteria:

1. The Heliborne survey provider; should have successfully executed: -following quantities in last five years ending last day of month previous to the one in which tenders are invited:
  - A. At least a total of 15,520 line-km of Heliborne Geophysical Surveys (i.e. approximately 30% of the quantity required to be executed in the project), in last five years ending last day of month previous to the one in which tenders are invited.  
*Note:- Bidder have to furnish an undertaking that they will be fully responsible for execution of all the components of the tender including for Ground Surveys i.e. G-TEM and 2-D imaging. In case Ground Geophysical Survey part is outsourced by the Bidder, He will have to provide copy of MOU entered with likely supplier/service provider for Ground Geophysical Survey (G-TEM and 2-D imaging). The Bidder or likely supplier/service provider for Ground Geophysical Survey (G-TEM and 2-D imaging) should have following Experience:-*
  - B. At least a total of 33 of G-TEM (i.e. approximately 30% of the quantity required to be executed in the project)in last five years ending last day of month previous to the one in which tenders are invited.
  - C. At least a total of 25 line-Km of 2D-Imaging(i.e. approximately 30% of the quantity required to be executed in the project)in the last five years ending last day of month previous to the one in which tenders are invited.
2. The Heliborne Survey provider should have sufficient number of professionals (see form tech-4), equipment (at least two) who can undertake the data acquisition for this project.
3. It is expected that the as per qualifying criteria, bidder has sufficient knowledge of the hydrogeology, topography, forest cover and other restricted areas of Indian sub-continent, the agencies/organizations working in this field, the existing rules, regulations and legal aspects of the government of India pertaining to the execution of this project.
4. The Minimum Average annual financial turnover during the last three years, ending 31st March of the previous financial year should be at Rs. 19.66 crores (~30% of the estimated cost.) (Balance Sheet duly audited and certified by Chartered Accountant required to be submitted)
5. If a bidder is a single company or a consortium/JV of companies with one company as the lead company, the credentials of all the consortium/JV members will be considered for evaluating the technical bids. There should be a legally binding agreement between the consortium partners, mentioning the roles and responsibilities of each member and sole responsibility of the lead company for the timely and successful execution of the project. Original consortium agreement should be submitted along with the technical bid. In the case of a joint venture company, credential of all the members will be considered for evaluation. It also specified that each partner should meet at least 25% (and the lead partner at least 50%) out of the qualifying limit in case financial turnover. In case of a Consortium/JV, all members of the Consortium/JV shall sign the contract and shall be jointly and severally liable for the entire assignment.
6. The bidder should have a representative/partner/employee in India who is always accessible to CGWB.
7. Secrecy clause: the bidder selected for the project should execute a non- disclosure agreement (NDA) before starting up the project. The format for the confidentiality document will be provided at the time of signing of agreement.
8. The bidder shall ensure that the bid security declaration/EMD is in order and has been

submitted with the technical bid as per format provided in this tender. Bids without the bid security declaration/EMD shall summarily be rejected and shall not be considered for further opening and evaluation of the proposals.

9. The bidder must ensure that all the relevant documents as asked in the tender have been attached including the technical and finance forms, declaration of non-blacklisting, certificate of incorporation/registration (companies act or partnership pact), PAN NO., GST-REG (GSTIN), Work Experience certificates, Audited Balance Sheets, Annual Turnover, Income Tax and others as asked in tender.
10. For the ease of bidders, a preliminary checklist for the documents to be enclosed along with the bid is attached as Annexure-IV in the tender.
11. If any of the documents is found missing in the submitted bid, clarification may be sought from the bidders. However, in case of non-receipt of response to clarifications in time, the bid will be rejected without any further evaluation. However, in case any missing documents make the bid non-responsive, then CGWB shall have the right to reject the bid without any further evaluation.

**Chapter-4****Pre-Qualifying Criteria**

Sl. No.	Basic requirement	Specific requirement	Documents required
1	Survey capability	<p>At least a total of 15,520 line-km of Heliborne/airborne Geophysical Surveys in last five years ending last day of month previous to the one in which tenders are invited.</p> <p>At least a total of 33 nos. of G-TEM in last five years ending last day of month previous to the one in which tenders are invited.</p> <p>At least a total of 25 line-Km of 2D-Imaging in last five years ending last day of month previous to the one in which tenders are invited.</p>	Copies of work order along with work completion certificate of client or copies of client certificate(s) stating completion of the project(s).
2	Technical capability	If the bidder is a consortium, then the owner of the survey technology and provider of the technical manpower must be the lead partner or at the very least, take full responsibility for all aspects of the geophysical component of the contract.	Consortium Agreement, Proof of Ownership of technology Undertaking of full responsibility of all aspects of the Geo-physical component
3.1	JV / Consortium Participation	<p>The bidder can be a single company or a Joint Venture company under Indian Companies Act.</p> <p>It could also be a consortium of companies, with one company as the lead partner.</p> <p>There could be a maximum of 4 members in a consortium.</p> <p>The credentials of only the consortium members will be considered for evaluating the technical bids.</p>	Registration Paper of all entities
3.2		<p>In case of JV or Consortium, there should be a legally binding agreement between the JV / consortium partners, mentioning the roles and responsibilities of each member and sole responsibility of the lead company for timely and successful execution of the project. Certified copy of JV / consortium agreement should be submitted along with the technical bid.</p>	JV / consortium agreement clearly mentioning roles and responsibilities of each partner and list of promoters and Directors of the each of member companies

4	Experts' experience	The team should have at least 2 Geophysicists and 1 Geologist, with 10 years or more experience in aero-geophysical TEM data, ERT and TEM/GTEM interpretation, processing and modeling, including substantial assignments during the last five years ending last day of month previous to the one in which tenders are invited And demonstrated familiarity with the proposed TDEM system.	CVs of experts and team members in prescribed format certified by authorized signatory. Proof of assignment & familiarity with aero-geophysical TEM data, ERT and TEM/GTEM data and the proposed TEM system.
5.1	Bidder's turnover	The bidder should have a minimum average annual turnover of INR 19.66 crores over the last three financial year sending 31st March 2024. Turnover of members of joint ventures/consortium will also be considered.	Copy of audited Financial statement/Balance sheets and Calculation Sheet of average turnover of last three financial years duly signed by CA.
5.2		The bidder should not have incurred any loss in more than two years during the last five years ending 31st March 2024	Audited Profit / Loss statement
6	Solvency Certificate	Solvency Certificate of a nationalized bank/scheduled bank of India with a minimum amount equal to 40% of the estimated total contract amount. The solvency certificate should not be older than one year on last date of receipt of tender. Solvency certificate of Promoter Company issued by a foreign bank will also be considered.	Solvency Certificate as per format given in Annexure-VI
7	Blacklisting	A self-certified letter by the authorized signatory of the bidder that the bidder has not been blacklisted or disqualified for participating at such tender by any central/state government (central /state government and public sector) and any court of law or under a declaration of ineligibility for corrupt or fraudulent practices as on date of bid submission must be submitted on original letter head of the bidder with signature and stamp in the format attached at annexure-X	A self-certified letter by an authorized signatory in the format attached at annexure-X
8	Authorized representative from bidder	A power of attorney /board resolution with due authorization In the name of the person signing the tender bid.	Original power of attorney/ board resolution copy
9	Bid Security Declaration /(EMD Fee)	EMD Fee as per annexure-XI or Bid security declaration should be as per annexure-I.	Submission of original document along with scan copy in the Bid Document
10	Copy of ITRs	The bidder must have filed income tax returns for the preceding three assessment years, i.e. 2021-22, 2022-23 & 2023-24.	Copy of ITRs shall be attached with certified financial statement



11	GST Registration	Valid GST registration certificate	GST registration certificate
12	Conflict of Interest	The party or parties participating in this tender as joint venture partners shall not be allowed to participate in the same tender as separate bidder or as a partner of another joint venture.	Signed Declaration
13	MSE Consideration	MSE benefits will be considered for any Bidder only if the bidder is registered as MSE for the work of <b>“Heliborne Geophysical Survey”</b> . In case of Joint Venture Company, for availing purchase preference, the firm has to be registered as MSE for the particular work of <b>“Heliborne Geophysical Survey”</b>	Valid MSE certificate specifically for the work of <b>“Heliborne Geophysical Survey”</b>
14	Subcontracting	Subcontracting for key responsibilities like Heliborne-geophysical survey work involving data acquisition, processing, interpretation and integration and report writing will not be accepted for this tender and any bidder engaging in subcontracting will be disqualified	Declaration by the bidder
16	Confidentiality	The Heli-borne Survey Provider selected for the project should execute a confidentiality document for the project. The format for the confidentiality document will be provided at the time of signing of agreement	Declaration by the bidder

## **Chapter -5**

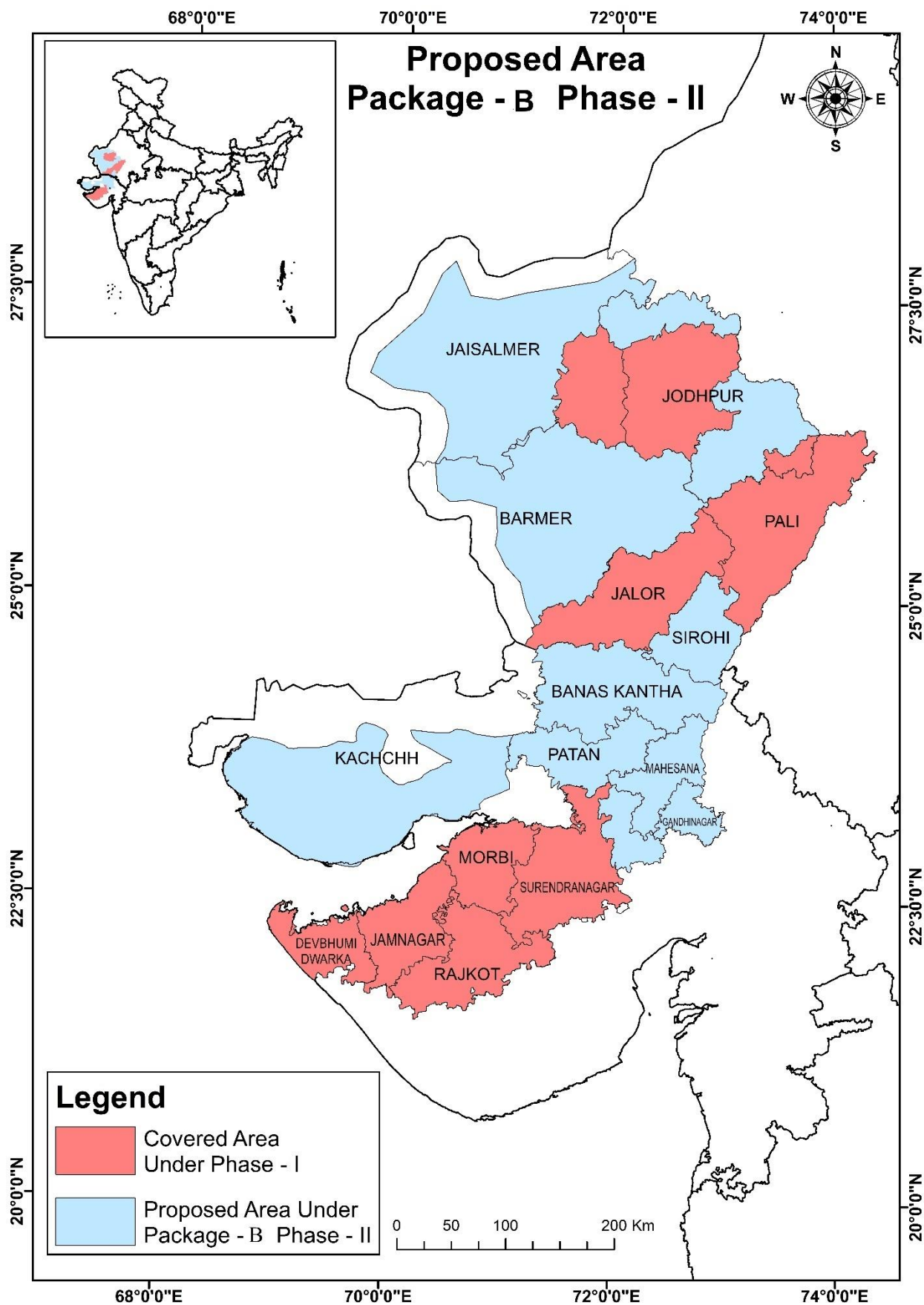
### **Scope of Work Technical Specification and BOQ of Package -B of Phase-II Heliborne TEM survey in Arid Region falling in parts of Rajasthan and Gujarat states of Northwest India under PIB Project**

#### **Introduction**

Arid areas in north-western India spread over parts of the States of Rajasthan, Gujarat, Punjab, Haryana, and Himachal Pradesh cover nearly 12% of the total geographical area of the country and are home to more than 8 crore people. With annual rainfall in the range of 100 to 400 mm, this area faces an acute shortage of water throughout the year and is highly dependent on groundwater resources. Parts of the area, especially falling in Punjab & Haryana are known as India's bread basket. A large proportion of the groundwater draft is being utilized for irrigation purposes. The areas of northwestern parts of the country are severely impacted by declining water levels and water quality issues along with heavy dependence of various stakeholder sectors on groundwater. There are 430 Over-exploited, 45 Critical & 77 Semi-Critical assessment units in the area covering Punjab, Haryana, Rajasthan, and Gujarat States. Further, inland salinity in groundwater aquifers & contamination of Nitrate, Fluoride & Heavy metals is common in groundwater.

In light of the aforementioned critical groundwater challenges in the area, a need to learn more about the nature and characteristics of aquifers on a larger scale, both in terms of breadth and depth, was felt. A high-resolution Heliborne Transient Electro-Magnetic (HTEM) survey is a state-of-the-art modern technology that can get more authentic information about sub-surface aquifers without undertaking too many drilling activities. In this connection, it is proposed to take up high-resolution aquifer mapping for understanding aquifer disposition and nature in a large area at a finer scale for further planning groundwater management to augment the groundwater resources. The ultimate aim of the proposed activity of the project is to map different aquifers, identify groundwater potential fractures, and saline/fresh groundwater interface in aquifers, and locate the potential sites for groundwater withdrawal and conservation. The findings of the Heliborne geophysical survey in the proposed areas will be used to meet the broader objectives of aquifer mapping, rejuvenation, and management of groundwater resources in the arid areas under the National Aquifer Mapping and Management (NAQUIM 2.0) Program, being implemented by the CGWB.

**Package-B** of the Phase-II heliborne survey will be carried out in parts of Rajasthan and Gujarat states. In Rajasthan State-Sirohi, parts of Barmer, Jaisalmer and Jodhpur districts whereas in Gujarat State - Banas Kantha, Gandhinagar, Patan, Mehsana, parts of- Kachchh and Ahmedabad districts will be covered. The area covered during Phase I Heliborne survey and the proposed areas for Package-B Phase II is shown in Figure 1.



**Figure 1:**Map showing area completed in Phase-I and proposed area of Package-B of Phase-II Heliborne Geophysical Survey in Rajasthan and Gujarat States.

**A brief description of the geophysical methodologies that will be taken up as part of the project is provided below**

**(i) Heliborne Transient Electromagnetic and Magnetic Methods**

With the increasing demand for aquifer mapping over large areas, fast-track single/dual-moment Transient Electromagnetic and magnetic investigations are proposed to be carried out in a continuous manner in the project area to acquire a large volume of data with constant line and close spacing. The objective of this survey is to delineate the disposition of aquifers in three dimensions. Since in the present program, a precision aquifer mapping is to be completed in a time-bound manner, it is therefore necessary that the area is covered by a fast-track geophysical technique like heliborne Transient Electromagnetics. With this aim, it is proposed to carry out the heliborne time domain electromagnetic and magnetic to obtain precise data with better measurement density.

In the Heliborne TEM method, current pulses are sent through a large hexagonal/circular loop at an altitude of ~ 30 m above the ground surface which is hung 30 m below the helicopter. The decay of current at the end of each pulse generates a primary magnetic field that diffuses into the earth. Eddy currents induced by this time-varying magnetic field generate, in turn, secondary magnetic fields in the electrically conductive earth. The amplitude and rate of decay of these secondary fields are measured at the receiver in a loop and analyzed in terms of the variation of electrical resistivity concerning depth, in a manner analogous to that of electrical resistivity sounding.

**(ii) Ground Transient Electromagnetic Method (G-TEM)**

Measurement of sub-surface variations in resistivity by DC electrical method to delineate aquifers has some procedural and technical constraints, such as injection of current into ground through electrodes, difficulty in current penetration if the surface layer is extremely resistive, e.g., exposed rocks, dry sands, deserts, and dunes, etc. and shallow near-surface inhomogeneities affecting the measurements. Because of the above the Electromagnetic techniques are proposed where the constraint of current penetration by electrodes is overcome as it is induced in the earth magnetically. The EM surveys can be conducted in the Time domain or Transient (TEM).

**(iii) Electrical Resistivity Tomography (ERT)**

Electrical resistivity tomography (2-D resistivity imaging) is the state-of-the-art technique available to map the vertical and lateral variations in lithofacies and thus define the continuity of aquifers. The limitation of VES is that it gives only point information and does not map the lateral changes in the sub-surface resistivity. A more accurate model of the subsurface is a two-dimensional (2-D) model where the resistivity changes in vertical as well as horizontal directions along the survey line are deciphered. Resistivity imaging equipment measures the variations in the electrical resistivity of the sub-surface lithological layers by applying electric currents through the multi-electrodes array. The survey data is processed by software to produce 2-D sections of graphical / images of the resistivity variation of sub-surface electrical layers with respect to depth

and along the survey profile. Unit electrode spacing is to be determined by configuration parameters that include profile length, desired resolution, and targeted depth penetration.

**Scope of the Work**

The high-resolution aquifer mapping using Heliborne-Transient Electromagnetic Method (HTEM) and Magnetic surveys in different hydrogeological setups along with other ground-based geophysical investigations will be carried out to get depth-wise variation in resistivity to delineate the aquifer zones in different hydrogeological formations. Major Outputs/Deliverables on implementation of this component of the project are enumerated as under:

- 3-D Geophysical model, Geophysical Thematic maps at horizontal and vertical planes showing aquifer disposition.
- Aquifer Geometry of principal aquifers with knowledge of de-saturated and saturated aquifers.
- Demarcation of Aquifer system with relatively fresh and saline zones.
- Spatial distribution of paleo-channel network if any and its linkage with aquifer system.
- Best suitable sites for groundwater withdrawal and water conservation through artificial or managed aquifer recharge.
- Provide additional information such as pollution affected, demarcation of recharge-worthy areas etc. for the development of an aquifer management plan under NAQUIM 2.0

**Methodology**

An integrated hydro-geophysical study consisting of Heliborne geophysics (electromagnetic and magnetic), and surface geophysics (Electrical Resistivity Tomography, Ground Transient electromagnetic, etc.) is planned under this component of the proposed project. The Heliborne geophysics is the main component that will be used for regional-scale rapid coverage in almost continuous mode for obtaining 3-D geophysical maps. These results will be further supported by ground-based geophysical methods, drilling, borehole geophysical logging, and pumping tests.

The heliborne geophysical surveys would be conducted in phases. First, the survey will be carried out at a coarser grid to get a first-order overview of the prevailing sub-surface hydrogeological conditions. These results will provide clues to identify areas where more detailed information is required. In the second phase the selected / complex areas, needing more details, would again be flown with infill lines to effectively obtain information at closer separation. The flight line spacing will vary as per terrain and lithological variability.

The ground-based geophysical surveys are also planned in two phases. Few ground geophysics are planned to be conducted prior to the Heliborne geophysics for conceptualization as well as important locations identified based on the existing database/knowledge base. The remaining ground geophysics will be conducted at strategically identified locations after the Heliborne geophysics to support the data gap and validate the Heliborne results.

The data/information/geophysical model generated through the Heliborne survey would be calibrated with available lithological and other supporting hydrogeological and geological information to have a high-resolution aquifer map of the surveyed area. The entire information will be interpreted to provide the layered information and complete geometry of the aquifer system.

