



**DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA**

**MINISTRY OF TRANSPORT, HIGHWAYS AND  
URBAN DEVELOPMENT**



**SRI LANKA LAND DEVELOPMENT CORPORATION**

## **BIDDING DOCUMENT**

**FOR**

**LiDAR DRONE SURVEY WORKS AND PREPARATION OF DIGITAL ELEVATION  
MODEL (DEM), DIGITAL SURFACE MODEL (DSM) AND HIGH-RESOLUTION  
2D ORTHOPHOTO OF VAVUNIYA AREA**

**PROCUREMENT NO : S/168/26**

**Bid Closing Date & Time : 24<sup>th</sup> June 2026 at 13:30 hours**

Chairman  
Procuring Entity,  
Sri Lanka Land Development Corporation  
No:03, Sri Jayawardanapura Mawatha,  
Welikada,  
Rajagiriya.

June 2026

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**Please refer to the following:**

- **Volume - 1 of CIDA Publication “Standard Bidding Document Procurement of Works Minor Contracts” – ICTAD/SBD/03**
- **Procurement Guidelines and Manual - 2024 of the National Procurement Commission (NPC)**

**VOLUME 1**

Read Only

## SECTION - 1

### INSTRUCTIONS TO BIDDERS

*Notes :*

*Instructions to Bidders shall be read in conjunction with Bidding Data under Section 5 (Volume 2). Matters governing the performance of the Contractor, Payment under the Contract, or matters affecting the risks, rights, and obligations of the parties under the Contract are included under Section 3 - Conditions of Contract (Volume 1) and Contract Data under Section 5 (Volume 2). However, some information is reproduced in this section to facilitate the bidders to price their bids.*

*Instructions to Bidders will not be a part of the Contract and will cease to have effect once the Contract is signed.*

*Note :*

*All Bidders shall refer STANDARD BIDDING DOCUMENT FOR PROCUREMENT OF WORKS ICTAD/SBD/03 (Second Edition - January 2007) Section 1, Instructions to Bidders.*

## **SECTION - 2**

### **STANDARD FORMS (CONTRACT)**

**Note :**

Please refer Volume I of the ICTAD Standard Bidding Document, Procurement of Works Minor Contracts, ICTAD/SBD/03, Second Edition - January 2007. Not attached with this document for the following sections.

- Letter of Acceptance
- Agreement (Refer the attached format)
- Performance Security
- Advance Payment Security
- Retention Money Guarantee

## FORM OF AGREEMENT

This AGREEMENT made the..... [day] of .....[month] 20.....[year] between General Manager, Sri Lanka Land Development Corporation, No. 03, Sri Jayawardenapura Mawatha, Welikada, Rajagiriya (hereinafter called and referred to as “the Employer”) of the one part, and .....[name and address of Contractor] (hereinafter called and referred to as “the Contractor”) of the other part.

ARTICLES of Agreement made between General Manager (holding the office Sri Lanka Land Development Corporation, No. 03, Sri Jayawardenapura Mawatha, Welikada, Rajagiriya) hereinafter termed the General Manager, herself and her successors in the said office for the time being, acting for and on behalf of the Democratic Socialist Republic of Sri Lanka (hereinafter called and referred to as “the Republic of Sri Lanka”) of the one part, .....[name and address of Contractor] (hereinafter designated as “ the Contractor” which expressions shall include his or their heirs, execute or administrators and legal representatives or where the context so admits, includes the successors and permitted assigns) of the other part.

**WHERE AS** the Employer desires that the Contractor execute the contract for ..... [Name and Identification no of Contract] (hereinafter called and referred to as “the Works”) and the Employer has accepted the Bid of the Contractor for the execution and completion of such Works and the remedying of any defects therein.

### **NOW THIS AGREEMENT WITNESSETH as follows:**

1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.
2. The following documents shall be deemed to form and be read and constructed part of this agreement, viz.,
  - a. Contract Agreement
  - b. Letter of Acceptance
  - c. Conditions of Contract
  - d. Contract Data
  - e. Specification
  - f. Bill of Quantities
  - g. Drawings
  - h. Addendum
  - i. Performance Security
  - j. Form of Bid
3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of the Contract.

4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects wherein the Contract Price .....or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

**In Witness** whereof the parties hereto have set their respective hands and seals on the day and year above written.

**Signed by the duly authorized signatory  
For and on behalf of the Employer**

.....  
**General Manager  
Sri Lanka Land Development Corporation**

.....  
**Employer's Common Seal**

In the presence of  
Witnesses:

Witness: 1. Name : .....  
2. Signature : .....

