



REQUEST FOR PROPOSALS

Title: 2022 Remote Sensing – LiDAR Data Acquisition

Reference No.: 1220-030-2022-010

FOR PROFESSIONAL SERVICES (CONSULTANT)

(General Services)

Issuance Date: March 17, 2022

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REQUEST FOR PROPOSALS

1. INTRODUCTION

1.1 Purpose

The purpose of this request for proposals (“**RFP**”) is to select a service provider (or service providers) to perform the services (“**Services**”) described in Schedule A.

1.2 Definitions

In this RFP the following definitions shall apply:

“**BC Bid Website**” means www.bcbid.gov.bc.ca;

“**City**” means the City of Surrey;

“**City Representative**” has the meaning set out in Section 2.5;

“**City Website**” means www.surrey.ca;

“**Closing Time**” has the meaning set out in Section 2.1;

“**Contract**” means a formal written contract between the City and a Preferred Proponent to undertake the Services, the preferred form of which is attached as Schedule B;

“**Evaluation Team**” means the team appointed by the City;

“**Information Meeting**” has the meaning set out in Section 2.2;

“**Preferred Proponent(s)**” means the Proponent(s) selected by the Evaluation Team to enter into negotiations for a Contract;

“**Proponent**” means an entity that submits a Proposal;

“**Proposal**” means a proposal submitted in response to this RFP;

“**RFP**” means this Request for Proposals;

“**Services**” has the meaning set out in Schedule A;

“**Site**” means the place or places where the Services are to be performed; and

“**Statement of Departures**” means Schedule C-1 to the form of Proposal attached as Schedule C.

2. INSTRUCTIONS TO PROPONENTS

2.1 Closing Time and Address for Proposal Delivery

The Proponent should submit the Proposal **electronically** in a single pdf file which must be delivered by email at: purchasing@surrey.ca

on or before the following date and time

Time: 3:00 p.m., local time

Date: March 30, 2022

(the “Closing Time”).

Confirmation of receipt of email will be issued. Proposals that cannot be opened or viewed may be rejected. A Proponent bears all risk that the City’s receiving computer equipment functions properly so that the Proposal is received by the Closing Time.

Note: The maximum file size the City can receive is 10Mb. If sending large email attachments, Proponents should phone [604-590-7274] to confirm receipt.

2.2 Information Meeting

An information meeting may be hosted by the City Representative to discuss the City’s requirements under this RFP (the “**Information Meeting**”). While attendance is at the discretion of Proponents, Proponents who do not attend will be deemed to have attended the Information Meeting and to have received all of the information given at the Information Meeting. At the time of issuance of this RFP a meeting has not been scheduled.

2.3 Late Proposals

Proposals received after the Closing Time will not be accepted or considered. A Proponent bears all risk that the City’s receiving computer equipment functions properly so that the Proposal is received by the Closing Time.

2.4 Amendments to Proposals

Proposals may be revised by written amendment, delivered to the email address set out in Section 2.1, at any time before the Closing Time but not after. An amendment should be signed by an authorized signatory of the Proponent in the same manner as provided by Section 3.2. E-mailed amendments are permitted, but such amendment should show only the change to the proposal price(s) and should not disclose the actual proposal price(s). A Proponent bears all risk that the City’s computer equipment functions properly so as to facilitate timely delivery of any amendment.

2.5 Inquiries

All inquiries related to this RFP should be directed in writing to the person named below (the “**City Representative**”). Information obtained from any person or source other than the City Representative may not be relied upon.

Name: Sunny Kaila, Manager, Procurement Services

E-mail: purchasing@surrey.ca

Reference: 1220-030-2022-010

Inquiries should be made no later than seven (7) business days before Closing Time. The City reserves the right not to respond to inquiries made within seven (7) business days of the Closing Time. Inquiries and responses will be recorded and may be distributed to all Proponents at the discretion of the City.

Proponents finding discrepancies or omissions in the Contract or RFP, or having doubts as to the meaning or intent of any provision, should immediately notify the City Representative. If the City determines that an amendment is required to this RFP, the City Representative will issue an addendum in accordance with Section 2.6. No oral conversation will affect or modify the terms of this RFP or may be relied upon by any Proponent.

2.6 Addenda

If the City determines that an amendment is required to this RFP, the City Representative will issue a written addendum by posting it on the BC Bid Website at www.bcbid.gov.bc.ca and the City Website at www.surrey.ca (collectively, the “**Websites**”), and upon posting, any addenda will form part of this RFP. It is the responsibility of Proponents to check the Websites for addenda. The only way this RFP may be added to, or amended in any way, is by a formal written addendum. No other communication, whether written or oral, from any person will affect or modify the terms of this RFP or may be relied upon by any Proponent. By delivery of a Proposal the Proponent is deemed to have received, accepted and understood the entire RFP, including any and all addenda.

2.7 Examination of Contract Documents and Site

Proponents will be deemed to have carefully examined the RFP, including all attached Schedules, the Contract and the Site (as applicable) prior to preparing and submitting a Proposal with respect to any and all facts which may influence a Proposal.

2.8 Opening of Proposals

The City intends to open Proposals in private but reserves the right to open Proposals in public at its sole discretion.

2.9 Status Inquiries

All inquiries related to the status of this RFP, including whether or not a Contract has been awarded, should be directed to the City Website and not to the City Representative.

3. PROPOSAL SUBMISSION FORM AND CONTENTS

3.1 Form of Proposal

Proponents should complete the form of Proposal attached as Schedule C, including Schedules C-1 to C-5. Proponents are encouraged to respond to the items listed in Schedules C-1 to C-5 in the order listed. Proponents are encouraged to use the forms provided and attach additional pages as necessary.

3.2 Signature

The legal name of the person or firm submitting the Proposal should be inserted in Schedule C. The Proposal should be signed by a person authorized to sign on behalf of the Proponent and include the following:

- (a) If the Proponent is a corporation then the full name of the corporation should be included, together with the names of authorized signatories. The Proposal should be executed by all of the authorized signatories or by one or more of them provided that a copy of the corporate resolution authorizing those persons to execute the Proposal on behalf of the corporation is submitted;
- (b) If the Proponent is a partnership or joint venture then the name of the partnership or joint venture and the name of each partner or joint venturer should be included, and each partner or joint venturer should sign personally (or, if one or more person(s) have signing authority for the partnership or joint venture, the partnership or joint venture should provide evidence to the satisfaction of the City that the person(s) signing have signing authority for the partnership or joint venture). If a partner or joint venturer is a corporation then such corporation should sign as indicated in subsection (a) above; or
- (c) If the Proponent is an individual, including a sole proprietorship, the name of the individual should be included.

4. EVALUATION AND SELECTION

4.1 Evaluation Team

The evaluation of Proposals will be undertaken on behalf of the City by an evaluation team appointed by the City (the “**Evaluation Team**”), which may consist of one or more persons. The Evaluation Team may consult with others including City staff members, third party consultants and references, as the Evaluation Team may in its discretion decide is required. The Evaluation Team will give a written recommendation for the selection of a Preferred Proponent or Preferred Proponents to the City.

4.2 Evaluation Criteria

The Evaluation Team will compare and evaluate all Proposals to determine each Proponent's strength and ability to provide the Services in order to determine the Proposal, or Proposals, which are most advantageous to the City, using the following criteria:

- (a) Experience, Reputation and Resources – The Proponent’s experience, reputation, and resources as applicable to the performance of the Services.

For this evaluation criterion The Evaluation Team will consider the Proponent's responses to items in Schedule C-2.

- (b) Technical – The Proponent's technical proposal for the performance of the Services as outlined in the Proponent's responses to items in Schedule C-3 and Schedule C-4.
- (c) Financial – The Proponent's financial proposal for the performance of the Services as described in the Proponent's response to Schedule C-5.
- (d) Statement of Departures - The Evaluation Team will consider the Proponent's response to Schedule C-1.

The Evaluation Team may apply the evaluation criteria on a comparative basis, evaluating the Proposals by comparing one Proponent's Proposal to another Proponent's Proposal. Specific weightings are not assigned to the individual evaluation criteria, but it is anticipated that the Proposal that offers the greatest overall value for money will be judged as most advantageous.