**The approach for conducting the Heli-borne TEM survey, Ground TEM survey, and ERT survey in**

**the project area is outlined in the following para****(a) Approach for conducting Heliborne Transient Electromagnetic (H-TEM) and Magnetic Surveys:**

For conducting H-TEM and Magnetic surveys, the following approach has to be followed:

- The contractor will collect and confirm the area details to conduct the HTEM and Magnetic surveys at a pre-defined altitude and flight line spacing.
- The contractor must inform well in advance to CGWB authority regarding the work plan in detail.
- The contractor should have a qualified team of geophysicists & geologists to perform the geophysical data acquisition, processing, and interpretation.
- The contractor should have a reputed company make Heliborne-TEM and Magnetic equipment with a facility to store and transfer the data.
- The contractor should provide generated data along with GPS location through email at the end of the day to CGWB.

**(b) Approach for conducting Ground-Transient Electromagnetic Method Surveys (TEM):**

For conducting Ground Transient Electromagnetic (G-TEM) surveys, the following approach has to be followed:

- The contractor will collect and confirm the area details to conduct the G-TEM surveys at a predefined location.
- The contractor must inform well in advance to CGWB authority regarding the work plan in detail.
- The contractor should have qualified geophysicists & geologists to perform the geophysical data acquisition, processing, and interpretation.
- The contractor should have a reputed company make TEM equipment with a facility to store and transfer the data.
- The contractor should provide generated and processed data along with GPS location through email within a week.

**(c) Approach for conducting ERT survey (2D Resistivity Imaging)**

For conducting electrical resistivity imaging, the Gradient and Wenner/Schlumberger both configurations will be used in resistivity and IP mode for the survey on the same profile line for getting the sub-surface resistivity data.

- The contractor will collect and confirm the area details to conduct the resistivity imaging at a predefined location / across the lineament.
- The contractor must inform well in advance to CGWB representative regarding the work plan in detail.
- Investigators should make themselves aware of the local geologic and hydrogeologic conditions of the area.
- The contractor should have qualified geophysicists & geologists to perform the geophysical data generation and interpretation.
- The contractor should have a microprocessor-based resistivity imaging system having attached data-storing device.
- The 2-D resistivity imaging will be conducted with a minimum 120 electrodes having equal 10 m spacing
- The orientation of the imaging line must be mentioned.

- The contractor should provide generated data along with GPS location through email within two days.
- The contractor must ensure that all the 120 electrodes should be collinear.

**(d) Security of Field Data**

1. It is a requirement of the Government of India that all data is recognized as highly confidential and sensitive and must be kept secured at all times and across all areas of operation. It is a mandatory requirement that no raw, compiled, processed and interpreted data, products or deliverables leave India or agency/person other than the authorized officers of CGWB. Consequently, the bidder and the TS-QC team must be prepared to undertake all work within the country, either at the operational bases and/or at a centralized location and sign a confidentiality agreement with the CGWB before initiating work to that effect. Failure to do so or non-compliance will result in the contract being cancelled and appropriate sanctions imposed. All field data collected during the survey is regarded as the property of the Government of India represented by the CGWB and must be handed over in its entirety. Copies made for security back up must remain under the safe custody of Regional Data Center of CGWB situated at Jaipur /Ahmadabad or at National Data Center of CGWB situated at CHQ, Faridabad (Final Center will be finalized after discussion with the PIA). It is to be ensured by the bidder that Internet connectivity and data sharing apps available for the cloud computing technology is not being used for transmission of survey data, processed data as well as data involved for interpretation.

**2. Delivery to CGWB**

Procedures will be agreed to and implemented for the daily or weekly delivery of survey data to the project coordination unit at the concerned CGWB Regional Offices. Such data shall be delivered in a secure digital format fully compatible with the software and archiving protocols in place at the concerned CGWB Regional Office's operations room. While it is recognized that the data is ultimately the property of the Government of India, the selected suppliers will have their own protocols in place for the transmission and delivery of the digital data to the processing facility situated at Regional Data Center of CGWB Jaipur /Ahmadabad or at National Data Center of CGWB situated at CHQ, Faridabad (Final Center will be finalized after discussion with the PIA) and the integrity of that workflow will be respected.

The role of the TS-QC team and their working relationship with both the bidders' management and the CGWB management will be vital to the successful, secure, delivery of the Heli-borne data from the field operating centers to the Regional Data Center of CGWB Jaipur /Ahmadabad or at National Data Center of CGWB situated at CHQ, Faridabad (Final Center will be finalized after discussion with the PIA).

CGWB and the TS-QC team will co-ordinate with the bidders on secure methods for transmission of data to designated centers of CGWB and maintaining security within the processing centre. It is anticipated that CGWB will deploy security officers to the field, who will participate in the review and secure transmission of the data.

**3. Archiving at CGWB**

It is an absolute requirement that the raw and processed data is archived securely at CGWB and thus there has to be appropriate hardware and physical space at the processing/interpretation centre in designated centers of CGWB capable of handling, uploading, archiving and transmitting large data files. It will be the sole responsibility of bidders to ensure adequate and appropriate infrastructure for transmission of the survey data, and its processing and interpretation, in the space provided by CGWB at its office premises at Regional Data Center of CGWB Jaipur /Ahmadabad or at National Data Center of CGWB situated at CHQ, Faridabad (Final Center will be finalized after discussion with the PIA). In addition all data will need to be backed-up both on site and externally in order to comply with international best practice as well as Indian national security requirements.

**4. Security of Interim and Final Deliverables**

The deliverables will be prepared at the processing centre established at Regional Data Center of CGWB situated at Jaipur /Ahmadabad or at National Data Center of CGWB situated at CHQ, Faridabad (Final Center will be finalized after discussion with the PIA). Similar security procedures as those for the field data will be employed.



**Chapter-6****Technical Specifications****Heliborne-TEM: Major systems, accessories and specifications**

1	<b>Heliborne Single/Dual-Moment TEM System</b>	
1.1	General	The Heliborne single/multi/dual- The moment TEM system (also referred to as 'The System' in some parts of the text) should have a complete set including a transmitter capable of transmitting pulses in multi-moment (low and high) mode, and a receiver to measure ground response.
		The TEM transmitter/receiver assembly should be configured for helicopter-mounted under-slung operation.
1.2	Transmitter and Receiver	To achieve a high degree of lateral resolution, it is desirable to have a transmitter coil area as small as possible (preferably $\leq 450 \text{ m}^2$ ) to ensure minimal lateral averaging of resistivity.
		The system should be able to transmit single/multi/dual-moment/multi-pulse EM signals, with the transmitter/receiver loop towable at a low level ( $\sim 30 \text{ m}$ above the ground surface), as well as capable of collecting data above any terrain. The receiver should have approximately 17 gates for low moments and 20 or more gates for high moments.
		The orientation and geometry of the transmitter/receiver coils should be recorded accurately during the data acquisition using suitable DGPS and inclinometers, to account for errors due to orientation and changes in transmitter/receiver loop geometry during the final processing. If an external generator is used as a power source, it should be placed at a sufficient distance from the EM transmitter, ensuring that no noise affects the receiver signal.
		The system should be capable of data collection at survey speeds in the range of 60 to 80 km/h, ensuring that the geometry of the transmitter loop remains horizontal (within $\pm 10\text{m}$ ) for various geophysical applications to acquire high-resolution and cost-effective data optimally. The deviations of the transmitter loop from the horizontal plane should be measured precisely ( $\leq 1^\circ$ ) for processing/modeling corrections.
		The single/dual/multi-moment system must have a suitable dipole moment to decipher the shallow information of around 3 mbgl and up to the depth of 500 m or more. The minimum peak dipole moment should be more than 4,00,000 NIA.
1.3	Accessories	The system must be complete in all respects, including the essential accessories for high-resolution multi-moment TEM data collection and quality checks. The major accessories are listed.
1.4	Laser Altimeters	2 nos., Digital, Class 1 Laser, complying with the regulations with respect to the safe use of laser equipment, Resolution: $\sim 20 \text{ cm}$ . The range of the reflectors should be around 1 to 125 m or higher.
1.5	Differential GPS and Navigation	<ul style="list-style-type: none"> <li>• 2 no's or more, including 1 rover and 1 base station with high accuracy — horizontal positioning (better than <math>\pm 1 \text{ meter}</math>).</li> <li>• In addition, they should supply a navigational support system with suitable software that facilitates the creation of blocks, and survey lines and provides on-board navigational aid to the pilot. The required position accuracy is around <math>\pm 2 \text{ m}</math>.</li> <li>• Preferably real-time differential corrections may be obtained from either a GPS reference station or from a satellite system or any other way practiced internationally for such operation.</li> </ul>

1.6	Data and Format	<ul style="list-style-type: none"> <li>The system should provide TEM data in a format ready for inversion in the processing software platform 'Aarhus Workbench' for layered inversion, and also in other formats if required.</li> <li>System description, settings files, importing data, system parameters, etc., required for data processing should be provided.</li> <li>Supporting software(s) for preparing flight lines, data download, formatting or format conversion, etc., should be provided by the supplier without any additional charge.</li> </ul>
1.7	Calibration	The geophysical system should be calibrated at any established test site, and supporting documents to this effect should be provided.
1.8	Data Quality, Control, Security & Processing	<p>Data QA/QC needs to be done at the field site/base camp under secure conditions by CGWB officials/scientists. In this regard, necessary software, commissioning, and QA/QC procedures need to be provided by the contractor.</p> <ul style="list-style-type: none"> <li>All the acquired data is confidential and is the absolute property of CGWB, Government of India. It needs to be handed over in an external HDD of sufficient capacity to CGWB in a secure condition. Afterward, the collected data, if any, should be deleted from the system/devices of the field personnel provided by the supplier to ensure that no data is transmitted elsewhere.</li> <li>To achieve better field data QA &amp; QC, the heliborne TEM system must be able to facilitate 1D inversion of the collected data within 24-48 hours of flight completion.</li> </ul>
1.9	Other system	The system should also include a high-resolution airborne magnetometer and a ground magnetometer to record diurnal variations. The specifications are provided below.
<b>2</b>	<b>Magnetometer</b>	
2.1	Airborne magnet-o-meter	
2.1.1	Number	1
2.1.2	Error envelope	Not exceeding $\pm 0.2$ nT for more than 10% of any flightline.
2.1.3	Sensitivity	Typically 0.002 nT at a 0.1 second sample rate.
2.1.4	Operating range	~20,000 to 100,000 nT
2.1.5	Heading error	<2 nT
2.1.6	Absolute accuracy	Better than 3 nT throughout the range.
2.1.7	Operating temperature	-5°C to +50°C
2.1.8	Synchronization	The counter is to be synchronized with the TEM system. The system should record magnetic data only during the TEM off time.
<b>2.2</b>	<b>Ground-based magnetometer</b>	
2.2.1	Numbers	1
2.2.2	Magnetic base station	User-selectable sample interval ranging from 0.2 s to 1 s and a sensitivity of approximately 0.1 nT.
2.2.3	Digital recordings	Digital data should include standard parameters like the date, an absolute value of the total magnetic field, and GPS time, etc., with accurate e-synchronization to the airborne data acquisition system. The system should have sufficient memory to store

		10-12 hours of data.
2.2.4	Resolution	~0.01nT or better
2.2.5	Absolute Accuracy	Around $\pm 0.1$ to $0.2$ nT or better
3	<b>Other Requirements/Conditions</b>	
3.1	System Engineer/ Operator	A system engineer will be needed at the time of DGCA inspection for assembly and during the field surveys for maintenance and smooth data acquisition.
3.2	Insurance	The supplier should ensure the insurance of all the systems for the entire period.
3.3	Service and maintenance	Necessary time-bound/earliest possible service and maintenance, including spare parts, have to be ensured by the supplier without attracting any additional cost. Service and maintenance, in the case of major issues, should not exceed more than a week. Any delay will attract penalization depending upon the resultant loss to CGWB.
3.4	Experience	<ul style="list-style-type: none"> <li>The aquifer mapping requires high-resolution data from very shallow depths (~3 m to map reliably the upper soil essential for recharge zones) to deeper horizons (aquifers and bedrock). Therefore, the contractor must supply essential documents of the Heliborne multi-moment/pulse TEM system to support their adequate experience in groundwater-related studies across various geological terrains.</li> <li>The company should have experience of at least 36,000-line kilometers of data collection using multi-moment/pulse TEM systems for groundwater investigations in the last five years.</li> </ul>
3.4	Age of the system	The Multi-moment/pulse system should be preferably new. In any case, it should not be more than 5 years old, in good condition, and up-to-date with the latest updates. The smooth functioning of the system has to be ensured by the supplier during the entire survey period.
3.5	Technical support	The supplier needs to provide technical support for data acquisition to the CGWB personnel on survey system maintenance, software, and hardware (both in the field and in the lab), data acquisition, QA & QC, system health, safety, security, etc.
3.6	Backup	Additional alternative devices/essential major spares may be ensured as standby for backup reasons.
3.7	Data interpretation	The Heliborne TEM data interpretation should be done using industry standard and licensed software.
3.8	Digitization	The H-TEM location map, location coordinates, elevation, plotted curves, 2-D section, 3-D model should be digitized as compatible with the GIS platform i.e. *.shp file format. These diagrams should be also produced in JPEG format.
3.9	Reports include the following items	There should be one report for each state (giving details for each district) containing the Introduction, Objective, Principal and methodology, Correlation of inferred layer parameters with existing VES, GTEM, borehole lithology/logging, and deriving resistivity ranges for different lithological units. Interpretation, results of Heliborne-TEM, Inference, Recommendations, Conclusion, and raw and processed field data.

**(a) Scope of supply and incidental services:**

- The indented single/dual/multi-moment TEM survey equipment for high-resolution mapping of electrical

resistivity distributions from very near surface up to deep level (~500 m) is required primarily for groundwater studies and also useful for other geotechnical purposes. The magnetometer is used for measurement of the total magnetic field data, primarily for structural features or discontinuities. The geophysical (single/dual/multi-moment TEM and magnetic) system should be calibrated at an established test site (in India or abroad) and supportive documents to this effect should be provided.

**(b) Acceptance test:**

The supplier should supply a calibrated system with the supporting document of calibration. Further, this will be tested with known areas for satisfactory comparison.

**(c) Qualification criteria if any:**

Comparable with known models of known areas.

**Ground-TEM**

The Ground-TEM equipment has at least a capacity of 20 A current or more and the size of the transmitter loop should be not less than 6400 m<sup>2</sup> (80 m x 80 m). The soft copy of raw G-TEM data collected in the field should be provided in a recorded format as well as binary or coma delimited \*.csv Excel file or \*.USF file format. TEM data must be processed with reputed software to get resistivity variation with depth.

**Data interpretation:** The Ground TEM data interpretation should be done using industry standard and licensed software.

**Digitization:** The TEM location map, location coordinates, elevation, plotted curves, and 2D section should be digitized as compatible with GIS platform i.e. \*.shp file format. These diagrams should be also produced in JPEG format.

**Report includes the following items:** There should be one report for each state (giving details for each district) containing the Introduction, Objective, Principal and methodology, Correlation of inferred layer parameters with existing borehole lithology, and deriving resistivity ranges for different lithological units. Interpretation, results of individual TEM, Inference, Recommendations, Conclusion, and field data.

**Electrical Resistivity Tomography (2D Imaging)**

Data generation in alluvium/marginal alluvium/hard rock formation by reputed micro-processor-based resistivity imaging equipment having minimum 250-watt power with 2.5A current. Both Gradient and Wenner configurations in Resistivity and IP mode will be used with a minimum of 120 numbers of electrodes having 10 m electrode spacing for the same profile line as per the availability of space near the proposed locations. In cases where sufficient space is not available for the survey, prior approval of the concerned Regional Director is to be obtained along with proper justifications.

The soft copy of raw data of 2-D Imaging collected in the field should be provided in a recorded format as well as, coma delimited \*.csv Excel file or converted in RES2DINV \*.dat file. Resistivity imaging data must be processed with reputed software to produce graphical colored 2-D resistivity sections versus the depth of sub-surface electrical layers.

Location of 2-D imaging line on map along with latitude, longitude, orientation/direction, and Elevation of imaging line.

**Report includes the following items:** There should be one report for each state (giving details for each district) containing an Introduction, Objective, Principal and methodology, Correlation of inferred resistivity 2D section with existing VES, borehole lithology, and deriving resistivity ranges for different lithological units. Location map, Interpretation of individual 2-D imaging site, Inference, Recommendations, Conclusion, raw field data.

### Timelines and milestones

#### Heliborne TEM Survey -Package-B

Duration: 15 months from the award of contract/Signing of MoA or up to 31<sup>st</sup> March 2026.

Activity/Items	Months														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M
Quarter Wise	Q1			Q2			Q3			Q4			Q5		
Field reconnaissance, data compilation, conceptualization, etc.	■	■	■												
Permission for Heliborne Geophysical surveys	■	■	■	■	■	■	■	■							
Heliborne Geophysics-Data acquisition								■	■	■	■	■	■	■	
Heliborne Geophysics-Processing and interpretation								■	■	■	■	■	■	■	■
Ground Geophysics -ERT & TEM		■	■	■	■	■	■	■	■	■	■	■	■	■	
Validation and finalization of geophysical results				■	■	■	■	■	■	■	■	■	■	■	■
Training and Capacity Building of CGWB Scientists						■	■	■	■	■	■	■	■		
Final Report Writing										■	■	■	■	■	■

- The preparation for conducting Heli-borne TEM/ ground TEM and ERT and approaching to

the area may be completed within 1 month of the award of the work.

- The digital data and curves of completed Heli-borne TEM/ground TEM and ERT are to be submitted on weekly basis. The final report should be submitted as specified in the tender terms and conditions.
- Data collection, data interpretation, and submission of reports in soft & hard copies prescribed in the tender document shall be completed within 15 months.
- The 25% ground TEM/ERT for each state shall be completed before taking up the Heli-borne survey in that state and the remaining 75% ground TEM/ERT are to be completed post-Heli-borne survey. Out of 75 %, preferably 25% is to be conducted on flight line for data validation and 50% for fulfill the data gap in the respective states.

***Package-B- State-wise Schedule of Quantity of Work***

**(a) Heliborne TEM& Magnetic**

Schedule No.	Name of State	Line km of Heliborne TEM& Magnetic
(i)	<b>Rajasthan</b> (Sirohi, parts of Barmer, Jaisalmer & Jodhpur Districts). @ 2.5 Km flight spacing	28445
(ii)	<b>Gujarat</b> (Banas Kantha, Mehsana, Pattan, Gandhinagar and parts of Kachchh &Ahmadabad Districts) @ 2.5 Km flight spacing	20817
5% extra infill flight lines over hydrogeological interesting/complex / contact areas		2463
<b>Total</b>		<b>51726</b>

**(b) Ground TEM**

Schedule No.	State	No. of G-TEM	Remarks
(i)	<b>Rajasthan</b> (Sirohi, parts of Barmer, Jaisalmer & Jodhpur Districts).	63	The tentative location where Ground TEM is proposed to be carried out is given at Appendix I (i to ii).
(ii)	<b>Gujarat</b> (Banas Kantha, Mehsana, Pattan, Gandhinagar and parts of Kachchh &Ahmadabad Districts)	46	
<b>Total</b>		<b>109</b>	

**(c) Electrical Resistivity Tomography/ 2-D Imaging**

Schedule No.	State	ERT/2D Imaging nos./LKM (Up to depth of 200 m)	Remarks
(i)	<b>Rajasthan</b> (Sirohi, parts of Barmer, Jaisalmer & Jodhpur Districts).	48/57.6	The tentative location where ERT/2DImaging is proposed to be carried out is given at Appendix II (i to ii).
(ii)	<b>Gujarat</b> (Banas Kantha, Mehsana, Pattan, Gandhinagar and parts of Kachchh &Ahmadabad Districts)	36/43.2	
<b>Total</b>		<b>84/100.8</b>	

**BOQ**

The price should be quoted in Indian Rupees (INR) without of GST.