Witness: 1. Name : .....  
2. Signature : .....

**Signed by the duly authorized signatory  
For and on behalf of the Contractor**

.....  
**Contractor**

.....  
**Contractor's Common Seal**

Witness: 1. Name : .....  
2. Signature:.....  
3. National Identity Card No : .....

Witness: 1. Name : .....  
2. Signature:.....  
3. National Identity Card No : .....

## **SECTION - 3**

### **CONDITIONS OF CONTRACT**

***Conditions of Contract shall be read in conjunction with the Section 5 – Schedule in Volume 2, which shall take precedence over the Conditions of Contract***

*Note :*

*All Bidders shall refer STANDARD BIDDING DOCUMENT PROCUREMENT OF WORKS MINOR CONTRACTS ICTAD/SBD/03 (Second Edition - January 2007) published by the Construction Industry Development Authority (CIDA) / Institute for Construction Training and Development (ICTAD) for Volume I Section 3, Conditions of Contract.*

**VOLUME – 02**

Read Only

## INVITATION FOR BIDS

*Note:*

*Bidders are advised to consider the information printed in blue colour in the original ICTAD/SBD/03 document as a checklist, when preparing their bids. However, it is the responsibility of the bidders to comply with all the requirements given in the bidding document.*

## INVITATION FOR BIDS (IFB)

### MINISTRY OF TRANSPORT, HIGHWAYS AND URBAN DEVELOPMENT

#### SRI LANKA LAND DEVELOPMENT CORPORATION

1. The Chairman, Procuring Entity of Sri Lanka Land Development Corporation (SLLDC), No. 03, Sri Jayawardenepura Mawatha, Welikada, Rajagiriya, now invites sealed bids from eligible and qualified bidders for **LiDAR Drone Survey Works and Preparation of Digital Elevation Model (DEM), Digital Surface Model (DSM) and High-Resolution 2D Orthophoto of Vavuniya Area (S/168/26)** as described below:

The above Work is described in the Specifications, Bill of Quantities & Drawings.

The Project period is **30 Calendar days** from the date of award of the Contract.

2. Bidding will be conducted through Limited National Competitive Bidding (LNCB) Procedure.
3. To be eligible for contract award, the successful bidder shall not have been blacklisted.
4. Qualification requirements to qualify for contract award includes:
  - Successful completion of total LiDAR Aerial Surveys of not less than 2000 hectares. Details of used LiDAR Sensors and other equipment used to be clearly mentioned.
  - Successful completion of at least one (01) LiDAR Survey project with a project size over 800 hectares or more. Details of used LiDAR Sensors and other equipment used to be clearly mentioned.
  - Bidder's Net Worth for the last 03 (2025/24, 2024/23, 2023/22) years shall be positive.
  - Bidder's Working Capital shall be positive.
  - Bidder's Average Turnover for the last 03 (2025/24, 2024/23, 2023/22) years > Rs. 30 Million

Additional details are provided in the bidding document.

5. Interested bidders may obtain further information from Deputy General Manager (Urban Water Management) (Tel: 011-2058154, Fax: 011-2058153, email: [slldcuwm@gmail.com](mailto:slldcuwm@gmail.com)), Sri Lanka Land Development Corporation (SLLDC) and inspect the bidding document at the address given below from **09<sup>th</sup> June 2026 to 23<sup>rd</sup> June 2026** from **09:00 hrs. to 15:00 hrs.** during normal working days.

Deputy General Manager (Supplies)  
Sri Lanka Land Development Corporation  
No. 03, Sri Jayawardenepura Mawatha,  
Welikada, Rajagiriya.

6. A complete set of Bidding Documents in English language may be purchased by interested bidders on the submission of a written application to the Deputy General Manager (Supplies) Sri Lanka Land Development Corporation on working days from **09<sup>th</sup> June 2026 to 23<sup>rd</sup> June 2026** during **09:00 hrs. to 15:00 hrs.** Upon payment of a non-refundable fee of **Rs. 3,000.00**. The method of payment will be in cash only.

7. **Original bid with duplicate, sealed separately** shall be delivered to the address given below on or before **24<sup>th</sup> June 2026** at **13.30 hrs**. Late bids will be rejected. Bids will be opened soon after closing in the presence of the bidder or their representatives who choose to attend.

The Chairman,  
Procuring Entity,  
Sri Lanka Land Development Corporation,  
No. 03, Sri Jayawardenapura Mawatha,  
Welikada, Rajagiriya.