4.3 Discrepancies in Proponent's Financial Proposal

If there are any obvious discrepancies, errors or omissions in Schedule C-5 of a Proposal (Proponent's Financial Proposal), then the City shall be entitled to make obvious corrections, but only if, and to the extent, the corrections are apparent from the Proposal as submitted, and in particular:

- (a) if there is a discrepancy between a unit price and the extended total, then the unit prices shall be deemed to be correct, and corresponding corrections will be made to the extended totals;
- (b) if a unit price has been given but the corresponding extended total has been omitted, then the extended total will be calculated from the unit price and the estimated quantity; and
- (c) if an extended total has been given but the corresponding unit price has been omitted, then the unit price will be calculated from the extended total and the estimated quantity.

4.4 Litigation

In addition to any other provision of this RFP, the City may, in its absolute discretion, reject a Proposal if the Proponent, or any officer or director of the Proponent submitting the Proposal, is or has been engaged directly or indirectly in a legal action against the City, its elected or appointed officers, representatives or employees in relation to any matter, or if the City has initiated legal action against any officers or directors of the Proponent.

In determining whether or not to reject a Proposal under this Section, the City will consider whether the litigation is likely to affect the Proponent's ability to work with the City, its consultants and representatives and whether the City's experience with the Proponent indicates that there is a risk the City will incur increased staff and legal costs in the administration of the Agreement if it is awarded to the Proponent.

4.5 Additional Information

The Evaluation Team may, at its discretion, request clarifications or additional information from a Proponent with respect to any Proposal, and the Evaluation Team may make such requests to only selected Proponents. The Evaluation Team may consider such clarifications or additional information in evaluating a Proposal.

4.6 Interviews

The Evaluation Team may, at its discretion, invite some or all of the Proponents to appear before the Evaluation Team to provide clarifications of their Proposals. In such event, the Evaluation Team will be entitled to consider the answers received in evaluating Proposals.

4.7 Negotiation of Contract and Award

If the City selects a Preferred Proponent or Preferred Proponents, then it may:

- (a) enter into a Contract with the Preferred Proponent(s); or
- (b) enter into discussions with the Preferred Proponent(s) to attempt to finalize the terms of the Contract(s), including financial terms, and such discussions may include:
 - (1) clarification of any outstanding issues arising from the Preferred Proponent's Proposal;
 - (2) negotiation of amendments to the departures to the draft Contract, if any, proposed by the Preferred Proponent as set in Schedule C-1 to the Preferred Proponent's Proposal; and
 - (3) negotiation of amendments to the Preferred Proponent's price(s) as set out in Schedule C-5 to the Preferred Proponent's Proposal and/or scope of Services if:
 - (A) the Preferred Proponent's financial Proposal exceeds the City's approved budget, or
 - (B) the City reasonably concludes the Preferred Proponent's financial proposal includes a price(s) that is unbalanced, or
 - (C) a knowledgeable third party would judge that the Preferred Proponent's price(s) materially exceed a fair market price(s) for services similar to the Services offered by the Preferred Proponent as described in the Preferred Proponent's Proposal; or
- (c) if at any time the City reasonably forms the opinion that a mutually acceptable agreement is not likely to be reached within a reasonable time, give the Preferred Proponent(s) written notice to terminate discussions, in which event the City may then either open discussions with another Proponent or terminate this RFP and retain or obtain the Services in some other manner.

5. GENERAL CONDITIONS

5.1 No City Obligation

Notwithstanding any other provision in this RFP, this RFP is not a tender and does not commit the City in any way to select a Preferred Proponent, or to proceed to negotiations for a Contract, or to award any Contract, and the City reserves the right to at any time, and for any reason, reject all Proposals, and to terminate this RFP process without further explanation. The City is under no obligation to consider any Proposal, including the

Proposal with the lowest price, or to select as the Preferred Proponent the Proponent that submits the Proposals with the lowest price.

5.2 Proponent's Expenses

Proponents are solely responsible for their own expenses in preparing, and submitting Proposals, and for any meetings, negotiations or discussions with the City or its representatives and consultants, relating to or arising from this RFP. The City and its representatives, agents, consultants and advisors will not be liable to any Proponent for any claims, whether for costs, expenses, losses or damages, or loss of anticipated profits, or for any other matter whatsoever, incurred by the Proponent in preparing and submitting a Proposal, or participating in negotiations for a Contract, or other activity related to or arising out of this RFP.

5.3 No Contract

By submitting a Proposal and participating in the process as outlined in this RFP, Proponents expressly agree that no contract of any kind is formed under, or arises from this RFP, prior to the signing of a formal written Contract.

5.4 Conflict of Interest

A Proponent shall disclose in its Proposal any actual or potential conflicts of interest and existing business relationships it may have with the City, its elected or appointed officials or employees. The City may rely on such disclosure.

5.5 Solicitation of Council Members, City Staff and City Consultants

Proponents and their agents will not contact any member of the City Council, City staff or City consultants with respect to this RFP, other than the City Representative named in section 2.5, at any time prior to the award of a contract or the cancellation of this RFP and which could be viewed as one Proponent attempting to seek an unfair advantage over other Proponents.

5.6 Confidentiality

All submissions become the property of the City and will not be returned to the Proponent. All submissions will be held in confidence by the City unless otherwise required by law. Proponents should be aware the City is a "public body" defined by and subject to the *Freedom of Information and Protection of Privacy Act* of British Columbia.

5.7 No Claims

Each Proponent, by submitting a Proposal, irrevocably:

- (a) agrees that it will not bring any claim, demand, action, cause of action, suit or proceeding, whether arising in contract, tort (including negligence) or otherwise (a "**Claim**") against the City or any of its employees, directors, officers, advisors or representatives, or any one of them, for any costs, damages or other compensation for any matter relating directly or indirectly to this RFP (including in the event that the City rejects or disqualifies or for any other reason fails to accept a Proposal,

accepts a non-compliant Proposal or otherwise breaches, or fundamentally breaches, the terms of this RFP or any duties arising from this RFP; and

- (b) waives any Claim against the City and its employees, directors, officers, advisors or representatives, or any one of them, for any compensation of whatsoever nature or kind, including for loss of anticipated profits, loss of opportunity, indirect, incidental or consequential damages or losses if no contract is entered into for the Services between the Proponent and the City for any reason whatsoever, including in the event that the City rejects or disqualifies or for any other reason fails to accept a Proposal, accepts a non-compliant Proposal or otherwise breaches, or fundamentally breaches, the terms of this RFP or any duties arising from this RFP.

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SCHEDULE A - SCOPE OF SERVICES

PROJECT TITLE: 2022 REMOTE SENSING – LiDAR DATA ACQUISITION

1. INTRODUCTION

The City of Surrey (the “City”) is inviting Proposals from highly qualified firms for the acquisition, development, and delivery of LiDAR Data Acquisition.

The successful Proponent should provide everything needed to meet all the requirements including, without limitation, any and all labour, materials, equipment, tools, supplies, and transportation to faithfully perform and provide the Services.

2. REQUIREMENTS

The requirements for remote sensing data acquisition and processing, include but not limited to the specifications listed below.

2.1 Technical Specifications

To ensure compatibility with Provincial requirements for flood plain mapping, the minimum specification for the City of Surrey LiDAR data acquisition and processing will be per Appendix D of the Ministry of Forests, Lands & Natural Resource Operations - Coastal Flood Plain Mapping Guidelines and Specifications - Final Report, June 2011(herein after referred to as “Provincial Specifications”):

http://www.env.gov.bc.ca/wsd/public_safety/flood/pdfs_word/coastal_floodplain_mapping-2011.pdf

The required mandatory accuracy will be to support 1:2000 maps depicting 0.36 m vertical contour lines for floodplain mapping, in accordance with the Provincial Specifications. For other applications, the City intends to publish primary contour every meter, with secondary contour intervals at a minimum of 0.5 m.

These specifications are largely based on the following documents and as such, invitees should be familiar with these as well.

- FEMA LiDAR Specifications for Flood Hazard Mapping, Appendix 4B (2010); and
- Ministry of Forests, Lands, Natural Resources Operations and Rural Development GeoBC, 2021. “Specifications for Airborne LiDAR for the Province of British Columbia”.

https://www2.gov.bc.ca/assets/gov/data/geographic/digital-imagery/geobc_lidar_specifications_v51.pdf

Where the technical specifications that follow go beyond the Provincial Specifications, the Proponents must meet the specifications contained in this scope of work specified in this RFP.

2.2 Geodetic Control

The Provincial Specifications refer to the utilization of BCACS control for GPS base stations. In the Vancouver area this control is defined by the Metro Vancouver High

Precision Network (HPN), and the BCACS^m Metro Vancouver Real-Time GPS base network service.

<https://www2.gov.bc.ca/gov/content/data/geographic-data-services/geo-spatial-referencing/bcacs>

Metro Vancouver HPN control points and/or the Metro Vancouver BCACS^m base stations will be used for differential GPS processing and monitoring of LiDAR navigation data.