#	Components	Unit	Quantity	Rate (Rs)	Cost (Rs)
1	Heliborne Geophysical Survey (Line Kilometers) Heliborne TEM & Magnetic data generation, Data interpretation, Digitization, Report submission (as specified in the technical specification)	Km	51,726		
2	Ground Geophysics - ERT (Nos.) ERT/2D Imaging data generation, Data interpretation, Digitization, and Report submission (as specified in the technical specification)	Nos.	84		
3	Ground TEM (Nos.) Ground TEM data generation Data interpretation Digitization Report submission (as specified in technical specification)	Nos	109		
4	Field reconnaissance, data compilation, conceptualization, Processing, Training and Capacity Building of CGWB 20 nos. Scientists (In two batches of 10 members each), Analysis and Interpretation of Heliborne, Ground Geophysical Data and validation, integration and finalization of final report and submission. One final report for each state (giving details for each district).	Lumpsum	01		
5	Total				
	GST 18% (Rs in Crore)				
	Grand Total (Rs in Crore)				

**SCHEDULE OF PAYMENT: TERMS OF PAYMENT AND MAINTENANCE OF ACCOUNTS**

It is envisaged to complete the projects in 15 months from the date of issuance of Work Order or up to 31<sup>st</sup> March 2026 with the implementing agency. The payments to the implementing agency will be released in phases and would be linked to the milestone.

The funds for the project shall be released in phases by CGWB as per time schedule, verification of progress of work and achievement of the following milestones:

Milestone No	Milestone	Payment (%) (as percentage of total project cost excluding GST)	Remarks
Advance Payment	Receipt of NoC from DGCA for deployment of Helicopters subsequent to the signing of MoA.	Amount 20% of the Contract cost excluding GST	Against a Bank Guarantee amounting to 20 % of the Contract cost excluding GST to be submitted by the successful bidder, which will be returned after the successful completion of Milestone-4) (as per the Rule 172 (1) of GFR, 2017 i.e.
Milestone 1	Mobilization of Helicopters in the survey	20% (Advance	Advance amount will be

	Block, survey equipment and personnel to the survey base of operations and obtaining necessary permissions and approvals from DGCA and other agencies/organizations and completion of all pre- survey calibrations and its approval from CGWB.	payment of 20% already made will be adjusted against this payment)	adjusted after issuance of certificate from concerned Regional Director regarding the deliverables against the Milestone.
Milestone 2	Submission of Inception Report and reconnaissance survey Report and completion of 25% of GTEM and ERT/2D imaging quantity specified in the BOQ	5% Contract cost excluding GST	To be released against the tax invoice upon Submission of the Inception Report and reconnaissance survey Report and Furnishing Certificate of completion of 25% of GTEM and ERT/2D imaging quantity specified in the BOQ is to be given by respective Regional Directors of CGWB
Milestone 3	Completion of 25% data acquisition of the total line km of Heli-borne survey	10% Contract cost excluding GST	To be released against the tax invoice upon Furnishing Certificate of completion of 25% data acquisition of the total line km of heliborne survey is to be given by respective Regional Directors of CGWB
Milestone 4	Completion of 50% data acquisition of the total line km of Heli-borne survey	10% Contract cost excluding GST	To be released against the tax invoice upon Furnishing Certificate of completion of 50% data acquisition of the total line km of heliborne survey is to be given by respective Regional Directors of CGWB
Milestone 5	Completion of 75% data acquisition of the total line km of Heli-borne survey	10% Contract cost excluding GST	To be released against the tax invoice upon Furnishing Certificate of completion of 75% data acquisition of the total line km of heliborne survey is to be given by respective Regional Directors of CGWB
Milestone 6	Completion of 100% data acquisition of the total line km of Heli-borne survey	10% Contract cost excluding GST	To be released against the tax invoice upon Furnishing Certificate of completion of 100% data acquisition of the total line km of heliborne survey is to be given by respective Regional Directors of CGWB
Milestone 7	Completion of heli-borne survey as per targets and data quality control report	10% Contract cost excluding GST	To be released against the tax invoice upon furnishing of



	Submission of raw dataset generated in the heli-borne survey in external HDD of sufficient capacity Hands on training of CGWB scientists.		Certificate of completion of heli-borne survey as per targets, receipt of raw dataset and hands on training of CGWB scientists is to be given by respective Regional Directors of CGWB.
Milestone 8	<ul style="list-style-type: none"> <li>• Completion of ground geophysical investigations and data quality control report.</li> <li>• Submission of raw dataset generated in the ground geophysical survey</li> <li>• Pin pointed sites for artificial recharge along with inferred lithology up to depth of 300 m in Alluvial area and 200m in hard rock area for each recommended site.</li> <li>• Paleo channel map of the study area and its linkages with the aquifer system</li> <li>• 3D Geophysical model of the area in reproducible vector format</li> <li>• Geophysical Thematic maps at horizontal and vertical planes.</li> <li>• Aquifer Geometry in 2D and 3D in reproducible vector formats depicting de-saturated/saturated and fresh/saline zones.</li> <li>• Submission of draft final report.</li> <li>• Submission of the entire raw and processed dataset generated in the study in external HDD.</li> </ul>	10% Contract cost excluding GST	To be released against the tax invoice upon furnishing of Certificate of completion of envisaged deliverables against the Milestone to be given by respective Regional Directors of CGWB
Milestone 9	Acceptance of final report	Balance amount of the actual work executed/completed excluding GST	To be released against the tax invoice upon the furnishing of the completion certificate mentioning the date of completion shall be submitted by the concerned Regional Directors of CGWB. The date of completion is the submission of the final report duly validated by Regional Directors.

**Advance payment can be made against Bank Guarantee subjected to the following conditions:**

- i. Advance payment will be considered only on receipt of a written request and on acceptance of terms and conditions regarding payment of advance under sign and seal of authorized signatory of the Vendor.
- ii. Advance payment shall be paid only after submission of BG issued by a Scheduled Commercial Bank registered in India (i.e. Indian or Foreign Banks included in the Second Schedule of Reserve Bank of India Act, 1934 excluding Co-operative banks or Regional Rural Banks) equal to the value of advance.
- iii. BG should be valid till 60 days after the project end date. Advance payment will be adjusted

against the milestone achievement, BG will be returned after adjustment of Advance amount and successful completion work till Milestone-4 as prescribed in the above table.

- iv. Advance payment will be against the first milestone (M-1) and it will be adjusted against the bill of milestone-1. GST amount pertaining to the Milestone-1 will be reimbursed after submission of the document as listed in the subsequent clause.
- v. If the work is not initiated after getting advance, vendor has to pay interest on the amount taken as advance with simple rate of interest of 10% per Annual.

<b>Milestone for which advance is requested</b>	<b>Milestone initiation point when vendor may request for advance payment</b>	<b>Period for which no interest will be charged</b>	<b>Interest to be charged for the period</b>	<b>Reasons for which penal interest may be exempted</b>
Milestone-1	Receipt of NoC from DGCA for deployment of Helicopters subsequent to the signing of MoA.	7 Months from the date of Signing of MoA	Period beyond 7 month from the date of Signing of MoA	i. Force Majeure ii. Delay in obtaining permissions from authorities iii. Adverse Weather conditions iv. Monsoon Break *The vendor must provide sufficient proof that despite putting serious efforts, delay could not be avoided

### **GST Reimbursement**

The actual Tax GST amount against the milestone payments as applicable shall be reimbursed to the contractor only after producing the following proof of tax amount paid to Government:-

- (i) A copy of GSTR-1,
- (ii) A copy of GSTR- 3B,
- (iii) CA certificate indicating details of invoices against which the payment under GSTR-3B has been made and any other relevant document.

### **ERT/2-D RESISTIVITY IMAGING DATA (Sample Format)**

Location:      Block:                      Distt:                      State:                      Toposheet Number:

Geology:    Unique ID:

Profile Line in Km:.....

FROM ..... (Latitude & Longitude in Degree Decimal)

TO .....(Latitude & Longitude in Degree Decimal)

Direction of Profile line:

RL: From .....m amsl

To .....m amsl

Date:

Electrodes configuration used for profile:

A. Comprehensive field data in Excel sheet and \*.dat files

B. 2-D plotted Images of

Measured apparent Resistivity Pseudo section

Calculated apparent Resistivity Pseudo section

Inverse model resistivity section

Signature of Authorized Signatory

**Chapter-7****Proposed locations for ground geophysical survey in Package-B of Phase-II Heliborne Survey Area***Appendix-I**(i) Proposed Tentative locations for ground TEM survey in Rajasthan*

S. No.	State	District	Block	Village	Longitude	Latitude
1	Rajasthan	BARMER	BALOTRA	Chaukriya Ki Dhani	71.9648	25.8676
2	Rajasthan	BARMER	BALOTRA	Mewa Nagar	72.1845	25.8085
3	Rajasthan	BARMER	BARMER	Galaberi	71.4963	25.6937
4	Rajasthan	BARMER	BAYTOO	Tankeliyasar	71.6549	25.9808
5	Rajasthan	BARMER	CHOHTAN	Gomrakh Dham	71.2672	25.5537
6	Rajasthan	BARMER	CHOHTAN	Saiyon Ki Basti	70.9344	25.4979
7	Rajasthan	BARMER	DHANA00	Kharawala	71.1967	25.3483
8	Rajasthan	BARMER	DHORIMANNA	Jambheji Ka Mandir	71.4529	25.1299
9	Rajasthan	BARMER	GADRAROAD	Hafiya @ Sankhli	70.6391	26.0854
10	Rajasthan	BARMER	GADRAROAD	Ranasar	70.823	25.8606
11	Rajasthan	BARMER	GIRA	LapundaraBarthan	72.0781	26.0609
12	Rajasthan	BARMER	GIRA	Rateu	71.7599	26.2361
13	Rajasthan	BARMER	GUDHAMALANI	Naya Kua	71.6663	25.3622
14	Rajasthan	BARMER	KALYANPUR	Kalyanpur	72.531	26.0039
15	Rajasthan	BARMER	KALYANPUR	Thoombli	72.474	26.1952
16	Rajasthan	BARMER	RAMSAR	Hothoyoniyon Ki Basti	71.1945	25.7565
17	Rajasthan	BARMER	SAMDARI	Bhilon Ki Dhani	72.4926	25.7684
18	Rajasthan	BARMER	SERWA	Gangasara	71.2598	24.9411
19	Rajasthan	BARMER	SHEO	Bohrasar	71.2405	26.4502
20	Rajasthan	BARMER	SHEO	Dholkiya	71.1745	26.0345
21	Rajasthan	BARMER	SHEO	Neemlanara	71.4316	26.1876
22	Rajasthan	BARMER	SINDHARI	Bhalkhari	71.889	25.4891
23	Rajasthan	BARMER	SINDHARI	Trishooliya	71.8235	25.7296
24	Rajasthan	BARMER	SIWANA	Tanda Bera	72.2357	25.5615
25	Rajasthan	JAISALMER	JAISALMER	Alipura	71.8584	27.6543
26	Rajasthan	JAISALMER	JAISALMER	Askandra	71.7863	27.4244
27	Rajasthan	JAISALMER	JAISALMER	Bhairwa	71.2166	26.889
28	Rajasthan	JAISALMER	JAISALMER	Hariyar	71.4715	27.5554
29	Rajasthan	JAISALMER	JAISALMER	Jaisalmer (M)	70.9608	26.9149
30	Rajasthan	JAISALMER	JAISALMER	Manuj Nagar	71.1396	27.506
31	Rajasthan	JAISALMER	JAISALMER	Mokla	70.7816	27.1584
32	Rajasthan	JAISALMER	JAISALMER	Sujiya	71.3699	27.133
33	Rajasthan	JAISALMER	JAISALMER	Tadana	71.5165	27.3954
34	Rajasthan	JAISALMER	JAISALMER	Taragarh	71.159	27.2775
35	Rajasthan	JAISALMER	SAM	Bandha	70.2427	27.1517
36	Rajasthan	JAISALMER	SAM	Bersiyala	70.6204	26.5117
37	Rajasthan	JAISALMER	SAM	Bhakhrani	71.0776	26.6512
38	Rajasthan	JAISALMER	SAM	Gajsingh Ka Gaon	70.8047	26.2993
39	Rajasthan	JAISALMER	SAM	Gandhi Gaon	70.4668	27.7323
40	Rajasthan	JAISALMER	SAM	Jamra	70.6016	26.6906

41	Rajasthan	JAISALMER	SAM	Mangliyawas	70.3798	26.9635
42	Rajasthan	JAISALMER	SAM	Nawalsingh Ka Gaon	70.4629	27.4107
43	Rajasthan	JAISALMER	SAM	Rabhlaufakironwala	70.0592	26.8563
44	Rajasthan	JAISALMER	SAM	Satto	70.4496	26.2418
45	Rajasthan	JAISALMER	SAM	Shahgarh	69.9609	27.1071
46	Rajasthan	JAISALMER	SAM	Tejpala	70.78	27.4676
47	Rajasthan	JODHPUR	BAORI	NandiyaJajra	73.1911	26.7575
48	Rajasthan	JODHPUR	BAP	BaoriBarsinga	72.3882	27.5249
49	Rajasthan	JODHPUR	BAP	Bhomji Ka Gaon	72.6237	27.5643
50	Rajasthan	JODHPUR	BAP	Durgani	72.046	27.23
51	Rajasthan	JODHPUR	BAP	Newa	72.1459	27.485
52	Rajasthan	JODHPUR	BHOPALGARH	Dewatra	73.4197	26.4674
53	Rajasthan	JODHPUR	BHOPALGARH	Shivnath Nagar	73.6119	26.6412
54	Rajasthan	JODHPUR	LUNI	Balaji Nagar	73.0572	26.1873
55	Rajasthan	JODHPUR	LUNI	Kalijal	72.8459	26.0312
56	Rajasthan	JODHPUR	MANDOR	Beroo	72.8978	26.372
57	Rajasthan	SIROHI	ABU ROAD	Mungthala	72.6962	24.495
58	Rajasthan	SIROHI	PINDWARA	Khari Gearwa	72.9299	24.9114
59	Rajasthan	SIROHI	PINDWARA	Sanwara	72.9798	24.5836
60	Rajasthan	SIROHI	REODAR	Rohua	72.4303	24.6784
61	Rajasthan	SIROHI	SHEOGANJ	Godana	73.0376	25.042
62	Rajasthan	SIROHI	SHEOGANJ	Manadar	72.8393	25.2017
63	Rajasthan	SIROHI	SIROHI	Kalandri	72.6585	24.9032

**(ii) Proposed Tentative locations for ground TEM survey in Gujarat**

S. No.	STATE	DISTRICT	Block	VILLAGE	Longitude	Latitude
1	GUJARAT	AHMADABAD	Sanand	Zolapur	72.1794	22.9732
2	GUJARAT	AHMADABAD	Viramgam	Dalsana	72.0572	23.267
3	GUJARAT	BANAS KANTHA	Bhabhar	Bhabhar Juna	71.6247	24.0833
4	GUJARAT	BANAS KANTHA	Danta	Vaghdacha	72.6984	24.1892
5	GUJARAT	BANAS KANTHA	Dantiwada	Nandotra (Thakorvas)	72.3066	24.2978
6	GUJARAT	BANAS KANTHA	Deesa	Jhabadiya	72.0929	24.1252
7	GUJARAT	BANAS KANTHA	Deesa	Jherda	72.1234	24.4051
8	GUJARAT	BANAS KANTHA	Dhanera	Ramuna	71.93	24.5637
9	GUJARAT	BANAS KANTHA	Kankrej	Akoli Maharajvas	71.8791	24.0366
10	GUJARAT	BANAS KANTHA	Suigam	Suigam	71.3702	24.1439
11	GUJARAT	BANAS KANTHA	Tharad	Rampura	71.6145	24.573
12	GUJARAT	BANAS KANTHA	Tharad	Sanavia	71.6857	24.2885
13	GUJARAT	BANAS KANTHA	Vav	Sapreda	71.4363	24.4377
14	GUJARAT	GANDHINAGAR	Dehgam	Palaiya	72.831	23.1783
15	GUJARAT	GANDHINAGAR	Mansa	Samou	72.6092	23.4824
16	GUJARAT	KACHCHH	Abdasa	Jakhau	68.7541	23.1966

17	GUJARAT	KACHCHH	Abdasa	Tera	68.9782	23.281
18	GUJARAT	KACHCHH	Anjar	Ratnal	69.8943	23.1924
19	GUJARAT	KACHCHH	Bhachau		70.8714	23.7521
20	GUJARAT	KACHCHH	Bhachau	Ganeshpar	70.385	23.8455
21	GUJARAT	KACHCHH	Bhachau	Kankhoi	70.3879	23.5655
22	GUJARAT	KACHCHH	Bhachau	Vondh	70.3829	23.3043
23	GUJARAT	KACHCHH	Bhuj	Bhagadio	69.3752	23.5515
24	GUJARAT	KACHCHH	Bhuj	Bhojardo	69.8153	23.5734
25	GUJARAT	KACHCHH	Bhuj	Gajod	69.5533	23.0478
26	GUJARAT	KACHCHH	Bhuj	Kharod	70.0673	23.4163
27	GUJARAT	KACHCHH	Bhuj	Layvara (Banni)	69.6449	23.7241
28	GUJARAT	KACHCHH	Bhuj	Sarspar	69.7111	23.365
29	GUJARAT	KACHCHH	Lakhpat	GugariyanaRakhal	68.968	23.5469
30	GUJARAT	KACHCHH	Lakhpat	Naredo	68.6443	23.562
31	GUJARAT	KACHCHH	Lakhpat	Umarsar	68.8255	23.7474
32	GUJARAT	KACHCHH	Mandvi	Kokaliya	69.0851	22.9778
33	GUJARAT	KACHCHH	Mandvi	Rayan Nani	69.3599	22.8706
34	GUJARAT	KACHCHH	Mundra	Jarpara	69.6602	22.8332
35	GUJARAT	KACHCHH	Nakhtarana	Sukhpar (Roha)	69.3345	23.2017
36	GUJARAT	KACHCHH	Rapar	Lodrani (Parkara Van)	70.6271	23.9013
37	GUJARAT	KACHCHH	Rapar	Thindalva Mota	70.7238	23.5235
38	GUJARAT	MAHESANA	Jotana	Jotana	72.2914	23.4722
39	GUJARAT	MAHESANA	Kadi	Pirojpur	72.3575	23.2623
40	GUJARAT	MAHESANA	Vadnagar	Malekhpur	72.5966	23.7639
41	GUJARAT	PATAN	Chanasma	Finchal	72.2048	23.7474
42	GUJARAT	PATAN	Sami	Ranavada	71.757	23.7987
43	GUJARAT	PATAN	Santalpur	Parsund	71.3193	23.7661
44	GUJARAT	PATAN	Santalpur	Piparala	71.075	23.6541
45	GUJARAT	PATAN	Shankheswar	Vagosan	71.9097	23.6075
46	GUJARAT	PATAN	Siddhapur	Sedrana	72.3647	23.9814

**Appendix-II****(i) Proposed Tentative locations for ERT (2D Imaging) survey in Rajasthan**

S.No.	State	District	Block	Village	Longitude	Latitude
1	Rajasthan	BARMER	BARMER	BothiyaJageer	71.3552	25.9079
2	Rajasthan	BARMER	BARMER	Kumharon Ka Tala	71.5074	25.4773
3	Rajasthan	BARMER	BAYTOO	Hudon Ki Dhani (Akdara)	71.8395	25.9959
4	Rajasthan	BARMER	CHOHTAN	Meghasar	71.0968	25.5506
5	Rajasthan	BARMER	DHORIMANNA	Koliyana	71.2487	25.145
6	Rajasthan	BARMER	GADRAROAD	Balewa	70.9031	25.9364
7	Rajasthan	BARMER	GADRAROAD	Shadad Ka Par Khurd	70.4773	25.9951
8	Rajasthan	BARMER	GIRA	Mahingpura	72.061	26.2835
9	Rajasthan	BARMER	GUDHAMALANI	Beri Gaon	71.664	25.1085
10	Rajasthan	BARMER	KALYANPUR	Rewara Maiya	72.3188	25.9956
11	Rajasthan	BARMER	SAMDARI	Majal	72.6903	25.8258
12	Rajasthan	BARMER	SHEO	Bhanwarisar	71.0867	26.2741
13	Rajasthan	BARMER	SHEO	Kashmir	71.5384	26.3316
14	Rajasthan	BARMER	SINDHARI	Bhooka Bhagatsingh	71.9825	25.6141
15	Rajasthan	BARMER	SIWANA	Dheera	72.4335	25.5697