8. Bids shall be valid **77 days (up to 09<sup>th</sup> September 2026)** from the closing date of the bids.
9. Bids shall be accompanied by a, "**Bid-Security**" (*as per the format given in the bidding document*), of **Rs. 45,000.00** Bid Security shall be from a Commercial Bank operating in Sri Lanka, approved by the Central Bank of Sri Lanka. It shall be irrevocable and unconditionally cashable upon the first written demand by the Employer. Bid Security shall be valid up to **07<sup>th</sup> October 2026**.
10. A Pre-Bid meeting will be held at 10.00 hrs on 16<sup>th</sup> June 2026, at the following address.
- Urban Water Management Centre  
Sri Lanka Land Development Corporation  
No. 260, Lake Drive,  
Colombo 05.
11. Employer will not be responsible for any expenses incurred by bidder in connection with preparation or submission of bids or any site inspection carried out by their own.

The Chairman,  
Procuring Entity,  
Sri Lanka Land Development Corporation  
No. 03, Sri Jayawardenapura Mw,  
Welikada,  
Rajagiriya.

## **SECTION - 4**

### **FORM OF BID & QUALIFICATION INFORMATION**

*Note: Bidders shall submit a duly completed Declaration of Non-Collusion along with the procurement documents, in compliance with the requirements of the Procurement Guidelines – 2024 for Goods, Works, and Non-Consultancy Services issued by the NPC.*

## FORM OF BID

**Name of Contract: LiDAR Drone Survey Works and Preparation of Digital Elevation Model (DEM), Digital Surface Model (DSM) and High-Resolution 2D Orthophoto of Vavuniya Area**

**Procurement No. : S/168/26**

To: General Manager,  
Sri Lanka Land Development Corporation  
No. 03, Sri Jayawardenapura Mawatha,  
Welikada,  
Rajagiriyia.

Gentleman:

1. Having examined the Standard Bidding Document - Procurement of Works, [ICTAD/SBD/03 Second Edition, January 2007], Specifications, Drawings and Bills of Quantities and Addenda for the execution of the above-named Works, we the undersigned, offer to execute and complete such Works and remedy any defect therein in conformity with the aforesaid Conditions of Contract, Specifications, Drawings, Bills of Quantities and addenda for the sum of Sri Lankan Rupees .....  
..... (LKR .....) or such other sums as may be ascertained in accordance with the said Conditions.
2. We/I acknowledge that the Schedule forms part of our Bid.
3. We/I undertake, if our Bid is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Engineer's notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the Schedule.
4. We/I agree to abide by this Bid for the period of 77 days from the date fixed for receiving or any extended period and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
5. Unless and until a formal Agreement is prepared and executed this Bid, together with your written acceptance thereof, shall constitute a binding Contract between us/me.
6. We/I understand that you are not bound to accept the lowest or any Bid you may receive.

Dated this ..... day of ..... 20..... in the capacity of .....

.....duly authorized to sign bids for and on behalf of.....

..... [IN BLOCK CAPITALS]

Signature : .....

Name : .....

Designation : .....

Address : .....

Witness : .....

## **NON-COLLUSION DECLARATION**

**(Relevant Reference to the Procurement Guidelines (2024) - 1.5)**

I, the undersigned bidder/ bidder's representative/ bidder's agent, honestly, truthfully and solemnly declare that;

- a) I, nor any other member, agent or representative of the firm/ company/ corporation/ partnership/ sole proprietorship that I represent, have entered into any combination, collusion or similar agreement with any person in connection with the prices to be submitted by any person with respect to the invitation for bid;
- b) I, nor any person who represents me, have acted to prevent any person from submitting a bid or to induce any person to refrain from submitting a bid in connection with the intention for bid (Bid No. S/168/26);
- c) This bid is not submitted in collusion with any other bid and is not made pursuant to any agreement, understanding or association with any other person in relation to such bid.

I declare that, I have not received and will not accept any discount, fee, reward, commission or anything of value, directly or indirectly, from any person, company or corporation in connection with the submission of this bid.

I further declare that, I have not given and will not give any discount, fee, reward, commission or anything of value, directly or indirectly, to any person, company or corporation in connection with the submission of this bid.

I, taking full responsibility for ensuring the absence of collusion, hereby pledge to abide by fair and ethical competitive practices throughout the entire procurement process and to fully comply with the relevant Procurement Guidelines issued by the National Procurement Commission.

I hereby declare that all the statements made by me above are true and correct.