Coordinate System:

Projection: UTM Zone 10 (Central Meridian 123 West)
Hz Datum: NAD 83 (CSRS) 4.0.0.BC.1.GVRD
Vertical Datum: CGVD28GVRD
Geoid Model: Metro Vancouver Geoid (HTMVBC00.byn)

<https://www2.gov.bc.ca/gov/content/data/geographic-data-services/geo-spatial-referencing/geoid-model-data>

Access to the above datums shall be through the Metro Vancouver HPN network, utilizing dual frequency geodetic GPS receivers.

3. SCOPE OF SERVICES

3.1 Mandatory Data Collection

- (a) The average cross-track and along-track spacing of laser pulses yielding valid ranges shall be no larger than 0.50 m, where a valid range is considered to be to the ground or to vegetation, buildings or structures on the ground. Mean density of the point cloud of valid ranges will be 20 points per square meter or better (sum includes points obtained from overlap of flight lines).
 - (a-1) Optional alternative: Propose increase level of point cloud density and associated costs as separate line item above and beyond proposed costs for 20pts per square meter.
- (b) The cross-track and along-track spacing at the 90% frequency of occurrence of laser pulses yielding valid ranges shall be no larger than 2.5 m, except where caused by: water bodies, or areas of low near infra-red (NIR) reflectivity. Minimum of 4 cross strips will be required for quality control within the City of Surrey.
- (c) Data collection will not be conducted:
 - (1) while there is snow cover on the ground;
 - (2) during inclement weather conditions that would significantly diminish the quality of the data such that the data accuracy requirements cannot not be achieved; and,
 - (3) during leaf-on.

- (d) Geodetic GPS Base Station locations shall be control points of the BCACS^m Metro Vancouver HPN network, or points tied to three or more of the Metro Vancouver BCACS^m base stations via static dual frequency GPS phase measurements. Base station height measurements will be determined either by using the Metro Vancouver geoid model in the GPS processing, or via closed loop differential leveling between base station locations, and existing Metro Vancouver HPN monuments. Accuracy of GPS Base station locations will be at a level consistent with the accuracy of the Metro Vancouver HPN, at the 95% confidence level. Data is available from the Metro Vancouver Real-Time BCACS^m network for post-processing. This data may be utilized for GPS processing but it is up to the proponent to confirm it's availability at flight times.
- (e) The maximum GPS baseline length shall not exceed 30 Km.
- (f) Absolute LiDAR point cloud accuracy will result in individual data points achieving the following:
 - (1) 0.18 meters vertically at the 95% confidence level on hard impervious surfaces (asphalt and concrete);
 - (2) 0.30 meters vertically at the 95% confidence level on pervious surfaces, or surfaces partially obscured by vegetation; and,
 - (3) 0.36 meters horizontally at the 95% confidence level.

(f-1) Optional alternative: Propose increase level of accuracy that could be provided by adjusting flight height and costs associated as separate line item above and beyond specified levels in item (f).

Absolute accuracy will be defined relative to the published HPN elevations (details available for download), with the RMSE reported as described in the QA/QC section.

3.2 Mandatory Data Processing

Processing procedures will ensure that all point products will be fully compliant with LAS v.1.3 format or newer. Proponents should review the LAS specifications at:

<http://www.asprs.org/Committee-General/LASer-LAS-File-Format-Exchange-Activities.html>

- (a) GPS times are to be recorded as adjusted GPS Time, at a sufficient precision to allow unique timestamps for each return. Adjusted GPS time is defined as Standard (or satellite) GPS time minus 1×10^9 .
- (b) Long swaths (those which result in a LAS file larger than 2GB) should be split into segments no greater than 2GB. Each segment will thenceforth be regarded as a unique swath and shall be assigned a unique File Source ID. Other swath segmentation may be acceptable, with prior approval. The processing report shall include detailed information on swath segmentation sufficient to allow reconstruction of the original swaths if needed.
- (c) Each swath shall be assigned a unique File Source ID. The Point Source ID field for each point within each swath file shall be set equal to the File Source ID.

- (d) Point Families (multiple return “children” of a single “parent” pulse) shall be maintained intact through all processing prior to tiling. Multiple returns from a single pulse shall be stored in sequential (collected) order.
 - (e) All collected swaths are to be delivered as part of the “Raw Data Deliverable”. Including calibration swaths and cross-ties. All collected points are to be delivered. Calibration swath data is not to be included in product generation. Extraneous data outside of the buffered project area (aircraft turns, transit between the collection area and airport, transit between fill-in areas, etc.), may be permanently removed.
 - (f) Outliers, blunders, noise points, geometrically unreliable points near the extreme edge of the swath, and other points deemed unusable are to be identified using the “Withheld” flag, as defined in the LAS specification.
 - (1) This applies primarily to points which are identified during pre-processing or through automated post-processing routines; and,
 - (2) “Noise Points” identified during Classification and Quality Assurance/Quality Control (QA/QC) are to be assigned the standard LAS classification value (class value=7), regardless of whether the noise is “low” or “high” relative to the ground surface.
 - (g) Those points are not to be used in any point density verification.
 - (h) A single non-overlapping tiling scheme will be established and agreed upon by the data producer and the City prior to collection. This scheme will be used for all tiled deliverables.
 - (1) Tiles must be sized using the same units as the coordinate system of the data; and,
 - (2) Tiled deliverables shall conform to the tiling scheme, without added overlap.
- Tiled deliverables shall edge-match seamlessly and without gaps in both horizontal and vertical DEM post spacing will be 1 meter.

3.3 Data Processing

The primary objective of this project is to acquire remote sensing data of the City of Surrey.

LiDAR Point Cloud Classification

Using the raw 3D LiDAR point cloud (assuming min 20 pts/m² nominal point spacing) perform classification (tiled deliverable in LAS format) for the following point types.

Classification of point cloud to include:

- (a) Bare-earth
- (b) Low vegetation (height less than 2m)
- (c) High vegetation (height greater than 2m)
- (d) Water
- (e) Buildings
- (f) Other

- (g) Noise (noise points, blunders, outliers, etc.).

In addition to the hard and soft surface mandatory QA/QC described in a subsequent section, as part of the optional LiDAR Point Classification, the Consultant shall evenly distribute a minimum of 20 sample points to evaluate and report on the accuracy throughout the project area for each classification described below and not group the sample points in a small subarea:

- (a) Bare-earth and low grass
- (b) Low vegetation
- (c) High vegetation
- (d) Buildings

4. MANDATORY QUALITY CONTROL/QUALITY ASSURANCE (QC/QA)

QC/QA of the LiDAR-derived data, demonstrating that the technical specifications are met, is primarily the responsibility of the Consultant. The City of Surrey, or its designee may perform additional QC/QA testing. The Consultant must field verify the vertical accuracy of the ground surface DEM to ensure that the RMSE requirement is satisfied for all major ground cover categories that predominate within the project area. Vertical accuracy of each surface type will be verified by establishing 20 checkpoints for each of the two surface types described below, with at least one checkpoint falling within each quadrant of the City. Specifically, a distribution of the following is required:

- (a) Hard surface: 20 (must include representative samples from concrete, asphalt, compacted gravel, cast iron surface); and,
- (b) Soft surface: 20 (must include representative samples from areas of short grass such as sports fields, and long grass such as fallow fields).

The Consultant shall also ensure that the airborne data was acquired for the sample points during times of representative PDOP conditions and not limited only to times of best PDOP conditions.

The reported RMSE values will be per the format outlined in the Provincial Specification.

5. PRE-FLIGHT DELIVERABLES

Prior to data collection, the Consultant must submit:

- (a) A map showing the study area boundaries and planned flight path, at a scale of 1:50,000 or larger;
- (b) Documentation specifying the laser system and IMU to be used (manufacturer, model and specifications);
- (c) Map shall identify which GPS ground control points are used as base stations on particular flight paths and areas;
- (d) Data sheets documenting vertical & horizontal accuracy of selected GPS base points;
- (e) Documentation specifying altitude, airspeed, scan angle, scan rate, LiDAR pulse rates, receiver return mode, and other flight and equipment information deemed appropriate;
- (f) A plot of PDOP as a function of time during the data collection period indicating times when data will not be acquired due to high PDOP; and
- (g) Documentation detailing the agreed upon tiling scheme, including ESRI shapefiles index map.