16	Rajasthan	JAISALMER	JAISALMER	Balana	71.3996	27.3562
17	Rajasthan	JAISALMER	JAISALMER	Deega	71.0101	27.4168
18	Rajasthan	JAISALMER	JAISALMER	Kanod Beerma	71.1284	27.1161
19	Rajasthan	JAISALMER	JAISALMER	Major Shaitansingh Nagar	72.1065	27.7815
20	Rajasthan	JAISALMER	JAISALMER	Panche Ka Tala	71.6304	27.589
21	Rajasthan	JAISALMER	JAISALMER	Tota	71.7339	27.2627
22	Rajasthan	JAISALMER	SAM	Asoo Ka Tala	70.1763	27.2798
23	Rajasthan	JAISALMER	SAM	Balidad Ki Basti	70.358	26.7775
24	Rajasthan	JAISALMER	SAM	Bersiyala	70.5616	26.4052
25	Rajasthan	JAISALMER	SAM	Bhinda Deslonwala	69.9099	26.9882
26	Rajasthan	JAISALMER	SAM	Damodara	70.6991	26.8969
27	Rajasthan	JAISALMER	SAM	Kohriya Ka Gaon	70.4833	27.1948
28	Rajasthan	JAISALMER	SAM	Ramgarh	70.436	27.6079
29	Rajasthan	JAISALMER	SAM	Sanwata	71.2963	26.7234
30	Rajasthan	JAISALMER	SAM	Shobh	70.887	26.567
31	Rajasthan	JODHPUR	BAORI	Vinayakpura	73.1237	26.5095
32	Rajasthan	JODHPUR	BAP	Bari Dhani	72.2937	27.3382
33	Rajasthan	JODHPUR	BAP	Shiv Nagar	72.6387	27.4654
34	Rajasthan	JODHPUR	BHOPALGARH	PalriRanawata	73.4461	26.7646
35	Rajasthan	JODHPUR	LUNI	Peethasani	73.2426	26.1573
36	Rajasthan	JODHPUR	LUNI	Sawan Nagar	72.7417	26.179
37	Rajasthan	JODHPUR	OSIAN	Panditji Ki Dhani	72.9631	26.8181
38	Rajasthan	JODHPUR	PIPAR CITY	Sri Krishana Nagar	73.6192	26.4494
39	Rajasthan	SIROHI	ABU ROAD	Uplagarh	72.8385	24.4651
40	Rajasthan	SIROHI	PINDWARA	Ajari	73.0531	24.7573
41	Rajasthan	SIROHI	REODAR	Jawal	72.4655	24.5611
42	Rajasthan	SIROHI	SHEOGANJ	Van	72.854	25.0657
43	Rajasthan	SIROHI	SIROHI	Sanpur	72.6192	24.7605
44	Rajasthan	SIROHI	SIROHI	Sirohi (Rural)	72.8493	24.8118
45	Rajasthan	SIROHI	SIROHI	Baoli	72.666824	25.005472
46	Rajasthan	SIROHI	ABU ROAD	Dovtra	72.946431	24.504821
47	Rajasthan	JODHPUR	Bhopalgarh	Budkiya	73.34586	26.476197
48	Rajasthan	BARMER	BARMER	Puniyo ki basti	71.682824	25.694621

*(ii) Proposed Tentative locations for ERT (2D Imaging) survey in Gujarat*

S. No.	STATE	DISTRICT	TEHSIL	VILLAGE	Longitude	Latitude
1	Gujarat	Ahmadabad	Sanand	Pipan	72.3707	22.9382
2	Gujarat	Ahmadabad	Viramgam	Moti Kishol	72.0844	22.8567
3	Gujarat	Banas kantha	Danta	Mota Pipodara	72.8308	24.187
4	Gujarat	Banas kantha	Dantiwada	Bhadali (Zat)	72.3436	24.4526
5	Gujarat	Banas kantha	Deesa	Nesda Nava	71.9451	24.1937
6	Gujarat	Banas kantha	Dhanera	Jadi	72.0805	24.5874
7	Gujarat	Banas kantha	Kankrej	Khengarpura	71.7942	23.9313
8	Gujarat	Banas kantha	Palanpur	Jagana	72.4385	24.1339
9	Gujarat	Banas kantha	Tharad	Rah	71.8135	24.4775
10	Gujarat	Banas kantha	Vav	Akoli	71.4343	24.598
11	Gujarat	Banas kantha	Vav	Madka	71.4962	24.2647
12	Gujarat	Gandhinagar	Dehgam	Antroli	72.9014	23.1748
13	Gujarat	Kachchh	Abdasa	Kothara	68.9	23.1191
14	Gujarat	Kachchh	Abdasa	Ukir	68.7297	23.3958
15	Gujarat	Kachchh	Anjar	Bhimasar	70.1652	23.2078

16	Gujarat	Kachchh	Bhachau		71.0397	23.8355
17	Gujarat	Kachchh	Bhachau	kanthkot	70.4632	23.417
18	Gujarat	Kachchh	Bhachau	Ratanpar	70.3648	23.8555
19	Gujarat	Kachchh	Bhuj		69.6738	23.5199
20	Gujarat	Kachchh	Bhuj	Godsar (Rakhal)	69.6119	23.2432
21	Gujarat	Kachchh	Bhuj	Karo Dungar	69.8595	23.8958
22	Gujarat	Kachchh	Bhuj	Luna	69.2676	23.7078
23	Gujarat	Kachchh	Lakhat	Panandhro	68.7336	23.6937
24	Gujarat	Kachchh	Mandvi	Ratadiya Mota	69.2792	22.9631
25	Gujarat	Kachchh	Mundra	Vagura	69.817	23.0234
26	Gujarat	Kachchh	Nakhtarana	Nakhatrana	69.2792	23.339
27	Gujarat	Kachchh	Rapar	Rav Moti	70.556	23.7149
28	Gujarat	Kachchh	Rapar	Vijapar	71.0281	23.5305
29	Gujarat	Mahesana	Becharaji	Akba	72.1424	23.4525
30	Gujarat	Mahesana	Kadi	Kalyanpur	72.1966	23.1298
31	Gujarat	Mahesana	Kheralu	Mandali	72.5106	23.8899
32	Gujarat	Mahesana	MAHESANA	Mulsan	72.4752	23.5021
33	Gujarat	Mahesana	Vijapur	Jantral	72.7282	23.6799
34	Gujarat	Patan	PATAN	Samalpati	72.1269	23.8745
35	Gujarat	Patan	Sami	Bhadrada	71.5814	23.6476
36	Gujarat	Patan	Santalpur	Korda	71.384	23.9029

### **Flight Lines and Ground Geophysical Survey Details**

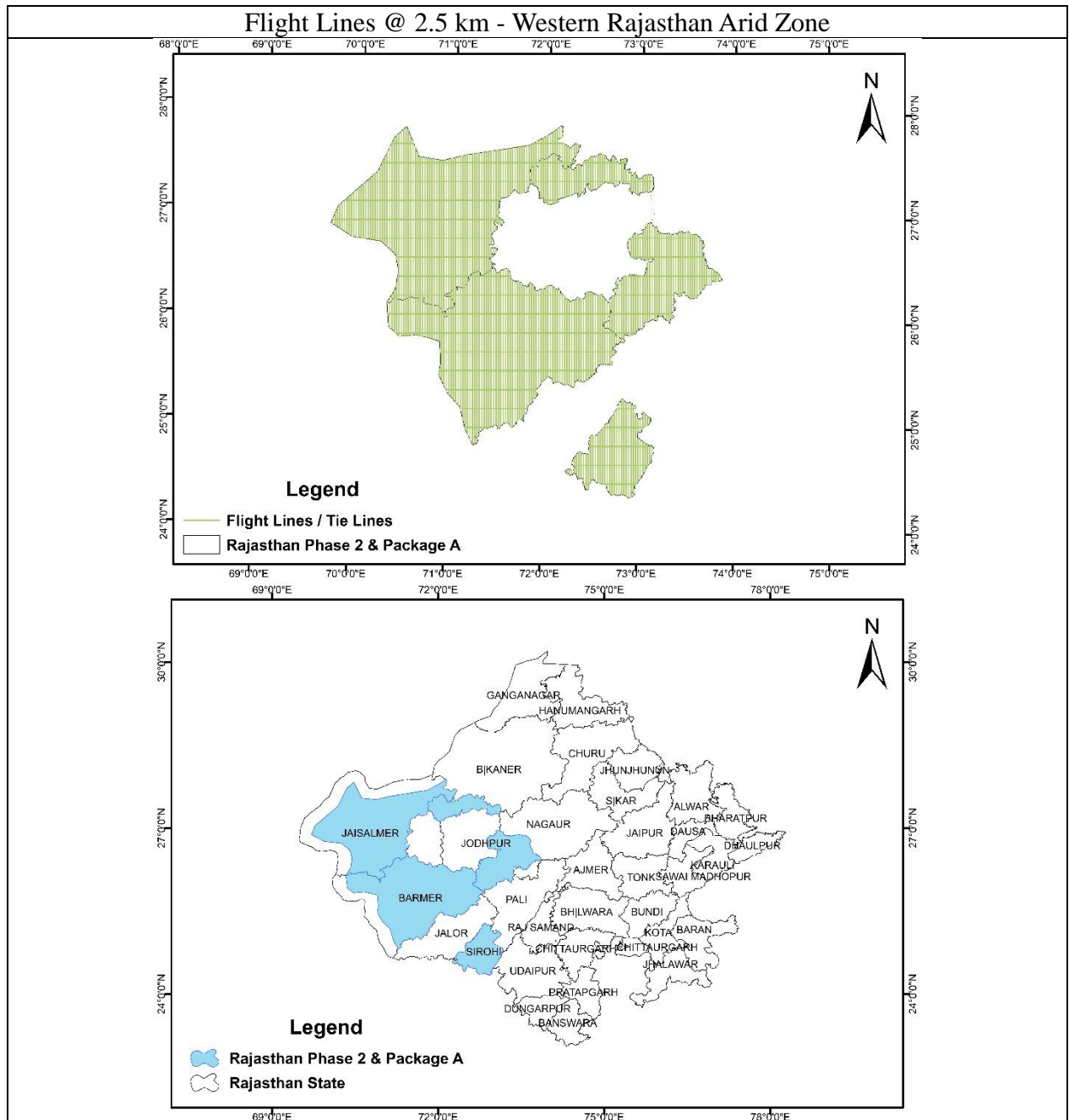
Details of tentative ground geophysical TEM and ERT numbers in the area under the Phase-II survey are given below.

Table: Details of Area and Ground Geophysical Surveys in Arid region under Phase-II.

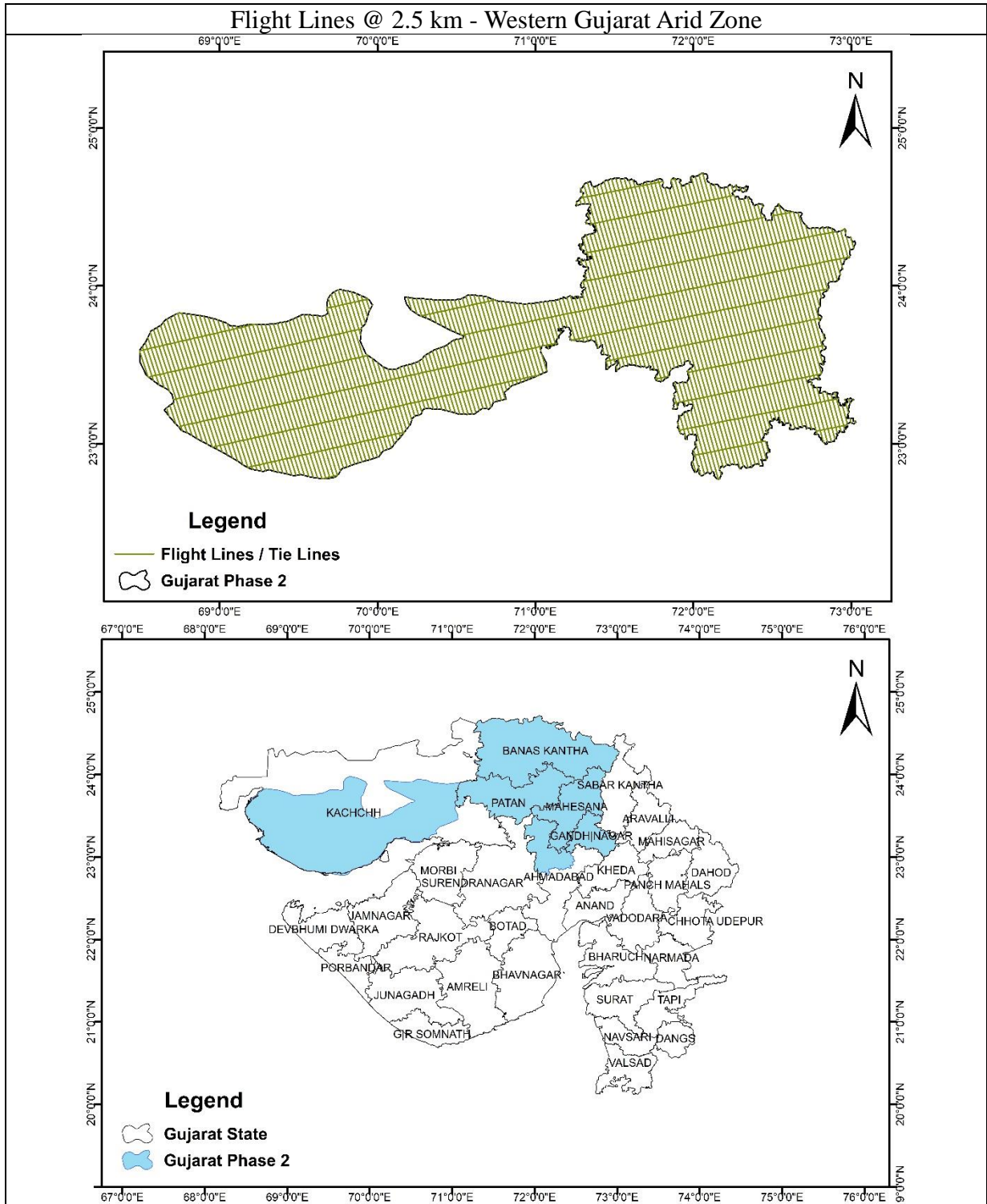
<b>S. No.</b>	<b>State</b>	<b>Area (Sq. Km)</b>	<b>TEM (Nos.) [1 @ 1000 Km<sup>2</sup>]</b>	<b>ERT (Nos.) [1 @ 1300 Km<sup>2</sup>]</b>
1	<b>Rajasthan</b> (Sirohi, parts of Barmer, Jaisalmer & Jodhpur Districts).	63,212	63	48
2	<b>Gujarat</b> (Banas Kantha, Mehsana, Patan, Gandhinagar and parts of Kachchh & Ahmadabad Districts)	46,260	46	36
	<b>Total</b>	<b>1,09,472</b>	<b>109</b>	<b>84</b>

In general, the Heliborne flight line spacing in Package - B of Phase II Heliborne survey areas falling in parts of Rajasthan & Gujarat States have been taken with major flight line parallel spacing of 2.5 Km and tie flight line will be flown at a line spacing of 20 Km.

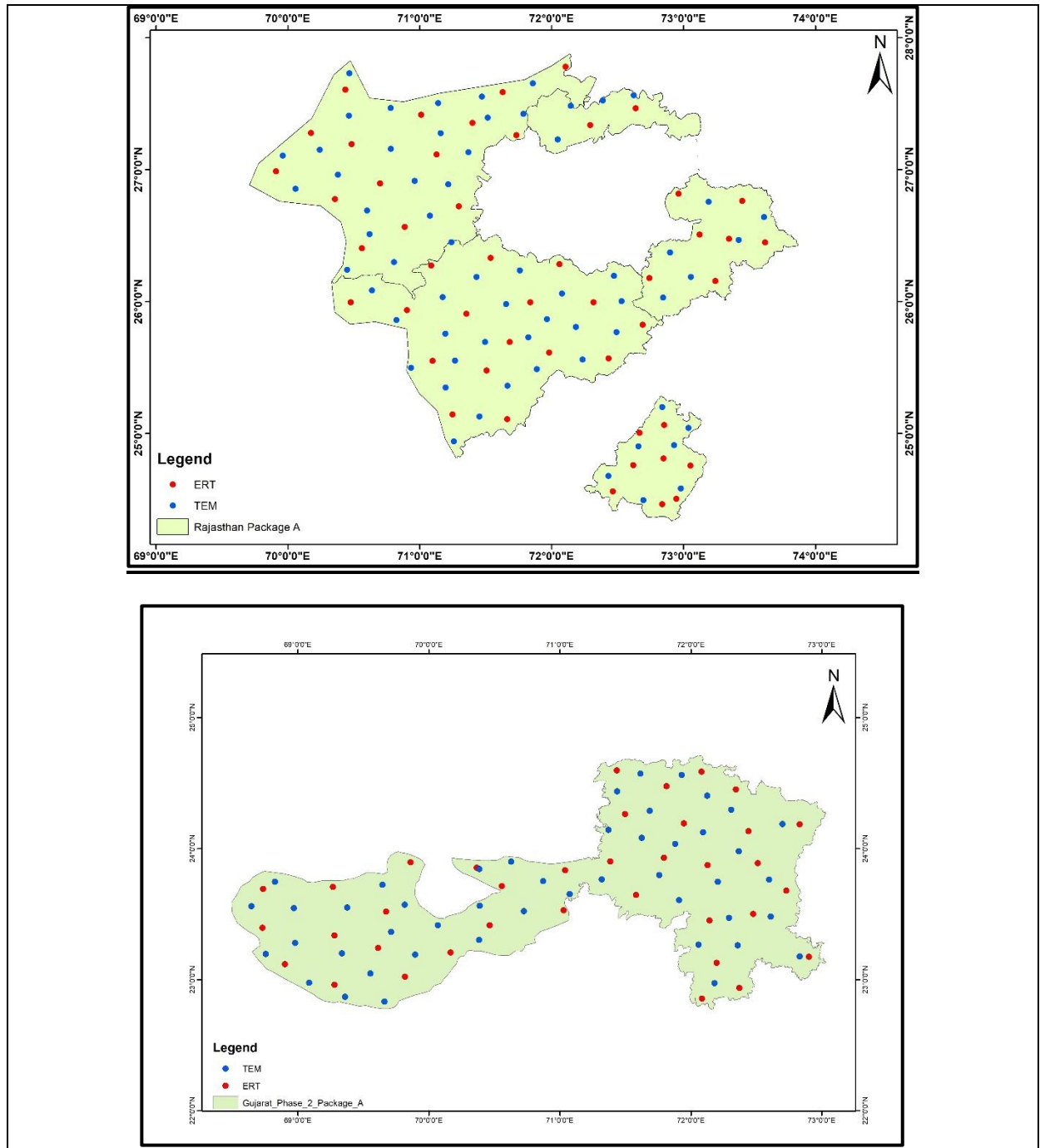
In Rajasthan & Gujarat states considering the boundary with hard rock geology, dipping formation, deep water levels, complex marginal alluvium deposit etc. the flight line spacing has been kept at 2.5 Km and tie flight at 20 Km spacing. Extra infill lines of around 5% will be flown over hydrogeologically interesting / complex / contact areas.







**Tentative TEM & ERT locations map**



**Chapter-8****Preparation of Bid**

- Bidder's bid (the bid) will consist of following components
- EMD Fee/Bid security declaration(BSD)
- Technical bid including details of claim of eligibility criterion laid down in notice inviting tender, and
- Financial bid
- The bid, as well as all related correspondence exchanged by the bidders and the authority shall be in English language only. All reports prepared by the appointed bidder shall also be in English.
- While preparing the bid, the bidder must add the contents table.