.....  
Signature of the Declarant

## Qualification Information

(To be completed and submitted by the bidder, with the Bid)

<b>Blacklisted Contractors</b>																
Have you been declared as a defaulted contractor by NPC or any other Agency? (Yes/No)																
IF yes provide details	<i>(attach as annex)</i>															
<b>VAT Registration Number</b>																
<b>Work Programme</b>	<i>(attach as annex)</i>															
<b>Legal status</b>	<i>(public company/ private company/ partnership/ sole proprietor) (attach relevant status copies including Company Registration, as annex)</i>															
<b>The authorization for bidder's signatory</b>	<i>(attach as annex – Power of Attorney or Board Resolution)</i>															
<b>Value of works Performed in last 03 years</b>																
Year 2025/2024 Rs.																
Year 2024/2023 Rs.																
Year 2023/2022 Rs.																
Total Turn Over Rs.	Average = Total/3 = Rs.															
<p><b>Successful completion of total LiDAR Aerial Surveys of not less than 2000 hectares. Details of used LiDAR Sensors and other equipment used to be clearly mentioned.</b></p> <p><b>Successful completion of at least one (01) LiDAR Survey project with a project size over 800 hectares or more. Details of used LiDAR Sensors and other equipment used to be clearly mentioned.</b></p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">1. Project .....</td> <td style="width: 20%;">Value .....</td> <td style="width: 30%;">Year .....</td> </tr> <tr> <td>2. Project .....</td> <td>Value .....</td> <td>Year .....</td> </tr> <tr> <td>3. Project .....</td> <td>Value .....</td> <td>Year .....</td> </tr> <tr> <td>4. Project .....</td> <td>Value .....</td> <td>Year .....</td> </tr> <tr> <td>5. Project .....</td> <td>Value .....</td> <td>Year .....</td> </tr> </table> <p style="text-align: center;"><i>(attach copies of Certificates of Completion etc. as annex)</i></p>	1. Project .....	Value .....	Year .....	2. Project .....	Value .....	Year .....	3. Project .....	Value .....	Year .....	4. Project .....	Value .....	Year .....	5. Project .....	Value .....	Year .....
1. Project .....	Value .....	Year .....														
2. Project .....	Value .....	Year .....														
3. Project .....	Value .....	Year .....														
4. Project .....	Value .....	Year .....														
5. Project .....	Value .....	Year .....														
<p><b>List of assets available and planned to be deployed for the project.</b></p> <p><b>Copy of the CAASL Registration of the drone to be deployed, shall be attached.</b></p>	<p><i>(attach as annex the list of assets available with the Bidder and the list of assets to be deployed for the project.</i></p> <p><i>CAASL registration of the drone to be deployed for the project should be annexed)</i></p>															
<p><b>Minimum persons with qualifications and experience to be defined</b></p>	<p><b><u>Managerial / Technical</u></b></p> <p><b>Lead Surveyor:</b></p> <ul style="list-style-type: none"> <li>- BSc./MSc. Degree in Surveying Sciences, with minimum experience in the relevant field more than 10 years, and minimum experience in Geodetic Surveying more than 5 years.</li> <li>- Registered Licensed Surveyor in Sri Lanka Land Survey Council with an annual practicing license for the year 2026.</li> </ul> <p><b>GIS Specialist:</b></p> <ul style="list-style-type: none"> <li>- Degree in GIS with minimum experience in the relevant field more than 10 years.</li> </ul> <p><i>(attach original of curriculum vitae with certified copies of certificates of the proposed technical and managerial staff)</i></p>															

Signature of the Bidder: .....

## **SECTION - 5**

### **SCHEDULE**

*Note:*

*This section shall be read in conjunction with Section 1 - Instruction to Bidders and Section 3 – Conditions of Contract, and is intended to provide specific information in relation to corresponding clauses in Section 1 & 3. Whenever there is an ambiguity, the provisions in Section 5 – Schedule shall supersede those provided in the Section 1 - Instruction to Bidders and Section 3 – Conditions of Contract.*