6. POST-FLIGHT DELIVERABLES

All x and y position in meters and expressed as Easting and Northing on the project mapping plane (UTM Zone 10 (Central Meridian 123 West) NAD 83 (CSRS) 4.0.0.BC.1.GVRD), and z reported in meters as both ellipsoidal (WGS-84) and orthometric (CVD28GVRD) elevations derived using the Metro Vancouver Geoid (HTMVBC00.byn) <https://www2.gov.bc.ca/gov/content/data/geographic-data-services/geo-spatial-referencing/geoid-model-data>.

The Consultant must submit:

- (a) Raw Point Cloud of all acquired laser returns with time stamp (GPS time plus date and local time of acquisition indicated for each laser shot), x and y position in meters Easting and Northing on the project mapping plane (UTM Zone 10 (Central Meridian 123 West) NAD 83 (CSRS) 4.0.0.BC.1.GVRD), and z reported in meters as both ellipsoidal (WGS-84) and orthometric (CVD28GVRD) elevations derived using the Metro Vancouver Geoid (HTMVBC00.byn) <https://www2.gov.bc.ca/gov/content/data/geographic-data-services/geo-spatial-referencing/geoid-model-data>. LAS v1.3 compliant. Delivered by swath. 1 file per swath, 1 swath per file, files size not to exceed 2GB;
- (b) Classified Point Cloud of laser returns identified to be returns from the surfaces described, with time-stamp, to the same datum noted previously. Tiled delivery, without overlap;
- (c) 0.5m Digital Elevation Model (DEM);
- (d) 0.5m Digital Surface Model (DSM);
- (e) 25cm laser intensity greyscale imagery;
- (f) Contour spatial vector data set, 1m primary contours with .5m secondary contours
- (g) Time-stamped GPS aircraft x,y,z trajectory, and with quality metrics such as: PDOP and estimated RMS error of each GPS epoch;
- (h) Void Area Map depicting areas where a 1st return LiDAR data point does not exist for an area greater than 256 m², with or without water features at the discretion of the Consultant;
- (i) Return energy amplitude for all acquired laser shots and laser head temperature, included with data in deliverable (1) and (2) above. An image gridded at 2 meters Easting and Northing, showing the return energy amplitude derived using TIN processing;
- (j) Cross-track scan angle for all acquired laser shots, included with data in deliverables (1) and (2); and,
- (k) Final reports documenting:
 - (1) system calibration;
 - (2) instrument acquisition parameters;
 - (3) GPS ground control and LiDAR test points (including: station descriptions, and digital photographs with equipment set-up and station number identified);
 - (4) GPS network adjustment report;
 - (5) data processing procedures;
 - (6) validation of data quality, demonstrating project specifications have been met;
 - (7) all pre-flight deliverables; and,
 - (8) weather conditions, flight dates and start/end times.

7. DELIVERY FORMAT

The following specifications shall apply to all data deliveries

- (a) Digital Media: Hard drive;
- (b) Digital Media Format: ASCII format of bare-earth classified X,Y,Z LiDAR points. LAS format for all other point cloud datasets;
- (c) ESRI vector or raster format as applicable to all other spatial datasets; and,
- (d) Transmittal: Shall include listing of all file names and applicable project area.

As the rightful owner of the dataset, the City reserves the right to distribute the data without restriction. The Consultant will not be restricted from distributing the data to others.

8. SCHEDULE

Field data acquisition must be completed prior to leaf-on conditions. Based on written confirmation of award from the City by the following schedule is to be followed:

- (a) Pre flight deliverables to be submitted no later than two weeks following contract signed date; and,
- (b) Post-flight deliverables to be delivered two months after data capture.

In addition to specified pre-flight deliverables, the Consultant must provide a proposed flight schedule in writing (email is sufficient) at least 24 hours prior to commencement of Services. The City will then promptly approve or reject the proposed flight time. Should the flight take place without prior written consent by the City, the City reserves the right to cancel the contract without cause and without compensation to the Consultant.

The Consultant will assume all risk and liability for producing digital orthophotos, which meet the City's requirements, regardless of whether the flight time was approved by the City. That is, the City will not accept nor pay for substandard product due to poor weather or tree bloom conditions. The Consultant reserves the right and is responsible for cancelling a scheduled flight due to poor weather or bloom conditions. In no case will the target completion date be extended without the prior written approval of the City.

9. REFERENCE DATA

The following table is a list of the additional data available to develop your quote.

| | |
|----------------------|--|
| Surrey City Boundary | Depicts extent of City of Surrey boundary |
| LiDAR Extent Tiles | Depicts the extent of area to be delivered for LiDAR |

Surrey City Boundary: <http://data.surrey.ca/dataset/surrey-city-boundary>

LiDAR Extent Tiles: <http://data.surrey.ca/dataset/LiDAR-extent-tiles>

[END OF PAGE]

SCHEDULE B – DRAFT CONTRACT



PROFESSIONAL SERVICES AGREEMENT

Title: 2022 Remote Sensing – LiDAR Data Acquisition

Reference No.: 1220-030-2022-010

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2022 Remote Sensing – LiDAR Data Acquisition

THIS AGREEMENT is dated for reference this ____ day of _____, 202_.

AGREEMENT No.: 1220-030-2022-010

BETWEEN:

CITY OF SURREY
13450 – 104th Avenue
Surrey, British Columbia, V3T 1V8, Canada
(the “**City**”)

AND:

( ***Insert Full Legal Name of Consultant***)

(the “**Consultant**”)

WHEREAS the City wishes to engage the Consultant to provide the Services and the Consultant agrees to provide the Services.

2022 Remote Sensing – LiDAR Data Acquisition

THEREFORE, in consideration of the premises and payment of one (\$1.00) dollar and other good and valuable consideration paid by each of the parties to the other (the receipt and sufficiency of which each party hereby acknowledges), the parties hereby covenant and agree with each other as follows:

1. INTERPRETATION

1.1 Definitions

In this agreement the following definitions apply:

“**Disbursements**” has the meaning set out in Section 5.3;

“**Dispute**” has the meaning set out in Section 14.1;

“**Fees**” has the meaning set out in Section 5.1;

“**Indemnitees**” has the meaning set out in Section 7.1;

“**Invoice**” has the meaning set out in Section 5.2(a);

“**Services**” has the meaning set out in Section 2.1;

“**Term**” has the meaning set out in Section 2.5; and

“**Time Schedule**” has the meaning set out in Section 2.6.

1.2 Appendices

The following attached Appendices are a part of this agreement:

Appendix 1 – Scope of Services;
Appendix 2 – Fees and Payment;
Appendix 3 – Time Schedule;
Appendix 4 – Personnel and Sub-Contractors; and
Appendix 5 – Additional Services.

2. SERVICES

2.1 Services

The City hereby retains the Consultant to provide the consulting and professional services as described generally in Appendix 1, including anything and everything required to be done for the fulfillment and completion of this agreement (the “**Services**”).

2.2 Amendment of Services

The City may from time to time, by written notice to the Consultant, make changes in the scope of the Services. The Fees will be increased or decreased by written agreement of the City and the Consultant according to the rates set out in Appendix 2.

2.3 Additional Services

The Consultant will, if requested in writing by the City, perform additional services as may be listed in Appendix 5. The terms of this agreement will apply to any additional services, and the fees for additional services, and the time for the Consultant’s performance, will generally correspond to the fees and time of performance as described in Appendices 2 and 3. The Consultant will not provide any additional services in excess of the scope of services requested in writing by the City.

2.4 Standard of Care

The Consultant will perform the Services with that degree of care, skill and diligence normally provided by a qualified and experienced practitioner performing services similar to the Services, and on the understanding that the City is relying on the Consultant’s experience and expertise. The Consultant represents that it has the expertise, qualifications, resources and relevant experience to provide the Services.

2.5 Term

The Consultant will provide the Services commencing on (START DATE) and terminating on (END DATE) (the “**Term**”).

The parties may extend the Term by mutual agreement. If the Term is extended, the provisions of this agreement will remain in force except where amended in writing by the parties.

2.6 Time

The Consultant acknowledges that time is of the essence with respect to the provision of the Services and accordingly the Consultant will provide the Services within the performance or completion dates or time periods (the "**Time Schedule**") as set out in Appendix 3, or as otherwise agreed to in writing by the City and the Consultant. If at any time the Consultant discovers that the Time Schedule cannot be met it will immediately advise the City in writing and provide a revised Time Schedule.