***Technical bid***

The technical bid shall not include any information related to the financial bid. Technical bids containing information related to the financial bid shall be declared non-responsive.

***The bid shall contain:***

- A brief description of the bidder's organization and an outline of recent experience of the bidder, on assignments of a similar nature. The information which you shall provide on each assignment should indicate, inter-alia, the profiles of the staff provided, duration, contract amount and firm's involvement. The details of assignments on hand shall also be furnished.
- A concise, complete, and logical description of approach and methodology as proposed by the bidder in compliance to the scope of work and technical specifications.
- The composition of the proposed team, the tasks which shall be assigned to each and their timing.
- CVs strictly in the prescribed format and recently signed in blue ink on each page by both the proposed professional staff and the authorized representative of the firm. Key information should include year's served with the firm and degree of responsibility held in various assignments. In CV format, at summary, the individual shall declare his/her qualification & total experience (in years) against the requirements specified in scope of work and technical specification for the position.
- Only one CV may be submitted for each position. Each expert of the preferred bidder may be called for interview at the cost of bidder, prior to issue of LOA.
- A certification to the effect should be furnished by the bidder that they have checked the qualifications and experience details submitted by the key personnel in their CVs and found to be correct. This certification should be made in CVs of all key personnel after the certification by the candidate. The format of CV includes certification to this effect.
- CGWB reserves the right to verify all statements, information, and documents submitted by the bidder in response to the tender. Any such verification or the lack of such verification shall not relieve the bidder of its obligations or liabilities hereunder nor will it affect any rights of CGWB there under.
- Any comments or suggestions on the scope of work and technical specification and a description of the methodology (work plan) which the firm proposes to execute the services, illustrated with bar charts of activities.
- All documents in support of qualifying criteria as mentioned in relevant chapter.

***Price Bid***

The price should be quoted in Indian Rupees (INR) including the GST.

***Payment Terms***

- The payment will be made to the GEM bidder which is a company or a joint venture or lead partner in case of a consortium.
- Payment will be milestone based as per the Terms of Payment and Maintenance of Account (chapter-6)
- Amount for each milestone will be calculated from the total cost as quoted in GEM as per following procedure:
- The milestone amounts without tax will be calculated as percentage specified in the schedule of payment. GST will be added to this to get the final milestone cost with tax. However, The actual Tax (GST) as applicable will be reimbursed against the valid invoice only after producing the following proof of tax amount paid to Government (i) A copy of GSTR-1, (ii) A copy of GSTR- 3B, (iii) CA certificate indicating details of invoices against which the payment under GSTR-3B has been made and any other relevant document.

### ***Submission, Receipt and Opening of Bids***

- The original bid (bid security declaration, technical bid) shall contain no interlineations or overwriting, except as necessary to correct errors made by bidders themselves. Any such corrections, interlineations or overwriting must have initials by the person(s) who signed the bid.
- The bidder or its authorized representative shall initial all pages of the bid. The representative's authorization must be confirmed by a written power of attorney accompanying the bids.
- All documents related to technical bids are to be uploaded on GeM portal within the due date as specified in this tender.
- Original "EMD Fee/Bid Security Declaration" in the prescribed format are required to be submitted to "Superintending Engineer (MMS-I), CGWB, CHQ, Faridabad, Haryana-121001" within the due date as specified in this tender.
- If any document is found missing in the submitted bid, clarification may be sought from the bidders. However, in case of non-receipt of response to clarifications in time, the bid will be rejected without any further evaluation. However, in case any missing documents make the bid non-responsive, then CGWB shall have the right to reject the bid without any further evaluation.

**Chapter-9****Bid Evaluation*****Criteria for evaluation of the bids***

- The evaluation of the proposals will be a two-stage. Evaluation of the technical proposals and financial proposals will be done by Tender Evaluation Committee (TEC).
- Evaluation of technical bid will be carried out prior to opening of financial bid. Financial Bids will be opened only for technically qualified bidders.
- In case of a bidder being a consortium of companies or a joint venture company the credentials of all the members of the consortium / joint venture will also be considered for evaluating the technical bids.

***Evaluation of technical bids***

- The eligibility and qualifying criteria will be first evaluated as defined in tender for each bidder. Detailed technical evaluation will be taken up for only those bidders, who meet with the prescribed eligibility and qualifying criteria.
- The authority's 'Tender Evaluation Committee' (TEC) will be responsible for evaluation of bids received.
- The TEC will evaluate the technical bids on the basis of bid's responsiveness using the evaluation criteria specified in the tender.

***A technical bid may not be considered for evaluation in any of the following cases:***

- The bidder failed to qualify in the eligibility and qualifying criteria of the tender.
- The technical bid was submitted in the wrong format; or
- The technical bid included details of costs of the services; or
- The EDM Fee/Bid Security Declaration is not received by the authority on or before the due date & time.
- The authority shall notify the bidders who have cleared eligibility and qualification criteria and would be eligible for opening of their financial bids.

**Opening and Evaluation of Financial Bids**

- As per the results obtained in each technical bid, the "tender evaluation committee" (TEC) will proceed with the technical evaluation report and choose to open the financial bid of qualified bidders.
- At the opening of financial bids, bidder's representatives who choose to attend will sign an attendance sheet. Financial bid of only those bidders will be opened who qualify and are declared as "technically qualified".
- The price bids of the technically qualified bidders will be opened by duly intimating the date and time of opening of the price bids. The bidders may remain present or depute its authorized representatives to witness the same.
- Method of evaluation: lowest price(L1) Bidder

**Chapter 10****Pre-contract Integrity pact**

This pre-contract agreement (hereinafter called the integrity pact) is made on .....*day of the month of* (year),

Between, on one hand, the president of India acting through Chairman, Central Ground Water Board, an subordinate office of the Department of Water Recourses, RD and GR, Ministry of Jal Shakti, Government of India (hereinafter called the buyer, which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns) of the first part and m/s.....*Represented* by *Shri*....., *Chief executive officer*(hereinafter called the bidder / seller, which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the second part;

Whereas, the buyer proposes to procure (*name of the stores/service/equipment/items*) and the bidder/seller is willing to offer/has offered for the stores/service; and

Whereas, the bidder is a *private company/public company/govt. Undertaking/ partnership/ registered export agency*, constituted in accordance with the relevant law in the matter and the buyer is Central Ground Water Board, an subordinate office of the Department of Water Recourses, RD and GR, Ministry of Jal Shakti, Government of India, performing its functions on behalf of the president of India;

Now therefore, to avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to :-

Enabling the buyer to obtain the desired said stores/service/equipment at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and

Enabling bidders to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the buyer will commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this integrity pact and agree as follows:

**1. Commitments of the buyer**

- 1.1 The buyer undertakes that no official of the buyer, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, Reward, favor or any material or immaterial benefit or any other advantage from the bidder, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.
- 1.2 The buyer will, during the pre-contract stage, treat all bidders alike, and will provide to all bidders the same information and will not provide any such information to any particular bidder which could afford an advantage to that particular bidder in comparison to other bidders.
- 1.3 All the officials of the buyer will report to the appropriate government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of

such a breach.

2. In case any such preceding misconduct on the part of such official(s) is reported by the bidder to the buyer with full and verifiable facts and the same is prima facie found to be correct by the buyer, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the buyer and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the buyer the proceedings under the contract would not be stalled.

3. **Commitments of the bidders**

The bidder commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following:-

3.1 The bidder will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favor, any materials or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the buyer, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.

3.2 The bidder further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favors, any material or immaterial benefit or other advantage, commission fees, brokerage or inducement to any official of the buyer or otherwise in procuring the contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the government for showing or forbearing to show favor or disfavor to any person in relation to the contract or any other contract with the government.

3.3 Bidders shall disclose the name and address of agents and representatives and Indian bidders shall disclose their foreign principals or associates.

3.4 Bidders shall disclose the payments to be made by them to agents/brokers or any other intermediary, in connection with this bid/contract.

3.5 The bidder further confirms and declares to the buyer that the bidder is the original manufacturer/integrator/authorized government sponsored export entity of the defense stores and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the buyer or any of its functionaries, whether officially or unofficially to the award of the contract to the bidder, nor has any amount been paid, promised or intended to be paid to any such individual firm or company in respect of any such intercession, facilitation or recommendation.

3.6 The bidder, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the buyer or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.

3.7 The bidder will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.

3.8 The bidder will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.

3.9 The bidder shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the buyer as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The bidder also undertakes to exercise due and adequate care lest any such information is divulged.

3.10 The bidder commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.

3.11 The bidder shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.

3.12 If the bidder or any employee of the bidder or any person acting on behalf of the bidder, either directly or indirectly, is a relative of any of the officers of the buyer, or alternatively if any relative of an officer of the buyer has financial interest/stake in the bidder's firm, the same shall be disclosed by the bidder at the time of filing of tender. The term 'relative' for this purpose would be as defined in section 6 of the companies' act 1956.

3.13 The bidder shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the buyer.

#### **4. Previous transgression**

4.1 The bidder declares that no previous transgression occurred in the last three years immediately before signing of this integrity pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any public sector enterprise in India or any government department in India that would justify bidder's exclusion from the tender process.

4.2 The bidder agrees that if it makes incorrect statement on this subject, bidder can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

#### **5. Earnest money (security deposit)**

5.1 While submitting the bid, the bidder shall provide the bid security declaration along with the technical bid.

#### **6. Sanctions for violations**

6.1 Any breach of the aforesaid provisions by the bidder or any one employed by it or acting on its behalf (whether with or without the knowledge of the bidder) shall entitle the buyer to take all or any one of the following actions, wherever required:-

- I. To immediately call off the pre contract negotiations without assigning any reason or giving any compensation to the bidder. However, the proceedings with the other bidder(s) would continue.
- II. The earnest money deposit (in pre-contract stage) and/or security deposit/performance bond (after the contract is signed) shall stand forfeited either fully or partially, as decided by the buyer and the buyer shall not be required to assign any reason therefore.
- III. To immediately cancel the contract, if already signed, without given any compensation to the bidder.



- IV. To recover all sums already paid by the buyer, and in case of an Indian bidder with interest thereon at 2% higher than the prevailing prime lending rate of state bank of India, while in case of a bidder from a country other than India with interest thereon at 2% higher than the labor. If any outstanding payment is due to the bidder from the buyer in connection with any other contract for any other stores, such outstanding payment could also be utilized to recover the aforesaid sum and interest.
- V. To encash the advance bank guarantee and performance bond/warranty bond, if furnished by the bidder, in order to recover the payments, already made by the buyer, along with interest.
- VI. To cancel all or any other contracts with the bidder. The bidder shall be liable to pay compensation for any loss or damage to the buyer resulting from such cancellation/rescission and the buyer shall be entitled to deduct the amount so payable from the money(s) due to the bidder.
- VII. To debar the bidder from participating in future bidding processes of the government of India for a minimum period of five years, which may be further extended at the discretion of the buyer.
- VIII. To recover all sums paid in violation of this pact by bidder(s) to any middleman or agent or broker with a view to securing the contract.
- IX. In cases where irrevocable letters of credit have been received in respect of any contract signed by the buyer with the bidder, the same shall not be opened.
- X. Forfeiture of performance bond in case of a decision by the buyer to forfeit the same without assigning any reason for imposing sanction for violation of this pact.

6.2 The buyer will be entitled to take all or any of the actions mentioned at Para 6.1(i) to (x) of this pact also on the commission by the bidder or any one employed by it or acting on its behalf (whether with or without the knowledge of the bidder), of an offence as defined in chapter-ix of the Indian penal code, 1860 or prevention of corruption act, 1988 or any other statute enacted for prevention of corruption.

6.3 The decision of the buyer to the effect that a breach of the provisions of this pact has been committed by the bidder shall be final and conclusive on the bidder. However, the bidder can approach the independent monitor(s) appointed for the purposes of this pact.

## 7. **Fall clause**

The bidder undertakes that it has not supplied/is not supplying similar service/product/systems or subsystems at a price lower than that offered in the present bid in respect of any other ministry/department of the government of India or PSU and if it is found at any stage that similar product/systems or sub systems was supplied by the bidder to any other ministry /department of the Government of India or a PSU at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the bidder to the buyer, if the contract has already been concluded.

## 8. **Independent external monitor**

8.1 The buyer has appointed an independent external monitor (hereinafter referred to as monitor) for this pact in consultation with the central vigilance commission. The name & address of the monitor is as follows:-

.....

.....

8.2 The task of the monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this pact.

8.3 The monitors shall not be subject to instructions by the representatives of parties and perform their functions neutrally and independently.

8.4 Both the parties accept that the monitors have the right to access all the documents relating to the project/procurement, including minutes of meetings.

8.5 As soon as the monitors notices, or has reasons to believe, a violation of the pact, he will so inform the authority designated by the buyer.

8.6 The bidder(s) accept that the monitor has the right to access without restriction to all project documentation of the buyer including that provided by the bidder. The bidder will also grant the monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to sub bidders. The monitor shall be under contractual obligation to treat the information and documents of the bidder/sub bidder(s) with confidentiality.

8.7 The buyer will provide to the monitor sufficient information about all meetings among the parties related to the project provided such meetings could have an impact on the contractual relations between the parties. The parties will offer to the monitor the option to participate in such meetings.

8.8 The monitor will submit a written report to the ....., Central Ground Water Board, within 8 to 10 weeks from the date of reference or intimation to him by the buyer/bidder and, should the occasion arise, submit proposals for correcting problematic situations.

**9. Facilitation of investigation**

In case of any allegation of violation of any provisions of this pact or payment of commission, the buyer or its agencies shall be entitled to examine all the documents including the books of accounts of the bidder and the bidder shall provide necessary information and documents in English and shall extend all possible held for the purpose of such examination.

**10. Law and place of jurisdiction**

This pact is subject to Indian law. The place of performance and jurisdiction is the seat of the buyer.

**11. Other legal actions**

The actions stipulated in this integrity pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

**12. Validity**

12.1 The validity of this integrity pact shall be from date of its signing and may extend upto 5 years or the complete execution of the contract to the satisfaction of both the buyer and the bidder/seller, whichever is later. In case bidder is unsuccessful, this integrity pact shall expire after six months from the date of the signing of the contract.

12.2 Should one or several provisions of this pact turn out to be invalid, the remainder of this pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions.

13. The parties hereby sign this integrity pact on.....

Buyer  
Name of the Officer  
designation  
Central ground water board

Bidder  
Chief executive officer

Witness:

witness:

1. \_\_\_\_\_

1. \_\_\_\_\_

2. \_\_\_\_\_ 2. \_\_\_\_\_ .....

\*provisions of these clauses would need to be amended / deleted in line with the policy of the buyer in regard to involvement of Indian agents of foreign supplier.

**Chapter-11**

**Forms to be Submitted**

***Form tech - 1***

**Technical bid**

[Location, date]:

To,

...../ head of the department

.....

Central Ground Water Board, Bhujal Bhawan, NH-IV, NIT-4 Fariadabad-121001.

.

Dear sir/madam:

We, the undersigned, offer to provide the consulting services for “.....” in accordance with your request for proposal dated [insert date]. We are hereby submitting our bid, which includes this technical bid, and a financial bid sealed under a separate cover.

We are submitting our bid in individual capacity. We hereby declare that all the information and statements made in this bid are true and accept that any misinterpretation contained in it may lead to our disqualification.

If negotiations are held during the period of validity of the bid, i.e., before the date indicated in tender, we undertake to negotiate on the basis of the proposed personnel. Our bid is binding upon us and subject to the modifications resulting from contract negotiations.

We undertake, if our bid is accepted, to initiate the consulting services related to the assignment not later than the date indicated (please indicate date).

We understand you are not bound to accept any bid you receive. We remain,

Yours sincerely,

Authorized signature [in full and initials]: name and title of signatory:

Name of firm: address:

***Form Tech - 2***

Bidder’s organization and experience

***Form Tech-2a: BIDDER ORGANIZATION***

[provide here a brief (maximum 10 pages) description of the background and organization of the bidder]

Name of bidder:	
Address of registered office of bidder:	
Year of establishment:	
Contact person with contact details:	
Annual turnover in last three years (in lakh's) Financial year 2021-22: Financial year 2022-23: Financial year 2023-24: Average annual turnover for above three financial years: *audited statements to be enclosed	
Audited net worth of agency as on 31.03.2024 (positive/ negative):	
Experience in similar assignments: Number of years: Total assignments: Assignment completed in last 5years: Similar assignments in last 5years:	
Any award or felicitation received by your agency:	
Any other relevant details:	

**Form Tech-2b: Bidder's Experience**

Assignment name:	Country:
Location within country:	Site professional provided by your firm/entity(profiles):
Name of firm/entity:	No. Of site professionals:
Address:	No. Of site professionals-months: duration of assignment:
Start date completion date (month/year) (month /year)	Value of services (in Indian rupee):
Name of associated consultants, if any:	No. Of months of professionals provided by associated consultants:
Name of senior staff (project director/coordinator, team leader) involved and functions performed:	
Narrative description of project:	
Description of actual services provided by your site professionals:	

\* Completion certificate from employer regarding experience should be furnished  
firm's Name:  
Signature of authorized representative:

***Form Tech - 3***

Description of approach, methodology and work plan for performing the assignment

**Approach and methodology:** in this chapter, bidder should explain its understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. Bidder should highlight the problems being addressed and their importance, and explain the technical approach it would adopt to address those. Bidder should also explain the methodologies the bidder proposes to adopt and highlight the compatibility of those methodologies with the proposed approach.

**Work plan:** in this chapter, bidder should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the authority), and delivery dates of the deliverables. The proposed work plan should be consistent with the technical approach and methodology, showing an understanding of the scope of work and technical specification and ability to translate them into a feasible working plan. A list of the final deliverables should be included here. The work plan should be consistent with the work schedule.

**Organization and personnel:** in this chapter bidder should propose the structure and composition of its team. Bidder should list the main disciplines of the assignment, the key expert responsible, and proposed technical and support personnel. The manpower requirement given in the tender is an indicative minimum requirement. The bidder should assess the specific and realistic manpower with reference to specific project package and it should be consistent with the proposed work schedule.

***Form tech – 4***

Team composition, task assignments

The bidder should provide a list of primary and backup personnel including name, project position, and level of education, years of relevant experience and years employed by the bidder. In addition, the curricula vitae of key personnel should be provided where indicated. The requested CVs will be incorporated in the technical evaluation and selection process. The following personnel and backups should be listed (additional positions may be added by the bidder):

Project manager(CV)

Operations manager(CV)

Instrument operators, if applicable.

\*(if not applicable, the bidder should state the responsibilities of the pilots and ground personnel with respect to instrument operation prior to, during and after each flight).

Field processors

Data compilation manager(CV)

Data processors

Interpretation manager(CV)

Interpreters

Officer of the bidder, together with the person responsible for HSE in the field.

During the course of the survey, substitute personnel not listed in the proposal may be required. If so, the bidder must submit their qualifications to CGWB prior to commencing work on the project. Delays involve in the appointment of substitute will be the sole responsibility of the Contractor.

***Experts:***

S.no.	Name of the Expert	Educational Qualification	Area of Expertise	Years of Experience	Task Assigned
1					
2					
3					

***Team members (Senior & Junior level professionals):***

S.no.	Name of the team Member	Educational Qualification	Area of Expertise	Years of experience	Task assigned
1					
2					
3					

In addition, all nominated survey pilots should be named with their qualifications, including total hours operating the proposed Helicopter and total hours operating an Helicopter on a geophysical survey.