## Schedule

ITB Clause	Conditions of Contract Clause	Item	Data
1.	1.1.8	Employer is:	<p>Name : General Manager            Address : Sri Lanka Land Development Corporation,            No. 03, Sri Jayawardenapura Mawatha,            Welikada, Rajagiriya.</p> <p>Name of Authorized Representative:            Deputy General Manager (Urban Water Management)            Sri Lanka Land Development Corporation</p>
	1.1.10	Engineer is:	<p>Name : Deputy General Manager            (Urban Water Management)            Address : Urban Water Management Centre,            Sri Lanka Land Development Corporation,            No. 260, Lake Drive, Colombo 05.</p>
1 & 13	1.1.21	Summary of Works	<p>Setting up of a Ground Control Point Network in the Vavuniya area, Capturing High-Resolution LiDAR data and High-Resolution 2D Orthophoto of the Vavuniya area with Ground Sampling Distance &lt; 10cm, including preparation of a Digital Elevation Model (DEM) and Digital Surface Model (DSM) of the Vavuniya Island with ≤10cm vertical accuracy, and horizontal resolution ≤100cm.</p>
1	1.1.14	Intended Completion Date	<p>Intended Completion Date is 30 Days from the start Date.</p>
2.		Source of Funds	<p>The source of the funds is Government of Sri Lanka (GOSL)</p>
4.		Eligibility and Qualification of the Bidder	<ul style="list-style-type: none"> <li>• A detailed method statement of the work specifically addressing, but not limited to, following items should be submitted by the bidder.               <ol style="list-style-type: none"> <li>i. Establishment of ground control points within the specified area in Vavuniya.</li> <li>ii. Conducting LiDAR drone survey within the specified area and preparation of DEM, DSM complying with the specified accuracy levels.</li> <li>iii. Capturing a high-resolution 2D orthophoto of the project area complying with the specified GSD.</li> <li>iv. Detailed survey implementation plan including the details of the equipment proposed for the project.</li> </ol> </li> </ul>
13.	10.10	Price Adjustment	<p>The Contract is not subject to price adjustment.</p>

ITB Clause	Conditions of Contract Clause	Item	Data
16.		Bid Security	<p>Bid shall include a bid Security:</p> <ul style="list-style-type: none"> <li>• For an amount of Rs. 45,000 (<i>Forty five thousand rupees only</i>).</li> <li>• The Bid Security shall be irrevocable and unconditionally cashable upon the first written Demand from the Employer.</li> <li>• Issued by the commercial bank operating in Sri Lanka approved by the Central Bank of Sri Lanka, using the form of bid security (unconditional guarantee) included in Section 9, Standard Forms).</li> <li>• Remain valid till 07<sup>th</sup> October 2026.</li> </ul>
31.	4.4	Performance Security	<p>Amount of Performance Security required is 5% of the Initial Contract Price. The form acceptable is an unconditional guarantee. The guarantee should be from a commercial bank operating Sri Lanka approved by the Central Bank of Sri Lanka.</p>
	6.4	Late Completion	<p>The amount to be paid is 0.05% of Initial Contract Price per Day, subjected to maximum of 10% of Initial Contract Price.</p>
	8.1	Notification of Defects	<p>The period for Defect Notification is 60 Days from Taking Over.</p>
	10.4	Retention	<p>The amount of retention is 10% of certified Work done. The maximum amount of retention is 5% of Initial Contract Price.</p>
	10.12	Advance Payment	<p>Upon the payment of the advance payment is full the Employer shall return the original of the advance payment guarantee to the Contractor.</p>
	13.1 (c)	Insurance, third party	<p>Minimum amount for the third party insurance is Rupees 100,000.00 per event.</p>
	13.1	Insurance for Contractor's Personnel	<p>Minimum amount for Insurance for Employer and Contractor's Personnel is Rupees 100,000.00 per event.</p>
33.	1.1.11	Adjudicator	<p>Fees and types of reimbursable expenses to be paid to the Adjudicator shall be on a case basis and shall be shared by the Contractor and Employer.</p>

## Appendix to the Conditions of Contract

### Conditions of Contract Clause

Time within  
which  
payment is  
to be made

10(1)

Upon submission of the generated high-resolution geospatial datasets including a Digital Elevation Model (DEM), Digital Surface Model (DSM), a high-resolution orthophoto of the project area and all other deliverables specified in the Specifications in the prescribed soft copy formats, sixty percent (60%) of the Contract Sum shall be released. This payment will be made after the submitted data and documents are reviewed and verified within two (02) weeks, provided that no major errors, inaccuracies, or non-conformities are identified during the scrutiny process.

The remaining forty percent (40%) of the Contract Sum shall be paid upon submission of the finalized and corrected deliverables, with a certification from a Registered Licensed Surveyor in Sri Lanka Land Survey Council, and all associated outputs fully complying with the requirements stipulated in the Specifications.