2.7 Pandemic Restrictions

The parties acknowledge that this Agreement has been entered into during the on-going COVID-19 pandemic (the "Pandemic"). The Contractor advises that it is able to proceed with the Services under the Pandemic conditions and restrictions (collectively the "Pandemic Restrictions") as they exist as of the date of this Agreement. The parties acknowledge that Pandemic Conditions may change so as to cause unavoidable interruptions or interference to the Contractor's performance of the Services. The parties confirm:

- (a) notwithstanding the known existence of the Pandemic, Section 2.7 will apply to new Pandemic Restrictions, which arise after the date of this Agreement, whether anticipated or not, which reasonably interfere with the Contractor's performance of the Services, such that upon the Contractor giving required notice shall be entitled to an extension of the time to perform the Services, but shall not be entitled to reimbursement of any costs;
- (b) notwithstanding any such new Pandemic Restrictions, the Agreement will remain valid and in force, subject to the terms of the Agreement including, without limitation Section 12 (Workers' Compensation Board and Occupational Health and Safety); and
- (c) if new Pandemic Restrictions occur that cause or threaten interruption of the Services the Contractor will give the City immediate notice, and a written plan of the interim steps the Contractor will take, if any, during the interruption of the Services, and when Pandemic Restrictions permit, provide the City with a written plan for the resumption of the Services.

3. PERSONNEL AND SUB-CONTRACTORS

3.1 Qualified Personnel

The Consultant will provide only professional personnel who have the qualifications, experience and capabilities to perform the Services.

3.2 Listed Personnel and Sub-Contractors

The Consultant will perform the Services using the professional personnel and sub-contractors as may be listed in Appendix 4, and the Consultant will not remove any such listed personnel or sub-contractors from the Services without the prior written approval of the City.

3.3 Replacement of Personnel or Sub-Contractors

If the City reasonably objects to the performance, qualifications, experience or suitability of any of the Consultant's personnel or sub-contractors then the Consultant will, on written request from the City, replace such personnel or sub-contractors.

3.4 Sub-Contractors and Assignment

Except as provided for in Section 3.2, the Consultant will not engage any personnel or sub-contractors, or sub-contract or assign its obligations under this agreement, in whole or in part, without the prior written approval of the City.

3.5 Agreements with Sub-Contractors

The Consultant will preserve and protect the rights of the City with respect to any Services performed under sub-contract and incorporate the terms and conditions of this agreement into all sub-contracts as necessary to preserve the rights of the City under this agreement. The Consultant will be as fully responsible to the City for acts and omissions of sub-contractors and of persons directly or indirectly employed by them as for acts and omissions of persons directly employed by the Consultant.

4. LIMITED AUTHORITY

4.1 Agent of City

The Consultant is not, and this agreement does not render the Consultant an agent or employee of the City, and without limiting the above, the Consultant does not have authority to enter into any contract or reach any agreement on behalf of the City, except for the limited purposes as may be expressly set out in this agreement, or as necessary in order to perform the Services. The Consultant will make such lack of authority clear to all persons with whom the Consultant deals in the course of providing the Services. Every vehicle used by the Consultant in the course of performing the services shall identify the Consultant by name and telephone number.

4.2 Independent Contractor

The Consultant is an independent contractor. This agreement does not create the relationship of employer and employee, a partnership, or a joint venture. The City will not control or direct the details, means or process by which the Consultant performs the Services. The Consultant will determine the number of days and hours of work required to properly and completely perform the Services. The Consultant is primarily responsible for performance of the Services and may not delegate or assign any Services to any other person except as provided for in Section 3.4. The Consultant will be solely liable for the wages, fringe benefits, work schedules and work conditions of any partners, employees or sub-contractors.

5. FEES

5.1 Fees

The City will pay to the Consultant the fees as set out in Appendix 2 (the "**Fees**"). Payment by the City of the Fees and Disbursements will be full payment for the Services and the Consultant will not be entitled to receive any additional payment from the City.

5.2 Payment

Subject to any contrary provisions set out in this Agreement:

- (a) the Consultant will submit an invoice (the "**Invoice**") to the City requesting payment of the portion of the Fees and Disbursements relating to the Services provided. Each Invoice should be sent **electronically** to: surreyinvoices@surrey.ca and include the following information:
 - (1) an invoice number;
 - (2) the Consultant's name, address and telephone number;
 - (3) the City's reference number for the Services; P.O. # (to be advised)
 - (4) the names, charge-out rates and number of hours worked in the previous month of all employees of the Consultant and any sub-contractor(s) that has/have performed services during the previous month;
 - (5) the percentage of Services completed at the end of the previous month;
 - (6) the total budget for the Services and the amount of the budget expended to the date of the Invoice;
 - (7) taxes (if any);
 - (8) grand total of the Invoice;
- (b) the Consultant will on request from the City provide receipts and invoices for all Disbursements claimed;
- (c) if the City reasonably determines that any portion of an Invoice is not payable then the City will so advise the Consultant;
- (d) the City will pay the portion of an Invoice which the City determines is payable less any deductions for setoffs or holdbacks permitted by this Agreement including, without limitation, any amounts permitted to be held back on account of deficiencies, within 30 days of the receipt of the Invoice;
- (e) if the Consultant offers the City a cash discount for early payment, then the City may, at the City's sole discretion, pay the discounted portion of an Invoice; and
- (f) all Invoices shall be stated in, and all payments made in, Canadian dollars.

5.3 Disbursements

In addition to the Fees, the City will reimburse the Consultant for actual out-of-pocket costs and expenses ("**Disbursements**") as identified in Appendix 2 which the Consultant, and approved sub-contractors, incur in the performance of the Services, plus any additional Disbursements with the prior written approval of the City.

For greater certainty, costs of general management, non-technical supporting services and general overheads are deemed to be covered by the Fees and will not be subject to additional payment by the City.

5.4 Records

The Consultant will prepare and maintain proper records related to the Services, including records, receipts and invoices relating to Disbursements. On request from the City, the Consultant will make the records available open to audit examination by the City at any time during regular

business hours during the time the Consultant is providing the Services and for a period of six years after the Services are complete.

5.5 Non-Residents

If the Consultant is a non-resident of Canada and does not provide to the City a waiver of regulation letter, the City will withhold and remit to the appropriate governmental authority the greater of:

- (a) 15% of each payment due to the Consultant; or
- (b) the amount required under applicable tax legislation.

6. CITY RESPONSIBILITIES

6.1 City Information

The City will, in co-operation with the Consultant make efforts to make available to the Consultant information, surveys, and reports which the City has in its files and records that relate to the Services. The Consultant will review any such material upon which the Consultant intends to rely and take reasonable steps to determine if that information is complete or accurate. The Consultant will assume all risks that the information is complete and accurate, and the Consultant will advise the City in writing if in the Consultant's judgment the information is deficient or unreliable and undertake such new surveys and investigations as are necessary.

6.2 City Decisions

The City will in a timely manner make all decisions required under this agreement, examine documents submitted by the Consultant and respond to all requests for approval made by the Consultant pursuant to this agreement.

6.3 Notice of Defect

If the City observes or otherwise becomes aware of any fault or defect in the Services, it may notify the Consultant, but nothing in this agreement will be interpreted as giving the City the obligation to inspect or review the Consultant's performance of the Services.

7. INSURANCE AND DAMAGES

7.1 Indemnity

The Consultant will indemnify and save harmless the City and all of its elected and appointed officials, officers, employees, servants, representatives and agents (collectively the "**Indemnitees**"), from and against all claims, demands, causes of action, suits, losses, damages and costs, liabilities, expenses and judgments (including all actual legal costs) for damage to or destruction or loss of property, including loss of use, and injury to or death of any person or persons which any of the Indemnitees incur, suffer or are put to arising out of or in connection with any failure, breach or non-performance by the Consultant of any obligation of this agreement, or any wrongful or negligent act or omission of the Consultant or any employee or agent of the Consultant.

7.2 Survival of Indemnity

The indemnity described in Section 7.1 will survive the termination or completion of this agreement and, notwithstanding such termination or completion, will continue in full force and effect for the benefit of the Indemnitees.