***Form tech – 5***

Curriculum vitae (CV) for proposed experts

(Summary of CV: the information in the summary shall be precise and accurate. The information in the summary will have bearing on the evaluation of the cv)

Proposed position [only one candidate shall be nominated for each position]:

Name of firm [insert name of firm proposing the expert]:

Name of expert [insert full name]:

Details of ID Card issued by Government (Copy to be attached):

Date of birth: citizenship:

Education [indicate college/university and other specialized education of expert, giving names of institutions, degrees obtained, and dates of obtainment]:

Membership of professional associations:

Other training [indicate significant training since degrees under 5 - education were obtained]:

Languages [for each language indicate proficiency: good, fair, or poor in speaking, reading, and writing]:

Employment record [starting with present position, list in reversed order, every employment held. List all positions held by staff member since graduation, giving dates, names of employing organizations, title of positions held and location of assignments. For experience period of specific assignment must be clearly mentioned, also give employer references, where appropriate:

From [year]: to [year]:

Employer:

Positions held:

List all tasks to be performed under this project and the corresponding experience of the expert

Certification:

I, the undersigned, certify to the best of my knowledge and belief that:

This cv correctly describes my qualifications and my experience.

I am not employed by the TSQA/QC agency.

I am/i am not in regular full-time employment with the bidder.

In the absence of medical incapacity, I will undertake this assignment for the duration provided team mobilization takes place within the validity of this bid or any agreed extension thereof.

I am willing to work on the project and I will be available for the entire duration of the project assignment.

I, the undersigned, certify that to the best of my knowledge and belief, this bio-data correctly describes me my qualifications and my experience I am committed to undertaking the assignment within the validity of bid.

I understand that any willful misstatement described herein may lead to my disqualification or dismissal if engaged.

Date: [day/month/year]

[Signature of expert or authorized representative of the firm]

Full name of authorized representative:



**Chapter-12****ROLE of Contractor (PIA)and CGWB****ROLE of the Contractor:**

- Contractor will undertake the following activities as under
- CONTRACTOR shall exercise all professional care, skill and diligence in the performance of the services under the agreement and shall carry out all its responsibilities in accordance with recognize professional standards.
- CONTRACTOR shall modify if needed in consultation and agreement with CGWB the quantum of work and methodology essentially required for obtaining specific sub-surface information for the objective of the Project.
- CONTRACTOR shall cooperate and shall submit hard copy & digital soft copy of all the deliverables mentioned in Tender Document.
- CONTRACTOR shall carry out the requisite services for successful completion and commissioning of the Project.
- The quality control assurance as per best Industrial practice and acceptable to CGWB shall be ensured by the CONTRACTOR in all respects of complete items of work as may be applicable. The requisite supervisory staff and subject matter experts shall provided at the site of work by the CONTRACTOR for effective supervision and quality assurance work.
- The CONTRACTOR will involve scientists from the CGWB at all stages of data acquisition , processing and interpretation for both ground and heli-borne surveys.
- CONTRACTOR shall be responsible for taking necessary Permission/NOCs required for the execution of the Project from the Central/State/Local authorities.
- CONTRACTOR will ensure that there is no time and cost overruns, subject to necessary clearances/approvals from various Central and State Govt agencies and also ensure the quality of the work carried out.
- CONTRACTOR shall ensure compliances to due procedures, any other extant rules, orders, conformity in the implementation of all the works pertaining to the project.
- CONTRACTOR shall be responsible for timely completion of all the activities as per the time schedule mentioned in the Tender Document.
- CONTRACTOR shall be liable to CGWB for performance of the work including performance of services and of CONTRACTOR obligations under this agreement and shall carry out requisite services for successful completion and commissioning of the project.
- CONTRACTOR would be responsible for adhering to safety measures during execution of the project including insurance coverage against any risk involved in this project. CGWB would not be liable for any damage, loss, compensation due to accidents, injuries/deaths to deployed personnel or the third party personnel etc in the execution of the project.
- CONTRACTOR shall be liable to CGWB for performance of the work including performance of services and of CONTRACTOR obligations under this agreement and shall carry out requisite services for successful completion and commissioning of the project.
- Contractor shall be liable to CGWB for confidentiality of acquired data, should handover it to CGWB in secure condition and acquired be deleted from the system/devices of the field personnel provided by the supplier to ensure that no data is transmitted elsewhere.
- Contractor should ensure mandatorily that no raw, compiled, processed and interpreted data, products and deliverables leave India. Consequently, the contractor must be prepared to undertake all work within the country, either at the operational bases and/or at CGWB office situated at Jaipur /Ahmadabad or at National Data Center of CGWB situated at CHQ,

Faridabad (Final Center will be finalized after discussion with the PIA). The contractor must establish a processing and interpretation centre at the CGWB premises situated at Jaipur /Ahmadabad or at National Data Center of CGWB situated at CHQ, Faridabad (Final Center will be finalized after discussion with the PIA). The TS-QC team will have secure access to the network and server with data storage. Each contractor will be responsible for arranging its own hardware and software necessary for data compilation, internal QC, processing, modelling and, interpretation, printing and map plotting.

- CONTRACTOR shall provide the output of the heli-borne survey in form of
  - Pin pointed sites for artificial recharge along with inferred lithology up to depth of 300 m in Alluvial area and 200 in hard rock area for each recommended site
  - Paleo channel map along with dimensions of the study area and its linkages with the aquifer system
  - 3D Geophysical model of the area in reproducible vector format
  - Geophysical Thematic maps at horizontal and vertical planes. Aquifer Geometry in 2D and 3D in reproducible vector formats depicting de-saturated/saturated and fresh/saline zones.
  - Submission of the entire raw and processed dataset generated in the study area in external HDD.
  - Hands on training of CGWB scientists in data acquisition, processing, and interpretation at Jaipur or place of mutual consent between CGWB and Contractor, as per agreed training module and timeline.
  - Inception Report (within 1 month of signing of MoA)
  - Monthly Progress Reports
  - Draft final report
  - Final Report of the study state-wise giving details for each district (10 Hard Copies to CHQ Faridabad and 2 copies each to concerned Regional offices of CGWB) including all outputs and deliverables upon completion of the study.

#### **ROLE OF CGWB:**

- The Central Ground Water Board will cooperate with the CONTRACTOR throughout the work for smooth execution of project. CGWB shall provide/share the following data / inputs for study areas:
  - The location details of the project area along with a base map showing location of bore well, observation wells, VES locations, Wells with E logs, lithologs and other existing data in GIS platform.
  - A Baseline Report giving hydro-geological information including water levels and water quality data, data gaps and other relevant details, like aquifer parameters, and surface geophysical data.
  - The data generated by CGWB within the project period through exploration, monitoring and other activities shall be made available to the CONTRACTOR to complete the project task.
  - Report/data on Ground water recharge and draft estimation and water quality data from the departmental ground water regime monitoring for correlation with the geo-electrical characteristics.
  - CGWB will ensure providing timely input and support such as existing data (geophysical, hydrogeological, water level etc.) and deep drilling as well as active participation on scientific discussion as and when required.
- CGWB shall not be liable for any legal and financial obligation to contractor/subcontractor or any agency hired by CONTRACTOR for execution of the work under this agreement.

- CGWB will provide the space to the contractor for establishing a processing and interpretation centre at the CGWB premises situated at Jaipur/Ahmedabad or at National Data Center of CGWB situated at CHQ, Faridabad (Final Center will be finalized after discussion with the PIA)
- The concerned Regional Directors of CGWB will monitor the progress of work and submit the status report in the first week of every month to CHQ.
- CGWB with the help of DoWR, RD&GR will make efforts to expedite the formalities in obtaining permission for flying of the helicopter for Heli-borne survey and its regional offices will help CONTRACTOR in obtaining support from local administrations in the respective study areas.
- All data shared by CGWB will be subject to the data dissemination policies of the Government of India.
- No other use of CGWB data will be made by CONTRACTOR except for the purpose of meeting the objectives of the project.
- Concerned Regional Directors of CGWB will designate a Nodal Officer for coordination of work in the particular state.
- The concerned Regional Director, CGWB will monitor the progress of work separately in respect of their Region and as part of Working Group and Nodal Officer will liaison with CONTRACTOR for timely completion of work.
- The concerned Regional Director, CGWB will issue a completion certificate mentioning the date of completion to CONTRACTOR upon completion of the work in all respect and submission of Outputs and Deliverables with respect to his jurisdiction. Final Completion Certificate of the entire project shall be issued by the concerned Member.

**ANNEXURE- I*****Bid security declaration***

Tender no.:.....

Date:.....

To

(Insert complete name and address of the purchaser)

I/WE.

The undersigned, declare that:

I/WE understand that, according to your conditions, bids must be supported by a bid security declaration.

I/WE accept that I/we may be disqualified from bidding for any contract with you for a period of one year from the date of notification if I am / we are in a breach of any obligation under the bid conditions, because I/we

Have withdrawn / modified / amended, impairs or derogates from the tender, my/ our bid during the period of bid validity specified in the form of bid;

or

Having been notified of the acceptance of our bid by the purchaser during the period of bid validity (i) fail or reuse to execute the contract, if required, or (ii) fail or reuse to furnish the performance security, in accordance with the instructions to bidders.

I/we understand this bid security declaration shall cease to be valid if I am / we are not the successful bidder, upon the earlier of (i) the receipt of your notification of the name of successful bidder; or (ii) thirty days after the expiration of the validity of my / our bid.

Signed:

(Insert signature of person

Whose name and capacity are shown)

In the capacity of

(Insert legal capacity of person

Signing the bid security declaration)

Name:

(Insert complete name of person

Signing the bid security declaration)

Duly authorized to sign the bid for an

On behalf of (Insert Complete Name of Bidder)

Dated on .....day of .....

(Insert date of signing)

Corporate seal (where appropriate)

(Note: in case of joint venture, the bid security declaration must be in the name of all partners to the joint venture that submits the bid)

*[Notes: 1) the above declaration shall be signed and sealed by the company secretary or any other officer of the Organization not below the rank of general manager or equivalent and be duly affirmed before a notary public. 2) to be executed by the Organization on non-judicial stamp paper / e-stamp paper worth Rs. 200/- or as applicable from time to time as per the stamp act in force in the state where the document is executed.]*

**ANNEXURE- II*****Bank guarantee Performa for furnishing performance security***

In consideration for the president of India (hereinafter called “the government” having agreed to contractor(s)” from the demand, under the terms and conditions of an agreement dated.....Madebetween.....and.....

..... Of performance security for the due fulfillment of the said contractor(s) of the terms and conditions contained in the said agreement, on production of bank guarantee for Rs.....(Rupees.....

..... (indicated the name of the bank) bank”) at the request of contractor(s) do here by undertake To pay to the government an amount not exceeding...against any Loss or damage caused to or suffered would be caused to or suffered by the government by reason of any breach of the said contractor(s) of any of the terms or conditions contained in the said agreement.

We..... do hereby undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the government stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the government by reason of breach by the said contractor(s) of any of the terms or conditions contained in the said agreement or by reason of the contractor(s)’s failure to perform the said agreement. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding.....

We undertake to pay the government any money so demanded notwithstanding any dispute or disputes raised by the contractor(s)/supplier(s) in any suit or proceeding pending before any court or tribunal relating thereto liability under this present being absolute and unequivocal.

The payment so made by us under this bond shall be a valid discharge of our liability for payment hereunder and

the contractor(s)/ supplier(s) shall have no claim against us for making such payment.

We,... further agree that the guarantee herein contained shall remain in

Full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the government under or by virtue of the said agreement have been fully paid and its claim satisfied or discharged or till.....that the terms and conditions of the said agreement have been fully and properly carried out by the said agreement have been fully and properly carried out by the said contractor(s) and accordingly discharges this guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before the guarantee there after.

We, further agree with the government that the government Shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the government against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said contractor(s) or for any forbearance, act or omission on the part of the government or any indulgence by the government to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

Notwithstanding anything contained herein above our liability under the guarantee is restricted to ₹..... And shall remain in force until\_\_\_.

Unless acclaim or suit under this guarantee is filled with as on or before\_\_\_.

All our rights under the guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities therein.

This guarantee will not be discharged due to the change in the constitution of the bank or the contractor (s)/supplier(s).

We,.....lastly undertake not to revoke this guarantee during its currency except with the previous consent of the government in writing.

Dated the        date of 202

For .....

(Indicate the name of bank)

Signature.....

Name of the officer.....

(In block capitals)

Designation of

Code no.....

Name of the bank and branch.....

Important: the bank guarantee details required be sent through digitally signed secured SFMS mode mails by the banker to our banker in order to confirm the issuance of the same. Bank Details for the same is as follows:-

Name:- Drawing & Disbursing Officer, Central Ground Water Board, Bhujal Bhawan, NH-IV, Faridabad-121001

Account No.- 30104397868

Bank- State Bank of India Branch- Faridabad, Main Branch, Neelam Chowk, Faridabad, Haryana

IFSC Code- SBIN0000734

**Annexure- III*****Undertaking acceptance of terms and conditions of tender***

I/we undertake that all the terms and conditions as laid in the attached pages and anywhere in the tender and its subsequent corrigendum if any, are accepted by the company and will abide by them.

I/we further undertake that the information given in this tender are true and correct in all respects and we hold responsibility for the same.

I/we shall be responsible for rejection/cancellation of contract if the services are not found up to the mark and for civil/criminal proceedings if the material supplied is found sub-standard or not accordance with the quality of services.

Company seal

Authorized signatory of the company

Place: \_\_\_\_\_ date: \_

**Annexure- IV*****Format for the Checklist***

S. No.	ITEM	Please mark		PageNo.
		Yes	No	
1.	Techno-commercial bid	Yes	No	
2.	EMD Fee/Bid security declaration	Yes	No	
3.	Integrity pact. The integrity pact should be signed and stamped by the contractor where applicable, leaving blank the segments to be Completed by the CGWB.	Yes	No	
4.	MSE valid registration certificate for availing Exemption for submission of bid security declaration	Yes	No	
5.	Commercial terms & condition compliance sheet	Yes	No	
6.	Undertakings for submission of performance security Deposit as per NIT terms(see undertaking below)	Yes	No	
7.	Undertakings to accept all terms and conditions of NIT(see undertaking below)	Yes	No	
8.	Solvency certificate	Yes	No	
9.	Brochure/literature	Yes	No	
10	Price/Financial Bid	Yes	No	NA
11.	Any other documents	Yes	No	

**Undertaking**

I do hereby agree to submit the performance security as per the given Performa (annexure-ii) and accept all the terms and conditions mentioned in the notice inviting tender (NIT).

Company seal

Authorized signatory of the company place:\_ date: \_



**Annexure- V****BIDDER'S GENERAL INFORMATION**

1	Bidder Name	
2	Status of Firm	Proprietorship Firm/Partnership firm/ Limited/Others If Others Specify: _____ [Enclose certificate of Registration]
3	Name of Proprietor/Partners/Directors of the firm/company	
4	Number of Years in Operation	
5	Address of Registered Office: * In case of a partnership firm, enclose a letter mentioning the current address of the firm and the full names and current addresses of all the partners of the firm.	
6	Bidder's address where order/contract is to be placed	
7	Address from where services are to be dispatched/provided along with GST no. (In case supply of Goods/Services are from multiple locations, addresses and GST no. of all Such locations are to be provided).	
8	Telephone Number of address where order is to be placed	
9	E-mail address	
10	Website	
11	Fax Number:	
12	ISO Certification, if any	If yes, please furnish details
13	Bid Currency	
14	Banker's Name	
15	Branch	
16	Bank account number	
17	PAN No.	[Enclose copy of PAN Card]
18	GST No. (refers l.no. 8 above)	[Enclose copy of GST Certificate]
19	EPF Registration No.	[Enclose copy of EPF Registration Certificate]
20	ESI code No.	[Enclose copy of relevant document]
21	Whether Micro/Small/Medium Enterprise	(Bidder to submit documents as specified in ITB)
22	Type of Entity	Corporate/ Non-Corporate (As per CGST/SGST/UTGST Act). (In case of Non-Corporate Entity, bidder will submit documentary Evidence for same).
23	Whether Bidder is Startups or not	Yes/No

Place:

Signature of Authorized Signatory of

Bidder:

Date:

Name:

Designation:

**ANNEXURE- VI****FORM OF BANKER'S SOLVENCY CERTIFICATE FROM A SCHEDULED BANK**

This is to certify that to the best of our knowledge and information that M/s/Sri [name of applicant]....., having marginally noted address [address of applicant]....., a customer of our bank are/is respectable and can be treated as good for any engagement up to a limit of..... [amount in words]\*\* (Rupees ₹ [amount in figures]).\*\*

This certificate is issued without any guarantee or responsibility on the bank or any of the officers.

Signature

Name of the bank

**Note:**

1. Bankers certificate should be on the letterhead of the bank, sealed in a cover addressed to the tendering authority.
2. In the case of a partnership firm, the certificate should include the names of all partners as recorded with the bank.

**Annexure-VII**

**Deleted**

**Annexure-VIII (A)*****Declaration of local content by local supplier***

Subject: public procurement (preference to make in India)

References:

Preference to make in India will be as per the public procurement (preference to make in India), order 2017, available in the following links:-

<https://dipp.gov.in/public-procurements>  
[http://dipp.nic.in/sites/default/files/publicProcurement\\_MakeinIndia\\_15June2017.pdf](http://dipp.nic.in/sites/default/files/publicProcurement_MakeinIndia_15June2017.pdf)  
[http://dipp.nic.in/sites/default/files/Revised-PPP-MII-Order-2017\\_28052018.pdf](http://dipp.nic.in/sites/default/files/Revised-PPP-MII-Order-2017_28052018.pdf)  
[https://dipp.gov.in/sites/default/files/PPP-MII%20Order%20dt%2029th%20May%2019\\_0.pdf](https://dipp.gov.in/sites/default/files/PPP-MII%20Order%20dt%2029th%20May%2019_0.pdf)  
<https://dipp.gov.in/sites/default/files/PPP%20MII%20Order%20dated%204th%20June%202020.pdf>

We hereby declare with reference to above subject and references that M/s.....tick whichever is applicable as below)

‘Class-I local supplier’ meeting the requirement of minimum local content equal to 50% (fifty percent) or more defined in the above government notification for the goods and services

(or)

“Class-II local supplier” meeting the requirement of local content 20% to less than 50% (fifty percent) defined in the above government notification for the goods and services

(or)

Non-local supplier (if not belonging to Class-I& Class-II) please mention the details against the following:

GEM bid no. .... dated .....

Type of supplier (class-i/class-ii) .....

Product/service:

Project:.....

**Details of location at which local value addition will be made is as follows:**

We also understand that the false declarations will be in breach of the code of integrity under rule 175(1)(i)(h) of the general financial rules for which a bidder or its successors can be debarred for up to two years as per rule 151(iii) of the general financial rules along with such other actions as may be permissible under law.

Authorized signature m/s .....

(Signature and seal)

Place: .....

Date: .....

**Annexure-VIII (B)****Format for declaring the break-up of the percentage of the local content in the project cost as per quoted Price bid**

<b>Declaration of Local Content and Foreign Content on the Total Project Cost</b>				
<b>Sl. No.</b>	<b>Component of the Project</b>	<b>Declared Resources as per Technical Bid</b>	<b>Local Content*</b>	<b>Foreign Content*</b>
			A	B
1	Helicopter with Regn. Number			
2	Pilot in Charge with Name			
3	Pilot with Name			
4	AME with Name			
5	Fuel			
6	Project Manager with Name			
7	Operation Manager with Name			
8	Geophysical Equipment with Model			
9	Instrument Operator with Name			
10	Field Processors with Name			
11	Data Compilation Manager with Name			
12	Data Processors with Name			
13	Interpretation manager with Name			
14	Interpreters with Name			
15	Safety Officer with Name			
16	QA-QC team (Geophysicists) with Name			
17	Other Resources if any maybe Indicated in detail			

**Note: \*Local and foreign component should be in terms of percentage of total project cost.**

**\*\*Total of columns 'A' and 'B' should be 100.**

**NB:-**

1. Non submission of the information as per Annexure-VII, VIII and IX, the Technical bid will be treated as incomplete and the bidder will not get any Make in India purchase preference for this tender.
2. Incomplete information submitted by the bidders with the technical bid against the Annexure-VII, VIII and IX, will be treated as non-compliance of the tender terms & Conditions and the bidder will not get any Make in India purchase preference for this tender.

**Annexure-VIII (C)**

Certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

Tender Reference No.: GeM Bid No.....dated .....