**SECTION - 6**  
**SPECIFICATIONS**

Read Only

# **Specifications for the LiDAR Drone Survey Works for Preparation of Digital Elevation Model (DEM), Digital Surface Model (DSM) and High-Resolution Orthophoto for Vavuniya Area, Sri Lanka.**

## **Background**

The Government of Sri Lanka is undertaking initiatives to strengthen urban infrastructure resilience and improve storm water drainage systems in vulnerable urban areas. Vavuniya City in the Northern Province have experienced drainage challenges due to low terrain gradients, rapid urbanization, and limited drainage infrastructure capacity.

In order to support the planning and design of improved storm water drainage infrastructure, accurate and high-resolution terrain data are required. Currently available topographic datasets do not provide the level of spatial resolution and vertical accuracy required for detailed hydrological and hydraulic modelling.

Accordingly, under this Contract it is required to conduct a LiDAR-based aerial survey covering approximately 10 km<sup>2</sup> in the Vavuniya area. The survey will generate high-resolution geospatial datasets including a Digital Elevation Model (DEM), Digital Surface Model (DSM), and a high-resolution orthophoto. The area identified for the survey is depicted under Section 8 - Drawings.

Following details are to be obtained under this Contract.

### **1. Ground Control Points Network**

- Minimum three (3) or more Ground Control Points, evenly distributed within the project area, shall be established within the specified area of survey, with horizontal accuracy <15mm and vertical accuracy <30mm, using GNSS Static Surveying and high accuracy equipment as prescribed by Survey Department Regulations and the Elevations shall be transferred from a Primary Bench Mark established by the Survey Department of Sri Lanka.
- Ground Control Point Monuments shall be established as per Survey Department Regulations.
- Static processing reports with network adjustment details and level line details with adjustment report shall be submitted to the Employer for approval.

### **2. Digital Elevation Model (DEM)**

- Digital Elevation Model (DEM) of the project area in Vavuniya with a vertical accuracy less than 10cm. Horizontal resolution should be at least 100cm or less.
- Verification on achieving the above vertical accuracy should be carried out by the Contractor and submitted to the Employer for review and approval.
- Raw LiDAR Point Cloud Data and LiDAR Imagery collected during the drone surveying shall be submitted to the Client for verification of the LiDAR survey works.

### 3. Digital Surface Model (DSM)

- Digital Surface Model (DSM) of the project area in Vavuniya with a vertical accuracy less than 15cm. Horizontal resolution should be at least 100cm or less.

### 4. High-Resolution 2D Orthophoto

- High-Resolution 2D Orthophoto of the project area, i.e. Vavuniya, with Ground Sampling Distance (GSD) less than 10cm.

#### Special Notes:

- All the geospatial data shall be referenced to the **SLD99 (EPSG:5235) Projected Coordinate System**.
- All the elevations shall be referenced to **Mean Sea Level (MSL)**.
- All the surveys shall be conducted using high-precision GNSS equipment.
- **The final products, DEM and DSM, shall bear a certification from a Registered Licensed Surveyor in the Sri Lanka Land Survey Council.**
- The Contractor shall provide a detailed survey implementation plan, including but not limited to, pertaining to the followings prior to the commencement of the field works.
  - Flight planning
  - Sensor specifications
  - Data acquisition parameters
  - Ground control requirements
  - Quality assurance procedures
- All the above data shall be stored in an external hard drive with suitable storage capacity and submitted to the Employer.
- All the required authorization for Drone operations shall be obtained by the Contractor from relevant authorities prior to commence such operations. The Employer will provide required supporting documents for the above process upon the request from the Contractor.
- No transport and accommodation facilities or any other equipment will be provided by the Employer.

**SECTION - 7**  
**BILL OF QUANTITIES**

Read Only

**LIDAR DRONE SURVEY WORKS AND PREPARATION OF  
DIGITAL ELEVATION MODEL (DEM), DIGITAL SURFACE MODEL (DSM)  
AND HIGH-RESOLUTION 2D ORTHOPHOTO OF VAVUNIYA AREA.**

**BILL OF QUANTITIES**

Note 1 : The bidder shall read the entire technical specification together with Bill of Quantities (BOQ) before pricing.

Note 2 : Any preliminary items which are not specified in BOQ shall be included into the rates of items in BOQ.

Note 3 : Any other associated works, required devices/software/accessories, etc. in order to complete the given scope of works under given specifications shall be included to the rates of items in BOQ

Note 4 : Do not carry the VAT component to the Form of Bid.