7.3 Consultant's Insurance Policies

The Consultant will, without limiting its obligations or liabilities and at its own expense, provide and maintain throughout this agreement the following insurances in forms and amounts acceptable to the City from insurers licensed to conduct business in Canada:

- (a) commercial general liability insurance on an occurrence basis, in an amount not less than three million (\$3,000,000) dollars inclusive per occurrence against death, bodily injury and property damage arising directly or indirectly out of the work or operations of the Consultant, its employees and agents. The insurance will include cross liability and severability of interests such that the coverage shall apply in the same manner and to the same extent as though a separate policy had been issued to each insured. The insurance will include, but not be limited to: premises and operators' liability, broad form products and completed operations, owners and Consultants protective liability, blanket contractual, employees as additional insureds, broad form property damage, non-owned automobile, contingent employers liability, broad form loss of use, personal injury, and incidental medical malpractice. The City will be added as additional insured;
- (b) professional errors and omissions insurance in an amount not less two million (\$2,000,000) dollars insuring all professionals providing the Services from liability resulting from errors or omissions in the performance of the Services, with a 12 month maintenance period; and
- (c) automobile liability insurance on all vehicles owned, operated or licensed in the name of the Consultant in an amount not less than three million (\$3,000,000) dollars per occurrence for bodily injury, death and damage to property.

7.4 Insurance Requirements

The Consultant will provide the City with evidence of the required insurance prior to the commencement of this agreement. Such evidence will be in the form of a completed certificate of insurance acceptable to the City. The Consultant will, on request from the City, provide certified copies of all of the Consultant's insurance policies providing coverage relating to the Services, including without limitation any professional liability insurance policies. All required insurance will be endorsed to provide the City with thirty (30) days advance written notice of cancellation or material change restricting coverage. To the extent the City has an insurable interest, the builder's risk policy will have the City as first loss payee. The Consultant will be responsible for deductible amounts under the insurance policies. All of the Consultant's insurance policies will be primary and not require the sharing of any loss by the City or any insurer of the City.

7.5 Consultant Responsibilities

The Consultant acknowledges that any requirements by the City as to the amount of coverage under any policy of insurance will not constitute a representation by the City that the amount

required is adequate and the Consultant acknowledges and agrees that the Consultant is solely responsible for obtaining and maintaining policies of insurance in adequate amounts. The insurance policy coverage limits shall not be construed as relieving the Consultant from responsibility for any amounts which may exceed these limits, for which the Consultant may be legally liable.

7.6 Additional Insurance

The Consultant shall place and maintain, or cause any of its sub-contractors to place and maintain, such other insurance or amendments to the foregoing policies as the City may reasonably direct.

7.7 Waiver of Subrogation

The Consultant hereby waives all rights of recourse against the City for loss or damage to the Consultant's property.

8. TERMINATION

8.1 By the City

The City may at any time and for any reason by written notice to the Consultant terminate this agreement before the completion of all the Services, such notice to be determined by the City at its sole discretion. Upon receipt of such notice, the Consultant will perform no further Services other than the work which is reasonably required to terminate the Services and return the City's property to the City. Despite any other provision of this agreement, if the City terminates this agreement before the completion of all the Services, the City will pay to the Consultant all amounts owing under this agreement for Services provided by the Consultant up to and including the date of termination, plus reasonable termination costs in the amount as determined by the City in its sole discretion. Upon payment of such amounts no other or additional payment will be owed by the City to the Consultant, and, for certainty, no amount will be owing on account of lost profits relating to the portion of the Services not performed or other profit opportunities.

8.2 Termination for Cause

The City may terminate this agreement for cause as follows:

- (a) If the Consultant is adjudged bankrupt, or makes a general assignment for the benefit of creditors because of its insolvency, or if a receiver is appointed because of its insolvency, the City may, without prejudice to any other right or remedy the City may have, terminate this agreement by giving the Consultant or receiver or trustee in bankruptcy written notice; or
- (b) If the Consultant is in breach of any term or condition of this agreement, and such breach is not remedied to the reasonable satisfaction of the City within 5 days after delivery of written notice from the City to the Consultant, then the City may, without prejudice to any other right or remedy the City may have, terminate this agreement by giving the Consultant further written notice.

If the City terminates this agreement as provided by this Section, then the City may:

- (a) enter into contracts, as it in its sole discretion sees fit, with other persons to complete the Services;
- (b) withhold payment of any amount owing to the Consultant under this agreement for the performance of the Services;
- (c) set-off the total cost of completing the Services incurred by the City against any amounts owing to the Consultant under this agreement, and at the completion of the Services pay to the Consultant any balance remaining; and
- (d) if the total cost to complete the Services exceeds the amount owing to the Consultant, charge the Consultant the balance, which amount the Consultant will forthwith pay.

8.3 Curing Defaults

If the Consultant is in default of any of its obligations under this agreement, then the City may without terminating this agreement, upon 5 days written notice to the Consultant, remedy the default and set-off all costs and expenses of such remedy against any amounts owing to the Consultant. Nothing in this agreement will be interpreted or construed to mean that the City has any duty or obligation to remedy any default of the Consultant.

9. APPLICABLE LAWS, POLICIES, BUILDING CODES AND BY-LAWS

9.1 Applicable Laws and Policies

This agreement will be governed by and construed in accordance with the laws of the Province of British Columbia. The City and the Consultant accept the jurisdiction of the courts of British Columbia and agree that any action under this agreement be brought in such courts.

The Consultant shall comply with all applicable policies, procedures and instructions provided by the City.

9.2 Codes and By-Laws

The Consultant will provide the Services in full compliance with all applicable laws, building codes and regulations.

9.3 Interpretation of Codes

The Consultant will, as a qualified and experienced professional, interpret applicable codes, laws and regulations applicable to the performance of the Services. If an authority having jurisdiction imposes an interpretation which the Consultant could not reasonably have verified or foreseen prior to entering into this agreement, then the City will pay the additional costs, if any, of making alterations so as to conform to the required interpretation.

10. CONFIDENTIALITY AND DISCLOSURE OF INFORMATION

10.1 No Disclosure

Except as provided for by law or otherwise by this agreement, the Consultant will keep strictly confidential any information supplied to, obtained by, or which comes to the knowledge of the Consultant as a result of the performance of the Services and this agreement, and will not, without the prior express written consent of the City, publish, release, disclose or permit to be disclosed any such information to any person or corporation, either before, during or after termination of this agreement, except as reasonably required to complete the Services.

10.2 Freedom of Information and Protection of Privacy Act

The Consultant acknowledges that the City is subject to the *Freedom of Information and Protection of Privacy Act* of British Columbia and agrees to any disclosure of information by the City required by law.

10.3 Return of Property

The Consultant agrees to return to the City all of the City's property at the completion of this agreement, including any and all copies or originals of reports provided by the City.

11. USE OF WORK PRODUCT

The Consultant hereby sells, assigns and transfers to the City the right, title and interest required for the City to use and receive the benefit of all the reports, drawings, plans, designs, models, specifications, computer software, concepts, products, designs or processes or other such work product produced by or resulting from the Services rendered by the Consultant.

12. WORKERS' COMPENSATION BOARD AND OCCUPATIONAL HEALTH AND SAFETY

12.1 The Consultant agrees that it shall, at its own expense, procure and carry, or cause to be procured, carried and paid for, full Workers' Compensation Board coverage for itself and all workers, employees, servants and others engaged in or upon any work or service which is the subject of this agreement. The Consultant agrees that the City has the unfettered right to set off the amount of the unpaid premiums and assessments for the Workers' Compensation Board coverage against any monies owing by the City to the Consultant. The City will have the right to withhold payment under this agreement until the Workers' Compensation Board premiums, assessments or penalties in respect of the Services have been paid in full.

12.2 The Consultant will provide the City with the Consultant's Workers' Compensation Board registration number and a letter from the Workers' Compensation Board confirming that the Consultant is registered in good standing with the Workers' Compensation Board and that all assessments have been paid to the date thereof prior to the City having any obligations to pay monies under this agreement.

12.3 The Consultant agrees that it is the prime contractor for the Services as defined in the *Workers Compensation Act, R.S.B.C. 2019, c.1* as amended and will ensure compliance with the *Workers Compensation Act* and Regulations in respect of the workplace. Without limiting its responsibilities under the legislation, the Consultant will coordinate the activities of employers, workers and other persons at the workplace relating to occupational health and

safety. The Consultant will have a safety program in place that meets the requirements of the Workers' Compensation Board Occupational Health and Safety Regulation and the *Workers Compensation Act*. As prime contractor, the Consultant will be responsible for appointing a qualified coordinator for insuring the health and safety activities for the location of the Services. That person will be the person so identified in this agreement, and the Consultant will advise the City immediately in writing if the name or contact number of the qualified coordinator changes.