This is to certify that I personally checked all the data provided by the firm to claim the Local Content under

Make In India clause and certify that the company/bidder is a Class I / Class II supplier and their service is containing % Local Content.

Signature : Name:

Place and Date: Official Seal

---

**Annexure- IX**

***Draft memorandum of agreement (MOA)***

Draft Memorandum of agreement

This memorandum of agreement (the “contract”) is made at Faridabad on the \_\_\_\_ day of \_2024.

By and between

The president of India acting through, **The Chairman, CGWB**, Department of Water Resources, RD & GR, Ministry of Jal Shakti, Government of India having its office located at CGWB, Bhujal Bhawan, NH-IV, Faridabad, HR-121001 (hereinafter referred to as “**client**”, which terms or expression shall unless excluded by or repugnant to the subject or context shall mean and include its successor(s)-in-office, administrators or permitted assignees) of the **first part**;

And

M/s.\_\_\_\_ (lead partner of the consortium),  
 (Address)\_\_\_\_ of PIA representing its consortium partner  
 \_\_\_\_\_(Hereinafter called “**project implementation agency (PIA)**” which expression shall, unless repugnant to the context, be deemed to include its successors and assigns) of the **second part**;

Whereas the client requires the services for conducting the “Heliborne magnetic and time-domain electromagnetic geophysical surveys” in parts of .....States of India, as defined in **appendix- i**, and invited bids from eligible bidders vide its tender no. \_\_\_\_\_Dated\_.

Whereas in response to the aforesaid tender, the PIA has submitted its bid proposal and the same was selected by CGWB for implementing the Project over area\_\_\_\_, as per the terms of reference mentioned at appendix- ii, and agreed to execute the contract herein.

Whereas PIA has the required number of Helicopters, geophysical equipment, personnel, experience and access to the know-how to provide the services required by the client, as mentioned in **appendix - ii**;

"PIA" and "client" may hereinafter collectively be referred to as "parties" and separately as "party".

Now, therefore, in consideration of the above matters and the representations, warranties, and covenants contained in this contract, both parties intending to be bound legally agree as follows:

A	General provisions		
1	General	1.1	The division of this contract into paragraphs or clauses and the Headings is for convenience of reference only, and shall not be used in interpreting the contract.
		1.2	References to the word “include” or “including” shall be Construed without limitation
2	Definitions	2.1	Unless the context otherwise requires, the following terms, Whenever used in this contract, have the following meanings:

		(a)	“applicable law” means the laws and any other instruments having The force of law in the client’s country, India.
		(b)	“client” means the agency that signs the contract for the services With the selected PIA.
		(c)	“PIA” means a legally-established firm (inclusive of the lead partner and the consortium partners) or entity selected by the client to Provide the services under the signed contract.
		(d)	“Contract” means the legally binding written agreement signed between the client and the PIA and which includes all the attached Documents.
		(e)	“Day” means a working day unless indicated otherwise.
		(f)	“effective date” means the date on which this contract comes into Force.
		(g)	“Services” means the work to be performed by the PIA pursuant to this contract, as described in appendix – II hereto.
3	Addresses of the parties	3.1	Representative of client: The Chairman Central Ground Water Board, Bhujal Bhawan, NH-IV, NIT-IV Faridabad-Hr (India) - 121001 (India) Tel/fax: ..... E-mail : .....
		3.2	PIA: Consortium of 1. M/s (lead PIA) Address----- Contacts----- M/s..... Address..... Contacts..... And M/s..... Address..... Contacts.....
	Communications		Any communication required or permitted to be given or made pursuant to this contract shall be in writing in the language specified in clause 7. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the party to whom the communication is addressed, or when sent to such party at the address specified at clause-3. Any change in the address should be communicated to the other party. All correspondence will be made only with the lead partner of the consortium i.e. M/s. XXXXXXXXXXXXX.
5	Relationship between the parties		Nothing contained herein shall be construed as establishing a relationship of master and servant or of principal and agent as between the client and the PIA. The PIA, subject to this contract, has complete charge of the experts and sub-PIAs, if any, performing the services and shall be fully responsible for the services performed by them or on their behalf hereunder.
6	Law governing contract		This contract, its meaning and interpretation, and the relation between the parties shall be governed by the laws of the republic



			of India.
7	Language		This contract has been executed in the English language, which Shall be the binding and controlling language for all matters relating to the meaning or interpretation of this contract.
8	Headings		The headings shall not limit, alter or affect the meaning of this Contract.
9	Location		The services shall be performed at such locations as are specified in APPENDIX – I hereto and, where the location of a particular task is not so specified, at such locations, whether in the client's Country or elsewhere, as the client may approve.
10	Authority of Member in charge		The consortium members hereby authorize the representative of the lead partner specified at clause 3.2, to act on their behalf in exercising all the PIAs rights and obligations towards the client Under this contract, including without limitation the receiving of instructions and payments from the client.
11	Authorized representatives		Any action required or permitted to be taken, and any document required or permitted to be executed under this contract by the client or the PIA may be taken or executed by the officials Specified in the clause 3.0
12	Corrupt and fraudulent Practices		The client requires compliance with its policy in regard to corrupt and fraudulent practices as set forth in pre-contract Integrity pact APPENDIX – III.
13	Effectiveness of Contract		This contract shall come into force and effect on the date (the “Effective date”) of the signing of the agreement.
14	Termination of contract for Failure to become effective		If the PIA fails to be into carry out the services within twenty (20) days of signing of the contract, the client shall have the right to terminate the contract and the PIA shall not have any claim against the client. The PIA has to submit a proof that the work is initiated within twenty (20) days of signing of the contract. Initiation of the services may include, but is not limited to, the following: communication with TS-QC consultant regarding draft survey/flight plan, draft HSE documents, time schedule, start of importation procedures, customs and permitting process, and other project documents. Copies of any one such document forwarded to the client, within twenty (20) days of Contract signature, constitute proof.
15	Expiration of Contract		Unless terminated earlier pursuant to clause 20 hereof, this Contract shall expire by *****. This expiry date can be Extended depending on the requirement with mutual agreement.
16	Entire agreement		This contract contains all covenants, stipulations and provisions agreed by the parties. No agent or representative of either party has authority to make, and the parties shall not be bound by or be liable for, any statement, representation, promise or agreement Not set forth herein.
17	Modifications or variations	17.1	Any modification or variation of the terms and conditions of this contract, including any modification or variation of the scope of the services, may only be made by written agreement between the parties. However, each party shall give due consideration to any proposals for modification or variation made by the other party.
		17.2	In cases of substantial modifications or variations, the prior written consent of the government of India or its declared representative is required.
		17.3	After award of contract, the PIA can change/replace any declared

			resources (similar/equivalent or higher version) provided in the technical bid with prior approval from the competent authority of CGWB. No other changes will be admissible.
18	Force majeure	18.1	For the purposes of this contract, “force majeure” means an event which is beyond the reasonable control of a party, is not foreseeable, is unavoidable, and makes a party’s performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible under the circumstances, and subject to those requirements, includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood or other adverse weather conditions, strikes, lockouts or other industrial action confiscation or any other action like lockdown, international travel restrictions imposed by government due to pandemic situation.
		18.2	Force majeure shall not include (i) any event which is caused by the negligence or intentional action of a party or such party’s experts, sub-PIAs or agents or employees, nor (ii) any event which a diligent party could reasonably have been expected to both take into account at the time of the conclusion of this contract, and avoid or overcome in the carrying out of its obligations hereunder.
		18.3	Force majeure shall not include insufficiency of funds or failure to make any payment required hereunder.
		18.4	The failure of a party to fulfill any of its obligations hereunder shall not be considered to be a breach of, or default under, this contract insofar as such inability arises from an event of force majeure, provided that the party affected by such an event has taken all reasonable precautions, due care and reasonable alternative measures, all with the objective of carrying out the terms and conditions of this contract.
		18.5	A party affected by an event of force majeure shall continue to perform its obligations under the contract as far as is reasonably practical, and shall take all reasonable measures to minimize the consequences of any event of force majeure.
		18.6	A party affected by an event of force majeure shall notify the other party of such event as soon as possible, and in any case not later than fourteen (14) calendar days following the occurrence of such event, providing evidence of the nature and cause of such event, and shall similarly give written notice of the restoration of normal conditions as soon as possible
		18.7	Any period within which a party shall, pursuant to this contract, complete any action or task, shall be extended for a period equal to the time during which such party was unable to perform such action as a result of force majeure.
		18.8	In the case of disagreement between the parties as to the Existence or extent of force majeure, the matter shall be settled according to clause 22.
19	Suspension		The client may, by written notice of suspension to the PIA, suspend all payments to the PIA hereunder, if the PIA fails to perform any of its obligations under this contract, including the carrying out of the services, provided that such notice of suspension (i) shall specify the nature of the failure, and (ii) shall request the PIA to remedy such failure within a period not

			exceeding thirty (30) calendar days after receipt by the PIA of such notice of suspension.
20	Termination of the contract		This contract may be terminated by either party as per Provisions set up below:
	By the client	20.1	The client may terminate this contract in case of the occurrence of any of the events specified in paragraphs (a) through (g) of this clause. In such an occurrence the client shall give at least thirty (30) calendar days' written notice of termination to the PIA in case of the events referred to in (a) through (d); at least sixty (60) calendar days' written notice in case of the event referred to in (e); and at least thirty (30) calendar days' written notice in case of the event referred to in(f):
			(a) if the PIA fails to remedy a failure in the performance of its obligations hereunder, as specified in a notice of suspension pursuant to clause 19;
			(b) if the PIA becomes (or, if the PIA consists of more than one entity, if any of its members becomes) insolvent or bankrupt or enter into any agreements with their creditors for relief of debt or take advantage of any law for the benefit of debtors or go into liquidation or receivership whether compulsory or voluntary;
			(c) if the PIA fails to comply with any final decision reached as a result of arbitration proceedings pursuant to clause 22.3
			(d) if, as the result of force majeure, the PIA is unable to perform a material portion of the services for a period of not less than ninety (90) calendar days;
			(e) if the client, in its sole discretion and for any reason Whatsoever, decides to terminate this contract;
			(f) if the PIA fails to confirm availability of key experts as Required
			(g) non submission of PBG amounting to INR
			Furthermore, if the client determines that the PIA has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the contract, then the client may, After giving fourteen (14) calendar days written notice to the PIA, terminate the PIA's employment under the contract.
	Cessation of right sand Obligations	20.3	Upon termination of this contract pursuant to clauses 14 or 20 hereof, or upon expiration of this contract pursuant to clause 15, all rights and obligations of the parties hereunder shall cease.
	Cessation of Services	20.4	Upon termination of this contract by notice of either party to the other pursuant to clause 20, the PIA shall, immediately upon dispatch or receipt of such notice, take all necessary steps to bring the services to a close in a prompt and orderly manner and shall make every reasonable effort to keep expenditures for this purpose to a minimum.
	Payment upon termination	20.5	Upon termination of this contract, the client shall make all the payments to the PIA for services satisfactorily performed prior to the effective date of termination.
21	Fairness and good faith		The parties undertake to act in good faith with respect to each other's rights under this contract and to adopt all reasonable measures to ensure the realization of the objectives of this contract.
22	Settlement of	22.1	The parties shall seek to resolve any dispute amicably by mutual

	Disputes		consultation.
		22.2	If either party objects to any action or inaction of the other party, the objecting party may file a written notice of dispute to the other party providing in detail the basis of the dispute. The party receiving the notice of dispute will consider it and respond in writing within fourteen (14) days after receipt. If that party fails to respond within fourteen (14) days, or the dispute cannot be amicably settled within fourteen (14) days following the response Of that party, clause 23 shall apply.
		22.3	Any dispute between the parties arising under or related to this contract that cannot be settled amicably may be referred to by either party to the adjudication/arbitration in accordance with the clause 23.
23	Arbitration		<p>If any dispute or difference or claims of any kind arises in connection with the contract, such dispute or difference or claim shall be referred by either party to the arbitration. The Indian arbitration and conciliation act, 1996 and any statutory modifications or re-enactment thereof rules made there under and for the time being in force shall be applicable to the arbitration. The arbitration shall be referred to the sole arbitrator duly appointed by the hon'ble high court of .....</p> <p>The decision of the arbitral tribunal shall be pronounced within six months unless otherwise extended by the parties, and the decision of the sole arbitrator shall be final and binding on the parties. The right to arbitrate disputes under this contract shall also survive even after expiry or the termination of this contract. The venue of arbitration proceedings pursuant to this clause shall be at ....., India and shall be conducted in English language. Pending the submission of and/or decision on dispute, difference or claim or until the arbitral award is published; the parties shall continue to perform all of their obligations under this contract without prejudice to a final adjustment in accordance with such award. The fees and expenses of sole arbitrator appointed by the hon'ble high court of ....., in accordance with the provision of this clause shall be governed by the rules of the arbitration tribunal, .....</p>
B	Obligations of the client		
24	Assistance in obtaining the permits and approvals	24.1	Client will facilitate the PIA in preparing necessary letters and other documentation to obtain work permits for import of the Helicopters, survey equipment & crews for foreign operators and flight operations. However it is the responsibility of the PIA to submit all the necessary documentation to the concerned authorities and pursuing for obtaining the same.
	Work space	24.2	The client will provide the work space to the PIA in the premises of CENTRAL GROUND WATER BOARD (CGWB), BHUJAL BHAWAN, NH-IV, FARIDABAD, HARAYANA-121001.for establishing processing and interpretation Centre.
	Geo-science Data	24.3	The client will provide the available data pertaining to geology, gravity, geochemistry and occurrences to the PIA <i>(For the integration in the available format).</i>
	Ts-qc Consultant	24.4	The client will appoint a TS-QC consultant to implement a range of quality assurance and quality control (QA/QC) procedures and inspections to ensure that CGWB's QA/QC objectives are met.

			The client or client's TS-QC should review and revert back on the products submitted with comments within 10 working days.		
	Security of the data.	24.5	The client, along with its TS-QC consultant, will coordinate with the PIAs on secure methods for transmission of data to CENTRAL GROUND WATER BOARD (CGWB), BHUJAL BHAWAN, NH-IV, FARIDABAD, HARAYANA-121001, and maintain security and confidentiality throughout the contract period. It is a mandatory requirement that no raw, compiled, processed, and interpreted data, products, or deliverables leave India. The client will deploy a scientific officer to the field, who will participate in the review and secure transmission of the data.		
	Scientific Officer deployed by the client	24.6	The scientific officer deployed by the client will check the data for its quality along with the qc team of PIA and data can be transmitted only after getting the clearance by the officer. The PIA should provide data to the concerned scientific field officer of the client in readable format.		
	Training	24.7	The client will nominate geoscientists for getting hands on training as per details given in tender document clause 3.9.		
	Return of PSD	24.8	The client will return the PSD submitted by PIA within 60 days after completion of the contract obligation.		
C	Obligations of the PIA				
25	Details of the allotted block and obligations	25.1	The PIA shall perform the services and carry out the services as mentioned in Appendix – II		
		25.2	The lead partner of the consortium i.e. M/s..... Is responsible for technical leadership of project and will provide the state of art equipment, technology and technical experts, Helicopter required for the project, the required flight crews and maintenance personnel (mention as per consortium agreement of technical bid). It is the sole responsibility of the lead partner of the consortium for timely and successful execution of the project. M/s._____, is responsible to provide for all permission, required local logistics and administrative issues of the project (mentioned as per consortium agreement of technical bid).		
D	Payment terms				
26	Contract price	26.1	Allotted block	:	Heliborne block-
			Area	:	----- Sq km
			Line km	:	----- L km
			Total cost of the project quoted In the bid( INR)	:	----- INR
			Rate per line km	:	----- INR
			Total line km amount	:	-----
				:	
				:	
			GST 18%	:	----- INR
			Total project contract price	:	----- INR
		26.2	There may be restricted zones in the area, which will be intimated by local ATC while giving flying permission. The exact coverage in line km may vary after the block is completely covered. Accordingly the total contract price may change based on the actual line km covered. The difference amount will be adjusted at the time of payment to milestone 5, mentioned at clause 27.1. Accordingly an addendum will be made to MOA.		

27	Payment Schedule	27.1	As per nit
		27.2	Each of the above deliverables will be subject to review and approval by TS-QC(client or client's TS-QC consultant), and finally by the client, prior to submission of the corresponding invoice. For milestone 3, the last field crew and Helicopter will not be permitted to leave a survey area until all data acquired over that block are reviewed & approved by Ts-qc (client or client's ts- qc consultant), and finally by the client. This period is limited to ten (10) days after the completion of the data acquisition and receipt Of the data by client or client's TS-QC consultant.
	Timeline for completion of project	27.3	As per NIT
		27.4	The PIA has to cover the block contiguously without leaving any gap unless restricted by regulatory authorities. Payments shall be made only for the actual line Km's covered within the block area.
		27.5	Income tax (TDS) will be deducted at source as per government of India rules, as applicable.
28	Delay in deliverables		1% monthly penalty on total contract amount will be levied on the first day of each month if the deliverables are delayed beyond *****. The total penalty will be capped at 10% of the contract amount. In case of any deficiency/delay/unsatisfactory/non-performance by the PIA, the appropriate action will be taken by the client against the delinquent PIA as per prevailing government of India rules/guidelines on procurement.
29	Change in the applicable law - related to taxes.		If, after the date of this contract, there is any change in the applicable law in the client's country with respect to taxes which increases or decreases the cost, then the amount payable to the PIA under this contract shall be increased or decreased accordingly, and corresponding adjustments shall be made to the contract price amount specified in clause 26.
30	Currency of Payment & mode		All milestone payments mentioned at clause 27.1 will be paid only in INR and will be paid only to the lead partner of the consortium I.E.M/s._____.
31	Performance security deposits		Performance security deposit (PSD) for the value of 3% of the total contract amount is to be deposited by the successful bidder, on selection of the bid, by way of bank guarantee of an acceptable bank (i.e. Scheduled bank as listed in the second schedule of the reserve bank of India act, 1934 excluding those listed under the headings of Gramin banks, urban co-operative banks and state co-operative banks) as per format under annexure-IB in the NIT. In case of non-compliance of terms and conditions of the contract and for any other unsatisfactory performance or/and failure to render contracted service during the period of contract by the PIA to whom order has been awarded, the performance security will be forfeited. If the PIA is unable to complete the task as per the milestone within the stipulated time, PIA has to renew the performance security beyond two months according to the extended contract

		<p>period.</p> <p>On successful completion of the contract, performance security deposit will be returned.</p> <p>No interest will be paid on performance security deposits.</p>
32	Liquidity Damages	<p>If the bidder is not carrying out the work as per the memorandum of agreement (MOA) guidelines, the delays in delivery of the final deliverables (of the complete project) will attract <u>Liquidity Damages</u> (financial penalty) at the rate of 1% of the contract amount per month. The total penalty will be capped at 10% of the total contract amount.</p> <p>In case of any deficiency/delay/unsatisfactory/non-performance by the bidder, the appropriate action will be taken by CGWB, against the delinquent bidder as per prevailing Govt. of India rules/guidelines on procurement.</p>

In witness whereof, the parties hereto have caused this contract to be signed in their respective names as of the day and year first above written. Two original of this agreement is signed, one for each party.

<p>For and on behalf of the president of India, Signed, sealed and delivered by</p> <p>Shri CENTRAL GROUND WATER BOARD, BHUJAL BHAWAN, NH-IV, FARIDABAD-HR (INDIA).</p> <p>In the presence of Witness: 1. 2.</p>	<p>For and on behalf of the m/s.----- Signed, sealed and delivered by Shri/smt----- Address-----</p> <p>And</p> <p>For and on behalf of the consortium member m/s. Shri/smt Address</p> <p>In the presence of witness: 1. 2.</p>
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**Appendix - I**

## 1. Allotted block details:

The Package shown in the following figure is allotted to the PIA for conducting  
The Heliborne .....