Item	Description	Unit	Qty	Rate	Amount (Rs.)
1.	Establishment of Ground Control Points Network within the project area.	lump sum	1		
2.	<u>Digital Elevation Model (DEM)</u> Capturing high-resolution LiDAR data of the project area and preparation of a DEM with vertical accuracy $\leq 10\text{cm}$ .	lump sum	1		
3.	<u>Digital Surface Model (DSM)</u> Capturing high-resolution LiDAR data of the project area and preparation of a DSM with vertical accuracy $\leq 15\text{cm}$ .	lump sum	1		
4.	<u>High-Resolution 2D Orthophoto</u> Capturing a high-resolution 2D orthophoto of the project area with GSD $< 10\text{cm}$ .	lump sum	1		
<b>Sub Total (Rs.)</b>					
Add 10% for Contingencies					
<b>Total Bidding Price (Rs.)</b>					
VAT 18% (Reg. No.....)					
<b>Grand Total (Rs.)</b>					

Total (to be carried to Form of Bid) in words:

Sri Lankan Rupees .....

**Authorized person of the Bidder**

Signature : .....

Name : .....

Address : .....

NIC No. : .....

Date : .....

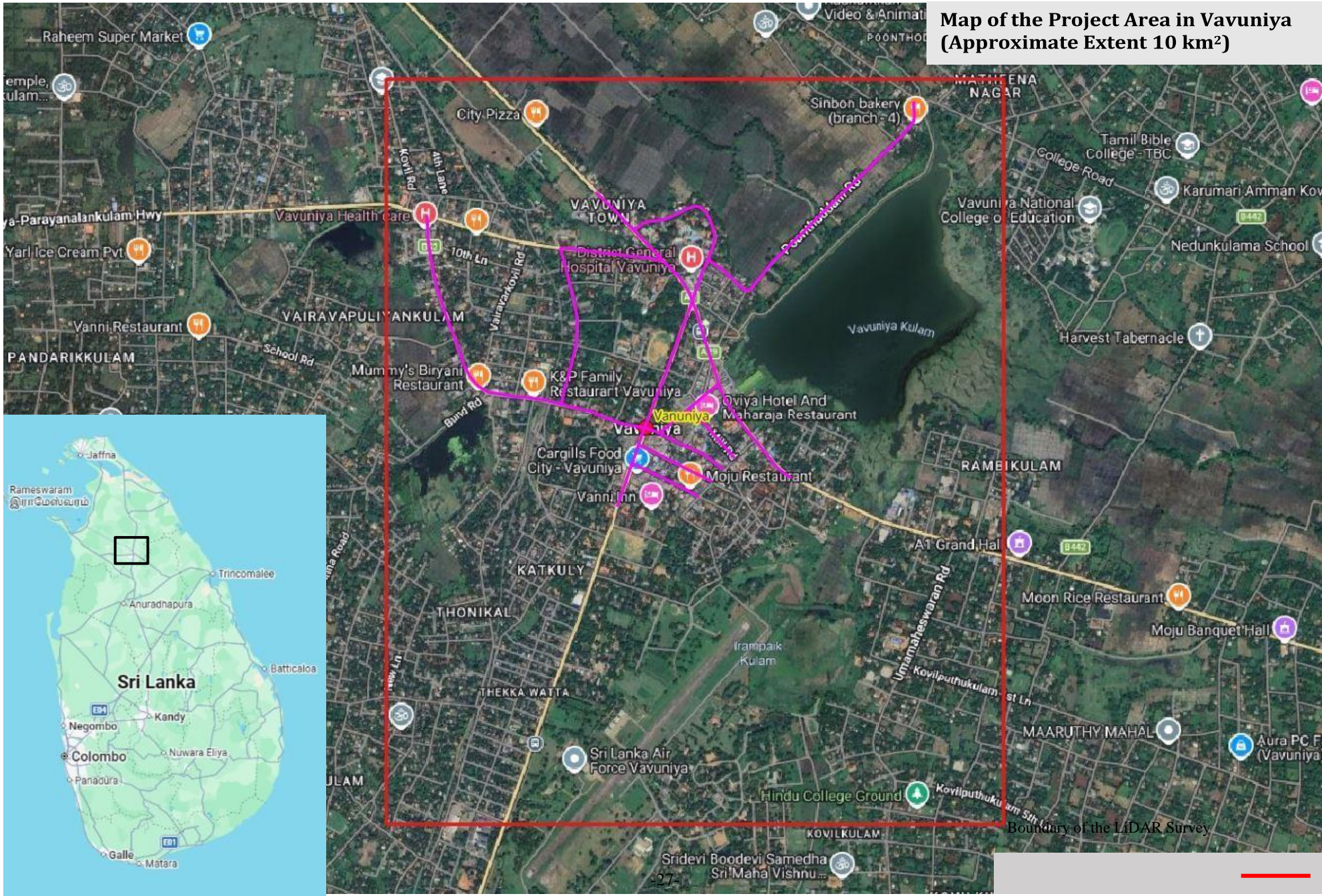
Common Seal

**SECTION - 8**

**DRAWINGS**

Read Only

**Map of the Project Area in Vavuniya (Approximate Extent 10 km<sup>2</sup>)**



## SECTION - 9

### STANDARD FORMS [BID]

#### *Notes on Standard Forms:*

- *Bidders shall submit the completed Form of Bid Security as appropriate in compliance with the requirements of the bidding documents.*
- *Bidders should not complete the Form of Agreement at the time of preparation of bids.*
- *The successful bidder will be required to sign the Form of Agreement, after the award of the contract.*
- *Any corrections or modifications to the accepted bid resulting from arithmetic corrections, acceptable deviations, or quantity variations in accordance with the requirements of the bidding documents should be incorporated into the Agreement.*
- *The Form of Performance Security, Form of Advance Payment Security and Form of Retention Money Guarantee should not be completed by the bidders at the time of submission of bids.*
- *The successful bidder will be required to provide these securities in compliance with the requirements herein or as acceptable to the Employer.*

## FORM OF BID SECURITY

*[This Guarantee form shall be filled in accordance with the instructions indicated in brackets]*

.....  
*[insert issuing agency's name, address of issuing branch or office]-*

**Beneficiary: General Manager, Sri Lanka Land Development Corporation**

Date:.....*[insert (by issuing agency) date]*

BID GUARANTEE No.....*[insert (by issuing agency) number]*