- 12.4 Without limiting the generality of any other indemnities granted by the Consultant in this agreement, the Consultant shall indemnify and save harmless the Indemnitees from and against all claims, demands, causes of action, suits, losses, damages, costs, liabilities, expenses, judgements, penalties and proceedings (including all actual legal costs) which any of the Indemnitees incur, suffer or are put to arising out of or in any way related to unpaid Workers' Compensation Board assessments owing from any person or corporation engaged in the performance of this agreement or arising out of or in any way related to the failure to observe safety rules, regulations and practices of the Workers' Compensation Board, including penalties levied by the Workers' Compensation Board.
- 12.5 The Consultant will ensure compliance with and conform to all health and safety laws, by-laws or regulations of the Province of British Columbia, including without limitation the *Workers Compensations Act* and Regulations pursuant thereto.
- 12.6 The City may, on twenty-four (24) hours written notice to the Consultant, install devices or rectify any conditions creating an immediate hazard existing that would be likely to result in injury to any person. However, in no case will the City be responsible to ascertaining or discovering, through inspections or review of the operations of the Consultant or otherwise, any deficiency or immediate hazard.

13. BUSINESS LICENSE

- 13.1 The Consultant will obtain and maintain throughout the term of this agreement a valid City of Surrey business license.

14. DISPUTE RESOLUTION

14.1 Dispute Resolution Procedures

The parties will make reasonable efforts to resolve any dispute, claim, or controversy arising out of this agreement or related to this agreement ("**Dispute**") using the dispute resolution procedures set out in this Section 14.

(a) Negotiation

The parties will make reasonable efforts to resolve any Dispute by amicable negotiations and will provide frank, candid and timely disclosure of all relevant facts, information and documents to facilitate negotiations.

(b) Mediation

If all or any portion of a Dispute cannot be resolved by good faith negotiations within 30 days, either party may by notice to the other party refer the matter to mediation. Within 7 days of delivery of the notice, the parties will mutually appoint a mediator. If

the parties fail to agree on the appointment of the mediator, then either party may apply to the British Columbia International Commercial Arbitration Centre for appointment of a mediator. The parties will continue to negotiate in good faith to resolve the Dispute with the assistance of the mediator. The place of mediation will be Surrey, British Columbia. Each party will equally bear the costs of the mediator and other out-of-pocket costs, and each party will bear its own costs of participating in the mediation.

(c) Litigation

If within 90 days of the request for mediation the Dispute is not settled, or if the mediator advises that there is no reasonable possibility of the parties reaching a negotiated resolution, then either party may without further notice commence litigation.

15. JURISDICTION AND COUNCIL NON-APPROPRIATION

- 15.1 Nothing in this agreement limits or abrogates, or will be deemed to limit or abrogate, the jurisdiction of the Council of the City in the exercise of its powers, rights or obligations under any public or private statute, regulation or by-law or other enactment.
- 15.2 The Consultant recognizes and agrees that the City cannot make financial commitments beyond the City's current fiscal year. The City will annually make bonafide requests for appropriation of sufficient funds to cover all payments covered by this agreement. If City Council does not appropriate funds, or appropriates insufficient funds, the City will notify the Consultant of its intention to terminate or reduce the services so affected within 30 days after the non-appropriation becomes final. Such termination shall take effect 30 days from the date of notification, shall not constitute an event of default and shall relieve the City, its officers and employees, from any responsibility or liability for the payment of any further amounts under this agreement.

16. GENERAL

16.1 Entire Agreement

This agreement, including the Appendices and any other documents expressly referred to in this agreement as being a part of this agreement, contains the entire agreement of the parties regarding the provision of the Services and no understandings or agreements, oral or otherwise, exist between the parties except as expressly set out in this agreement. This agreement supersedes and cancels all previous agreements between the parties relating to the provision of the Services.

16.2 Amendment

This agreement may be amended only by agreement in writing, signed by both parties.

16.3 Consultant Terms Rejected

In the event that the Consultant issues an invoice, packing slip, sales receipt, or any like document to the City, the City accepts the document on the express condition that any terms and conditions in it which constitute terms and conditions which are in addition to, or which establish conflicting terms and conditions to those set out in this agreement are expressly rejected by the City.

16.4 Survival of Obligations

All of the Consultant's obligations to perform the Services in a professional and proper manner will survive the termination or completion of this agreement.

16.5 Cumulative Remedies

The City's remedies under this agreement are cumulative and in addition to any right or remedy which may be available to the City at law or in equity.

16.6 Notices

Any notice, report or other document that either party may be required or may wish to give to the other should be in writing, unless otherwise provided for, and will be deemed to be validly given to and received by the addressee, if delivered personally, on the date of such personal delivery, if delivered by facsimile, on transmission, or if by mail, five calendar days after posting. The addresses for delivery will be as follows:

(a) The City:

City of Surrey, Surrey City Hall
 insert department/division/section name>
13450 – 104th Avenue, Surrey, B.C., V3T 1V8, Canada

Attention: **insert contact name**>
 insert title>

Business Fax No.: **insert**>

Business Email: **insert**>

(b) The Consultant (Contract Administrator):

 insert name and address>

Attention: **insert contact name**>
 insert title>

Business Fax No.: **insert**>

Business Email: **insert**>

16.7 Unenforceability

If any provision of this agreement is invalid or unenforceable, it will be severed from the agreement and will not affect the enforceability or validity of the remaining provisions of the agreement.

16.8 Headings

The headings in this agreement are inserted for convenience of reference only and will not form part of nor affect the interpretation of this agreement.

16.9 Singular, Plural and Gender

Wherever the singular, plural, masculine, feminine or neuter is used throughout this agreement the same will be construed as meaning the singular, plural, masculine, feminine, neuter or body corporate where the context so requires.

16.10 Waiver

No waiver by either party of any breach by the other party of any of its covenants, obligations and agreements will be a waiver of any subsequent breach or of any other covenant, obligation or agreement, nor will any forbearance to seek a remedy for any breach be a waiver of any rights and remedies with respect to such or any subsequent breach.

16.11 Signature

This agreement may be executed in one or more counterparts all of which when taken together will constitute one and the same agreement, and one or more of the counterparts may be delivered by fax or PDF email transmission.

16.12 Compliance with Covid-19 Policy

It is a material term of this agreement that the Consultant, and any personnel and subcontractors performing the Services who (a) will enter City facilities or (b) will be in close physical proximity to City staff outdoors, comply with the City's COVID 19 policy(ies) and requirements, including with respect to Consultant's personnel will be fully vaccinated against COVID-19 and require their personnel to provide proof of vaccination status in a form acceptable to the City prior to beginning work each day on-site. The Consultant will immediately remove any personnel or subcontractors who do not meet, maintain, or comply with any such polices and requirements.

The personal information collected will be held in confidence by the City and will be used only to monitor compliance with, and to administer, the City's vaccination policies. The City will collect this personal information under s. 26(c) of the Freedom of Information and Protection of Privacy Act.

16.13 Enurement

This agreement shall enure to the benefit of and be binding upon the respective successors and permitted assigns of the City and the Consultant.

IN WITNESS WHEREOF the parties hereto have executed this agreement on the day and year first above written.

CITY OF SURREY

I/We have the authority to bind the City.

(Signature of Authorized Signatory)

(Signature of Authorized Signatory)

(Print Name and Position of Authorized Signatory)

(Print Name and Position of Authorized Signatory)

 **INSERT FULL LEGAL NAME OF CONSULTANT]**

I/We have the authority to bind the Consultant.

(Signature of Authorized Signatory)

(Signature of Authorized Signatory)

(Print Name and Position of Authorized Signatory)

(Print Name and Position of Authorized Signatory)

(APPENDICES 1 THROUGH 5 WILL BE INSERTED LATER WHEN AN AGREEMENT IS ASSEMBLED FOR EXECUTION INCLUDING INFORMATION FROM THE RFP AND SUCCESSFUL PROPOSAL)

APPENDIX 1 – SCOPE OF SERVICES

APPENDIX 2 – FEES AND PAYMENT

APPENDIX 3 – TIME SCHEDULE

APPENDIX 4 – PERSONNEL AND SUB-CONTRACTORS

APPENDIX 5 – ADDITIONAL SERVICES

SCHEDULE C – FORM OF PROPOSAL

RFP Project Title: 2022 Remote Sensing – LiDAR Data Acquisition

RFP Reference No.: 1220-030-2022-010

Legal Name of Proponent: _____

Contact Person and Title: _____

Business Address: _____

Business Telephone: _____

Business Fax: _____

Business E-Mail Address: _____

TO:

City of Surrey

City Representative: Sunny Kaila, Manager, Procurement Services

E-mail for PDF Files: purchasing@surrey.ca

Dear Sir:

1.0 I/We, the undersigned duly authorized representative of the Proponent, having received and carefully reviewed all of the Proposal documents, including the RFP and any issued addenda posted on the City Website and BC Bid Website, and having full knowledge of the Site, and having fully informed ourselves as to the intent, difficulties, facilities and local conditions attendant to performing the Services, submit this Proposal in response to the RFP.