Fig-1. Map showing the Heliborne areas (as per NIT)

**Appendix – II**

1. Broad nature of work of the contract	
1.1	To conduct combined Heliborne TEM, Ground TEM and ERT/2D Imaging in Rajasthan, Punjab, Haryana, Gujarat, & Himachal Pradesh States as per the specifications over the Survey Area with Helicopter at <b>flight line spacing is 2.5 and 5 km and tie/control line spacing is 20 km</b> . The terrain clearance is set at a nominal height of m (as per NIT).
1.2	Total area of the survey area is ----- (as per NIT) and the estimated line-Kilometers are (as per NIT) includes traverses and tie-lines.
1.3	Geophysical data processing, modeling and integrated interpretation with an interpretation report.
1.4	Obtain necessary approvals from the technical supervisor cum quality control (ts-qc) consultant and the client for the final deliverables including final data, maps and All reports including interpretation report.
1.5	To impart hands-on training to the officers of CGWB.
2. Initial arrangements	
2.1	PIA has to submit all the required documentation to DGCA and other related government agencies for obtaining permissions related to import of Helicopters, geophysical survey equipment's, survey crews for foreign operators and flight operations.
2.2	The health and safety of all staff involved in the Heliborne survey must be given utmost priority. The PIAs must undertake to provide a safe and secure working environment for all staff and visitors including appropriate public liability insurance cover in place.
2.3	Before the survey commences, PIA should present to client a risk assessment, health and safety plan (to the IAGSA standard) and associated emergency response and search and rescue procedures;
2.4	Undertake to always accept modifications to the flight plan as required by the client in response to requests from organizations or members of the public concerned for the safety of their property (notably animals).
3. Survey Helicopter	
3.1	The PIA will commence data acquisition with (no. of Helicopter), with on identical backup Helicopter which can be used if required, and will complete the data acquisition.
3.2	The PIA must provide evidence of adequate insurance coverage to Helicopter, equipment and survey operations prior to mobilization to India.
3.3	The PIA must provide qualified pilots, co-pilots and Helicopter maintenance engineers (me), as per the norms of DGCA.  During the course of the survey, substitute Helicopter, pilots and/or Ames may be required. They must meet the same requirement criterion.



4. Heliborne survey instrumentation	
4.1	As per NIT
4.2	Base station magnetometer
5.	Technical specifications
5.1	As per NIT

**Appendix - III**

Pre-contract integrity pact- As per NIT

**Annexure-X**

Declaration by the bidder

(to be executed on INR 100 non-judicial stamp paper and to be duly notarized)

Date: \_\_

Sub: Tender no. \_\_\_\_\_

In response to the tender document above stated, I/WE hereby declare and

Solemnly swear that our company/ firm \_\_\_ is not banned/ blacklisted as on date by any competent court of law, forum or any state government or central government or their agencies or by any statutory entities or any PSUs.

And, if at any stage the declaration/statement on oath is found to be false in part or otherwise, then without prejudice to any other action that may be taken, I/we, hereby agree to be treated as a disqualified bidder for the ongoing contract.

In addition to the disqualification our concern/entity may be banned/blacklisted.

And, that I/WE, shall have no right whatsoever, to claim for consideration of my/our bid at any stage and the money deposited in the form of EMD shall be liable for forfeiture in full, and the tender, if any to the extent accepted may be cancelled.

Signature of the deponent

(Authorized signatory of the bidder with seal)

Date:

Place:

**Annexure-XI**

**BANK GUARANTEE FORM FOR EMD**

To

The President of India

Acting through

Drawing & Disbursing Officer, Central Ground Water Board, Bhujal Bhawan, NH-IV, Faridabad-121001.

WHEREAS {Name and Address of Tenderer} (hereinafter called “the tenderer”) has submitted its quotation (hereinafter called the “tender”) dated {} for supply of {Short Description of Goods and Services} against the Employer’s tender inquiry No. {} dated {}

Know all persons by these presents that we {Name of Bank}(hereinafter called the “Bank”) having our registered office at {Address of Bank}are bound unto {Name of Employer}(hereinafter called the “Employer”) in the sum of {Amount} for which payment will and truly to be made to the said Employer, the Bank binds itself, its successors and assigns by these presents.

Sealed with the Common Seal of the said Bank this{Specify Day} day of {Specify Month and Year}.

The conditions of this obligation are:

If the Tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.

If the Tenderer having been notified of the acceptance of his tender by the Employer during the period of its validity:

fails or refuses to furnish the performance security for the due performance of the contract.

fails or refuses to accept/execute the contract.

We undertake to pay the Employer up to the above amount upon receipt of its first written demand, without the Employer having to substantiate its demand, provided that in its demand the Employer will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition(s).

This guarantee will remain in force for a period of 60 (sixty) days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

{Signature of the Authorized Officer of the Bank}

{Name and Designation of the Officer}

{Seal, Name & Address of the Branch of the Bank}

Important: the bank guarantee details required be sent through digitally signed secured SFMS mode mails by the banker to our banker in order to confirm the issuance of the same. Bank Details for the same is as follows:-

Name:- Drawing & Disbursing Officer, Central Ground Water Board, Bhujal Bhawan, NH-IV, Faridabad-121001

Account No.- 30104397868

Bank- State Bank of India Branch- Faridabad, Main Branch, Neelam Chowk, Faridabad, Haryana

IFSC Code- SBIN0000734

**Annexure-XII**

Integrity pact

(To be signed on Plain paper)  
(To be submitted as part of Technical bid)

Integrity pact for tender document no. Tender no. \_\_\_\_\_,

Tender Title :.....)

This agreement (hereinafter called the integrity pact) is made on \_\_\_\_\_ day of the month of \_\_\_\_\_ 202\_\_ at \_\_\_\_\_, India

Between

Procuring organisation, ----- through head of procuring organisation,  
For and on behalf of president of India (hereinafter called the “The Principal”, which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns) of the first part

And

M/ s. \_\_\_\_\_ (hereinafter called the “The Bidder/ Contractor” which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the second part.

Preamble

‘The Principal’ intends to award, under laid down organizational procedures, contract/ s for \_\_\_\_\_, ‘The Principal’ values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/ transparency in its relations with its bidder(s) and/ or contractor(s).

In order to achieve these goals, the principal shall appoint independent external monitors (IEMs) who shall monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 - Commitments of the ‘The Principal’ 1.

‘The Principal’ commits itself to take all measures necessary to prevent corruption and to observe the following principles:

No employee of the principal, personally or through family members, shall in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

The principal shall, during the tender process treat all bidder(s) with equity and reason. The principal shall in particular, before and during the tender process, provide to all bidder(s) the same information and shall not provide to any bidder(s) confidential/ additional information through which the bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

The principal shall exclude from the process all known prejudiced persons.

If the principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/ PC act, or if there be a substantive suspicion in this regard, the principal shall inform the chief vigilance officer and in addition can initiate disciplinary actions.

Section 2 - Commitments of the ‘Bidder/ Contractor’

1. The ‘Bidder/ Contractor’ commit themselves to take all measures necessary to prevent corruption. The ‘Bidder/ Contractor’ commit themselves to observe the following principles during participation in the tender process and during the contract execution.

A. The ‘Bidder/ Contractor’ shall not, directly or through any other person or firm, offer, promise, or give to any of the principal’s employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/ she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

B. The ‘Bidder/ Contractor’ shall not enter with other bidders info any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

C. The ‘Bidder/ Contractor’ shall not commit any offence under the relevant IPC/ pc act; further the ‘bidder/ contractor’ shall not use improperly, for purposes of competition or personal gain, or

pass on to others, any information or document provided by the principal as part of the business relationship, regarding plans, technical proposals, and business details, including information contained or transmitted electronically.

D. The 'Bidder/ Contractor' of foreign origin shall disclose the name and address of the agents/ representatives in India, if any. Similarly, the bidder/ contractors of Indian nationality shall furnish the name and address of the foreign principals, if any. Further details as mentioned in the "guidelines on Indian agents of foreign suppliers" shall be disclosed by the bidder/ contractor. Further, as mentioned in the guidelines all the payments made to the Indian agent/ representative have to be in Indian rupees only. Copy of the "guidelines on Indian agents of foreign suppliers" is placed at annexe to this agreement.

E. The 'Bidder/ Contractor' shall, when presenting their bid, disclose any and all payments made, is committed to, or intends to make to agents, brokers, or any other intermediaries in connection with the award of the contract.

F. Bidder/ contractor who have signed the integrity pact shall not approach the courts while representing the matter to IEMS and shall wait for their decision in the matter.

2. The 'Bidder/ Contractor' shall not instigate third persons to commit offences outlined above or be an accessory to such offenses.

### Section 3 - Disqualification from tender process and exclusion from future contracts

If the 'Bidder/ Contractor', before award or during execution has committed a transgression through a violation of section 2, above or in any other form such as to put their reliability or credibility in question, the principal is entitled to disqualify the 'Bidder/ Contractor' from the tender process or take action as per the procedure mentioned in the "Guidelines On Banning Of Business Dealings".

### Section 4 - Compensation for Damages

1. If the principal has disqualified the 'Bidder/ Contractor' from the tender process prior to the award according to section 3, the principal is entitled to demand and recover from 'Bidder/Contractor' the damages equivalent to earnest money deposit/ bid security.

2. If the principal has terminated the contract according to section 3, or if the principal is entitled to terminate the contract according to section 3, the principal shall be entitled to demand and recover from the contractor liquidated damages of the contract value or the amount equivalent to performance bank guarantee.

### Section 5 - Previous Transgression

1. The bidder declares that no previous transgressions occurred in the last three years with any other company in any country conforming to the anti-corruption approach or with any public sector enterprise in India that could justify his exclusion from the tender process.

2. If the bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as per the procedure mentioned in "guidelines on banning of business dealings".

### Section 6 - Equal treatment of all bidders/ contractors/ subcontractors

In case of sub-contracting, the principal contractor shall take the responsibility of the adoption of integrity pact by the sub-contractor.

The principal shall enter into agreements with identical conditions as this one with all bidders and contractors.

The principal shall disqualify from the tender process all bidders who do not sign this pact or violate its provisions.

### Section 7 - Criminal charges against violating bidder(s)/ contractor(s)/ subcontractor(s)

If the principal obtains knowledge of conduct of a bidder, contractor or subcontractor, or of an employee or a representative or an associate of a bidder, contractor or subcontractor which constitutes corruption, or if the principal has substantive suspicion in this regard, the principal shall inform the same to the chief vigilance officer.

### Section 8 - Independent External Monitor

1 The principal appoints competent and credible independent external monitor for this pact after approval by central vigilance commission. The task of the monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this

agreement.

2 The monitor is not subject to instructions by the representatives of the parties and performs his/her functions neutrally and independently. The monitor would have access to all contract documents, whenever required. It shall be obligatory for him/ her to treat the information and documents of the bidders/ contractors as confidential. He/ she reports to head of procuring organization of procuring organization.

3 The bidder(s)/ contractor(s) accepts that the monitor has the right to access without restriction to all project documentation of the principal including that provided by the contractor. The contractor shall also grant the monitor, upon his/ her request and demonstration of a valid interest, unrestricted and unconditional access to their project documentation. The same is applicable to sub-contractors.

4 The monitor is under contractual obligation to treat the information and documents of the bidder/ contractor(s)/ sub-contractor(s) with confidentiality. The monitor has also signed declarations on 'non-disclosure of confidential information' and of 'absence of conflict of interest' .in case of any conflict of interest arising at a later date, the IEM shall inform head of procuring organization of procuring organization and recues himself/ herself from that case.

5. The principal shall provide to the monitor sufficient information about all meetings among the parties related to the project provided such meetings could have an impact on the contractual relations between the principal and the contractor. The parties offer to the monitor the option to participate in such meetings.

6. As soon as the monitor notices, or believes to notice, a violation of this agreement, he/ she shall so inform the management of the principal and request the management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the monitor has no right to demand from the parties that they act in a specific manner, refrain from action, or tolerate action.

7. The monitor shall submit a written report to head of procuring organisation of procuring organisation within 8 to 10 weeks from the date of reference or intimation to him by the principal and, should the occasion arise, submit proposals for correcting problematic situations.

8. If the monitor has reported to head of procuring organisation of procuring organisation, a substantiated suspicion of an offence under relevant IPC/ PC act, and head of procuring organisation of procuring organisation has not, within the reasonable time taken visible action to proceed against such offence or reported it to the chief vigilance officer, the monitor may also transmit this information directly to the central vigilance commissioner.

9. The word 'monitor' would include both singular and plural.

#### Section 9 - Pact duration

This pact begins when both parties have legally signed it. It expires for the contractor 12 months after the last payment under the contract, and for all other bidders 6 months after the contract has been awarded. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings.

If any claim is made/ lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/ determined by head of procuring organisation of procuring organisation.

#### Section 10 - Other provisions

This agreement is subject to Indian law. Place of performance and jurisdiction is the registered office of the principal, i.e., Faridabad.

Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made. If the contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties shall strive to come to an agreement to their original intentions.

Issues like warranty/ guarantee etc. Shall be outside the purview of IEMS.

In the event of any contradiction between the integrity pact and its annexure, the clause in the integrity pact shall prevail.

For and on behalf of the Principal  
(Name of the Officer and Designation)  
(Office Seal)

For and on behalf of 'Bidder/ Contractor'  
(Name of the Officer and Designation)

For and on behalf of the principal  
Place  
Date

Witness 1:

(name & address)

Witness 2:

(name & address)

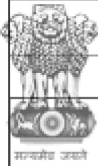
Date:

**Annexe to integrity pact**

***Guidelines for Indian agents of foreign bidders***

- 1.0 there shall be compulsory registration of agents for all global (open) tender and limited tender. An agent who is not registered with 'the principal' shall apply for registration in the registration form with appropriate unit.
- 1.1 Registered agents shall file an authenticated Photostat copy duly attested by a notary public/ original certificate of the principal confirming the agency agreement. It should cover - the precise relationship, services to be rendered, mutual interests in business - generally and/ or specifically for the tender. Any commission/ remuneration/ salary/ retainer ship, which the agent or associate receives in India or abroad from the OEM, whether should be brought on record in the agreement and be made explicit.
- 1.2 wherever the Indian representatives have communicated on behalf of their principals and the foreign parties have stated that they are not paying any commission to the Indian agents, and the Indian representative is working on the basis of salary or as retainer, a written declaration to this effect should be submitted by the party (i.e., principal) before finalizing the order.
- 2.0 Disclosures of particulars of agents/ representatives in India, if any.
- 2.1 Bidders of foreign nationality shall furnish the following details in their offers:
  - 2.1.1 The 'bidder/ contractor' of foreign origin shall disclose the name and address of the agents/ representatives in India if any and the extent of authorization and authority given to commit the principals. In case the agent/ representative be a foreign company, it shall be confirmed whether it is existing company and details of the same shall be furnished.
  - 2.1.2 The amount of commission/ remuneration included in the quoted price(s) for such agents/ representatives in India.
  - 2.1.3 Confirmation of the bidder that the commission/ remuneration, if any, payable to his agents/ representatives in India, may be paid by 'the principal' in Indian rupees only.
- 2.2 Bidders of Indian nationality shall furnish the following details in their offers:
  - 2.2.1 The 'bidder/ contractor' of Indian nationality shall furnish the name and address of the foreign principals, if any, indicating their nationality as well as their status, i.e., whether manufacturer or agents of manufacturer holding the letter of authority of the principal specifically authorizing the agent to make an offer in India in response to tender either directly or through the agents/ representatives.
  - 2.2.2 The amount of commission/ remuneration included in the price (s) quoted by the bidder for himself.
  - 2.2.3 confirmation of the foreign principals of the bidder that the commission/ remuneration, if any, reserved for the bidder in the quoted price(s), may be paid by 'the principal' in India in equivalent Indian rupees on satisfactory completion of the project or supplies of stores and spares in case of operation items.
- 2.3 In either case, in the event of contract materializing, the terms of payment shall provide for payment of the commission/ remuneration, if any payable to the agents/ representatives in India in Indian rupees on expiry of 90 days after the discharge of the obligations under the contract.
- 2.4 failure to furnish correct and detailed information as called for in clauses above shall render the concerned tender liable to rejection or in the event of a contract materializing, the same liable to termination by 'the principal'. Besides this there would be a penalty of banning business dealings with 'the principal' or damage or payment of a named sum.





**Basic Details**

<b>Organisation Chain</b>	Central Ground Water Board		
<b>Tender Reference Number</b>	GEM/2025/B/5805286		
<b>Tender ID</b>	2025_CGWB_784870_1		
<b>Tender Type</b>	Open Tender	<b>Form of contract</b>	Item Rate
<b>Tender Category</b>	Services	<b>No. of Covers</b>	2
<b>Payment Mode</b>	Offline	<b>Is Multi Currency Allowed For BOQ</b>	No
<b>Is Multi Currency Allowed For Fee</b>	No		

**Payment Instruments**

Offline	S.No	Instrument Type
	1	Bank Guarantee
	2	Demand Draft
	3	FDR
	4	As Per Tender Document

**Cover Details, No. Of Covers - 2**

Cover No	Cover	Document Type	Description
1	Fee/PreQual/Technical	.pdf	Tender Document
2	Finance	.xls	BOQ

**Tender Fee Details, [Total Fee in ₹ \* - 0.00]**

<b>Tender Fee in ₹</b>	0.00		
<b>Fee Payable To</b>	NA	<b>Fee Payable At</b>	NA
<b>Tender Fee Exemption Allowed</b>	NA		

**EMD Fee Details**

<b>EMD Amount in ₹</b>	1,31,08,282	<b>EMD Exemption Allowed</b>	No
<b>EMD Fee Type</b>	percentage	<b>EMD Percentage</b>	2.0%
<b>EMD Payable To</b>	DDO, CGWB, Bhujal Bhawan, NH-IV, Faridabad	<b>EMD Payable At</b>	Bhujal Bhawan, NH-IV, Faridabad

**Work /Item(s)**

<b>Title</b>	Heliborne Geophysical Survey (Package-B)				
<b>Work Description</b>	Heliborne Geophysical Survey (Package-B)				
<b>Pre Qualification Details</b>	As per Tender Document				
<b>Tender Value in ₹</b>	65,54,14,085	<b>Product Category</b>	Miscellaneous Services	<b>Sub category</b>	Heliborne Geophysical Survey
<b>Contract Type</b>	Tender	<b>Bid Validity(Days)</b>	180	<b>Period Of Work(Days)</b>	450
<b>Location</b>	Rajasthan, Gujarat	<b>Pincode</b>	121001	<b>Pre Bid Meeting Place</b>	Central Ground Water Board, Bhujal Bhawan, NH-IV,
<b>Pre Bid Meeting Address</b>	Central Ground Water Board, Bhujal Bhawan, NH-IV,	<b>Pre Bid Meeting Date</b>	16-Jan-2025 03:00 PM	<b>Bid Opening Place</b>	Central Ground Water Board, Bhujal Bhawan, NH-IV,

**Critical Dates**

<b>Publish Date</b>	10-Jan-2025 04:30 PM	<b>Bid Opening Date</b>	31-Jan-2025 04:30 PM
<b>Document Download / Sale Start Date</b>	10-Jan-2025 04:30 PM	<b>Document Download / Sale End Date</b>	31-Jan-2025 04:00 PM
<b>Clarification Start Date</b>	10-Jan-2025 04:30 PM	<b>Clarification End Date</b>	16-Jan-2025 03:00 PM
<b>Bid Submission Start Date</b>	10-Jan-2025 04:30 PM	<b>Bid Submission End Date</b>	31-Jan-2025 04:00 PM

**Tender Documents**

NIT Document	S.No	Document Name	Description	Document Size (in KB)
		1	Tendernotice_1.pdf	GeM Bid

Work Item Documents	S.No	Document Type	Document Name	Description	Document Size (in KB)
		1	Tender Documents	Package_B.pdf	Tender Document

### **Tender Inviting Authority**

<b>Name</b>	Superintendent Engineer (MMS-I), CGWB
<b>Address</b>	Central Ground Water Board, Bhujal Bhawan, NH-IV,

### **Tender Creator Details**

<b>Created By</b>	Amit Kumar Singh
<b>Designation</b>	Assistant Executive Engineer
<b>Created Date</b>	10-Jan-2025 04:17 PM