We have been informed that.....*[insert (by issuing agency) name of the bidder]* (hereinafter called "the bidder") has submitted to you its bid dated .....*[insert (by issuing agency) date]* (hereinafter called "the Bid") for the execution of **Lidar Drone Survey Works and Preparation of Digital Elevation Model (DEM), Digital Surface Model (DSM) and High-Resolution 2D Orthophoto of Vavuniya Area** under Invitation for Bids No. **S/168/26** ("the IFB").

Furthermore, we understand that, according to your conditions, Bids must be supported by a Bid Guarantee.

At the request of the bidder, we..... *[insert name of issuing agency]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of ..... *[insert amount in figures]* ..... *[insert amount in words]* upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder:

- a) has withdrawn its Bid during the period of bid validity specified; or
- b) does not accept the correction of errors in accordance with the Instructions to Bidders (hereinafter "the ITB"); or
- c) having been notified of the acceptance of its Bid by the Employer during the period of bid validity, (i) fails or refuses to execute the Contract Form, if required, or (ii) fails or refuses to furnish the performance Security, in accordance with the ITB.

This Guarantee shall expire: (a) if the bidder is the successful bidder, upon our receipt of copies of the Contract signed by the bidder and of the performance security issued to you by the bidder; or (b) if the bidder is not the successful bidder, upon the earlier of the successful bidder furnishing the performance security, otherwise it will remain in force up to.....(insert date<sup>22</sup>)

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

.....  
*[signature(s) of authorized representative (s)]*

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<sup>22</sup> Insert date in accordance with Sub-Clause 16 of Instructions to Bidders.

### Check List for Bidders

Bidders are advised to fill the following table,

ITEM	ITB Clause	YES (tick)	REFERENCE
<b>Form of Bid</b>			
Addressed to the Employer?	18		
Completed?	18		
Signed by Authorized Person?	18		
<b>Bid Securing Declaration Form (if required)</b>			
Properly filled and signed	16		
<b>Bid Security (if required)</b>			
Addressed to the Employer?	16		
Format as required?	16		
Issuing Agency as specified?	16		
Amount as requested?	16		
Validity 28 days beyond the validity of Bid?	16		
<b>Declaration of Non-Collusion and Multiple Bids</b>			
Non-Collusion Declaration with required signatures?	NPC 1.5		
<b>Qualification Information</b>			
All relevant information completed?	4		
Signed?	4		
<b>Addendum</b>			
Contents of the addendum (if any) taken into account?	10		
<b>BID package</b>			
All the documents given in ITB Clause 12 are enclosed in the original and copy?	12		
ITB Clause 19 followed before sealing the Bid package?	19		