2.0 **I/We confirm** that the following schedules are attached to and form a part of this Proposal:

- Schedule C-1 – Statement of Departures;
- Schedule C-2 – Proponent’s Experience, Reputation and Resources;
- Schedule C-3 – Proponent’s Technical Proposal (Services);
- Schedule C-4 – Proponent’s Technical Proposal (Time Schedule); and
- Schedule C-5 – Proponent’s Financial Proposal.

3.0 **I/We confirm** that this proposal is accurate and true to best of my/our knowledge.

4.0 **I/We confirm** that, if I/we am/are awarded a contract, I/we will at all times be the “prime contractor” as provided by the *Worker’s Compensation Act (British Columbia)* with respect to the Services. I/we further confirm that if I/we become aware that another consultant at the place(s) of the Services has been designated as the “prime contractor”, I/we will notify the City immediately,

and I/we will indemnify and hold the City harmless against any claims, demands, losses, damages, costs, liabilities or expenses suffered by the City in connection with any failure to so notify the City.

This Proposal is submitted this **[day]** day of **[month]**, **[year]**.

I/We have the authority to bind the Proponent.

(Legal Name of Proponent)

(Signature of Authorized Signatory)

(Signature of Authorized Signatory)

(Print Name and Position of Authorized Signatory)

(Print Name and Position of Authorized Signatory)

SCHEDULE C-1 - STATEMENT OF DEPARTURES

1. I/We have reviewed the proposed Contract attached to the RFP as Schedule “B”. If requested by the City, I/we would be prepared to enter into that Contract, amended by the following departures (list, if any):

| Section | Requested Departure(s) / Alternative(s) |
|----------------|--|
| | |
| | |

2. The City of Surrey requires that the successful Proponent have the following in place **before commencing the Services**:

- (a) Workers’ Compensation Board coverage in good standing and further, if an “Owner Operator” is involved, personal operator protection (P.O.P.) will be provided, Workers' Compensation Registration Number _____;
- (b) Prime Contractor qualified coordinator is Name: _____ and Contact Number: _____;
- (c) Insurance coverage for the amounts required in the proposed agreement as a minimum, naming the City as additional insured and generally in compliance with the City’s sample insurance certificate form available on the City’s Website at www.surrey.ca search [Consultants Certificate of Insurance](#);
- (d) City of Surrey or Intermunicipal Business License: Number _____;
- (e) If the Consultant’s Services are subject to GST, the Consultant’s GST Number is _____; and
- (f) If the Consultant is a company, the company name indicated above is registered with the Registrar of Companies in the Province of British Columbia, Canada, Incorporation Number _____.

As of the date of this Proposal, we advise that we have the ability to meet all of the above requirements **except as follows** (list, if any):

| Section | Requested Departure(s) / Alternative(s) |
|----------------|--|
| | |
| | |

3. I/We offer the following alternates to improve the Services described in the RFP (list, if any):

| Section | Requested Departure(s) / Alternative(s) |
|----------------|--|
| | |
| | |

4. The Proponent acknowledges that the departures it has requested in Sections 1, 2 and 3 of this Schedule C-1 will not form part of the Contract unless and until the City agrees to them in writing by initialling or otherwise specifically consenting in writing to be bound by any of them.

SCHEDULE C-2 - PROPONENT'S EXPERIENCE, REPUTATION AND RESOURCES

Proponents should provide information on the following (use the spaces provided and/or attach additional pages, if necessary):

- (i) Location of primary business, branch locations, background, stability, structure of the Proponent and number of years business has been operational;
- (ii) Proponent's relevant experience and qualifications in delivering services similar to those required by the RFP;
- (iii) Proponent's demonstrated ability to provide the Services;
- (iv) Proponent's equipment resources, capability and capacity, as relevant (including equipment resources under the Proponent's control, equipment resources to be rented, and equipment resources to be purchased). Include a detailed list of all equipment and/or software to be used in this project. Relate the equipment and/or software to the project workflow;
- (v) Proponent's references (name and telephone number). The City's preference is to have a minimum of three references;
- (vi) Proponent's financial strength (with evidence such as financial statements, bank references);
- (vii) Proponents should provide information on the background and experience of all key personnel proposed to undertake the Services (use the spaces provided and/or attach additional pages, if necessary):

Key Personnel

Name: _____

Experience:

Dates: _____

Project Name: _____

Responsibility: _____

Dates: _____

Project Name: _____

Responsibility: _____

Project Approach – Team Roles

- (viii) Proponents should provide an outline of the resource roles and estimated effort required for this project. (use the spaces provided and/or attach additional pages, if necessary):

| Role | Name | Forecasted Project Days/Hrs. |
|-------------|-------------|-------------------------------------|
| | | |
| | | |
| | | |
| | | |

Sub-Contractors

- (ix) Proponents should provide the following information on the background and experience of all sub-contractors proposed to undertake a portion of the Services (use the spaces provided and/or attach additional pages, if necessary):

| DESCRIPTION OF SERVICES | SUB-CONTRACTORS NAME | YEARS OF WORKING WITH PROPONENT | TELEPHONE NUMBER AND EMAIL |
|--------------------------------|-----------------------------|--|-----------------------------------|
| | | | |
| | | | |
| | | | |
| | | | |

[END OF PAGE]

SCHEDULE C-3 - PROPONENT'S TECHNICAL PROPOSAL (SERVICES)

Proponents should provide the following (use the spaces provided and/or attach additional pages, if necessary):

- (i) a narrative that illustrates an understanding of the City's requirements and Services.
- (ii) a description of the general approach and methodology that the Proponent would take in performing the Services including specifications and requirements specified in Schedule A, Section 3. Scope of Services.
- (iii) a narrative that illustrates how the Proponent will complete the scope of Services, including all required deliverables and milestones by the identified timelines, manage the Services, and accomplish required objectives within the City's schedule for the following:
 - Mandatory Quality Control/Quality Assurance (QC/QA)
 - Pre-Flight Deliverables
 - Post-Flight Deliverables
 - Schedule
- (iv) a list of reports that you would anticipate providing the City's management team, including the Final Reports specified in Schedule A, their relationship to project milestones and the method of delivery (electronic, paper, e-mail, other);
- (v) **Environmental and Social Responsibility:** Describe your commitment to environmental stewardship initiatives, recycling practices and carbon footprint reduction; and
- (vi) **Value Added Services:** The Proponent should provide a description of value added, innovative ideas and unique services that the Proponent can offer to implement the City's requirements relevant to the scope of Services described in this RFP. Unless otherwise stated, it is understood that there are no extra costs for these goods and services.

[END OF PAGE]

SCHEDULE C-5 - PROPONENT'S FINANCIAL PROPOSAL

Indicate the Proponent's proposed fee (excluding GST), and the basis of calculation (use the spaces provided and/or attach additional pages, if necessary) as follows (as applicable):

- (i) monthly fee;
- (ii) hourly rates for all team members if payment is to be made on an hourly basis; or
- (iii) lump sum fee.

Schedule of Rates:

| Item No. | Description | Estimated Quantity of Hours | Hourly Rate | Total Price |
|----------|------------------------------|-----------------------------|-------------|-------------|
| | Labour: | | | |
| | | | | |
| | | | | |
| | Materials: | | | |
| | | | | |
| | | | | |
| | Disbursements: | | | |
| | | | | |
| | | | | |
| | Subtotal: | | | |
| | GST: | | | |
| | TOTAL PROPOSAL PRICE: | | | |

SAMPLE

Optional Alternatives:

Refer to Schedule A, Section 3.1 Mandatory Data Collection

(a-1) Optional alternative: Propose increase level of point cloud density and associated costs as separate line item and beyond proposed costs for 20pts per square meter.

(f-1) Optional alternative: Propose increase level of accuracy that could be provided by adjusting flight height and costs associated as separate line item and beyond specified levels in item (f).

Additional Expenses:

The proposed Contract attached as Schedule "B" to the RFP provides that expenses are to be included within the fee, other than the expenses listed in the Contract as disbursements. Details of disbursements are to be shown in the chart above. Please indicate any expenses that would be payable in addition to the proposed fee and proposed disbursements set out above:

Payment Terms:

A cash discount of _____% will be allowed if account is paid within _____ days, or the _____ day of the month following, or net 30 days, on a best effort basis.

[END OF PAGE]