



**Contract Number**

**21-134** ~~ISD-19002~~ A-1

**SAP Number**

## Department of Innovation and Technology

<b>Department Contract Representative</b>	Lea Rademaker
<b>Telephone Number</b>	909-388-0672
<b>Contractor</b>	Aero-Graphics, Inc.
<b>Contractor Representative</b>	Bernie Doud
<b>Telephone Number</b>	801-428-3110
<b>Contract Term</b>	1/1/19-12/31/21
<b>Original Contract Amount</b>	\$299,985
<b>Amendment Amount</b>	\$300,000
<b>Total Contract Amount</b>	\$599,985
<b>Cost Center</b>	1200101000

### IT IS HEREBY AGREED AS FOLLOWS:

#### AMENDMENT NO. #

This Amendment No. 1 (this "Amendment") dated February 9, 2021 is made by and between Aero-Graphics, Inc. ("Aerographics"), and the COUNTY OF SAN BERNARDINO ("County") and modifies the terms to Agreement executed between the parties as of November 27, 2018 ("Agreement").

1. Delete Section F.1 of the Agreement in its entirety and replace with the following:

**F.1** The maximum amount of *payment* under this Contract shall not exceed \$599,985, of which \$0 may be federally funded, and shall be subject to availability of other funds to the County. The consideration to be paid to Contractor, as provided herein, shall be in full payment for all Contractor's services and expenses incurred in the performance hereof, including travel and per diem. Payment terms are NET 60 and the payment will be broken down as set forth in Section F.2.

2. Delete Section F.2 of the Agreement in its entirety and replace with the following:

**F.2 Payment Schedule and Penalties**

Payment schedule for this project shall be based on the following:

- a) **40% payment – Acquisition Completion** - County shall pay Contractor upon receipt of invoice for costs incurred for completion of winter imagery collect and ground survey (San Gorgonio and San Gabriel Mountains omitted due to snow cover). County shall also pay Contractor within 60 days of receipt of invoice for costs incurred for completion of summer imagery collect. The stereo images will be reviewed by the County prior to approving the payment. Payments shall not exceed a total of 40% of the total Contract amount, broken down as follows:

Year 1: \$39,998.00  
 Year 2: \$39,998.00  
 Year 3: See Table a below

Table a

	6" Orthos	Building Footprints	Total Remaining to Invoice
	\$ 319,996.00	\$ 79,999.00	
40% Winter Acq & Survey Complete (78% of ortho effort)	\$ 99,838.75		\$ 300,156.25
50% Winter Building Footprint Delivery (78% of footprint effort)		\$ 31,199.61	\$ 268,956.64
30% Winter Ortho Delivery	\$ 74,879.06		\$ 194,077.57
30% Winter Ortho Acceptance	\$ 74,879.06		\$ 119,198.51
40% Summer Acq Complete	\$ 28,159.65		\$ 91,038.86
50% Winter Building Footprint Acceptance		\$ 31,199.61	\$ 59,839.25
30% Summer Ortho Delivery	\$ 21,119.74		\$ 38,719.52
50% Summer Building Footprint Delivery		\$ 8,799.89	\$ 29,919.63
30% Summer Ortho Acceptance	\$ 21,119.74		\$ 8,799.89
50% Summer Building Footprint Acceptance		\$ 8,799.89	\$ -

- b) **30% payment- Orthoimage and Building Footprint Delivery** - County shall pay Contractor upon receipt of invoice for costs incurred for completion and delivery of winter flight orthoimagery deliverables, and upon receipt of invoice for costs incurred for completion and delivery of summer flight orthoimagery deliverables. County shall also pay Contractor within 60 days of receipt of invoice for costs incurred for completion and delivery of winter building footprints, and again upon receipt of invoice for costs incurred for completion and delivery of summer building footprints. Payments shall not exceed a total of 30% of the total Contract amount, broken down as follows:

Year 1: \$29,998.50  
 Year 2: \$29,998.50  
 Year 3: See Table b below

Table b

	6" Orthos	Building Footprints	Total Remaining to Invoice
	\$ 319,996.00	\$ 79,999.00	
40% Winter Acq & Survey Complete (78% of ortho effort)	\$ 99,838.75		\$ 300,156.25
50% Winter Building Footprint Delivery (78% of footprint effort)		\$ 31,199.61	\$ 268,956.64
30% Winter Ortho Delivery	\$ 74,879.06		\$ 194,077.57
30% Winter Ortho Acceptance	\$ 74,879.06		\$ 119,198.51
40% Summer Acq Complete	\$ 28,159.65		\$ 91,038.86
50% Winter Building Footprint Acceptance		\$ 31,199.61	\$ 59,839.25
30% Summer Ortho Delivery	\$ 21,119.74		\$ 38,719.52
50% Summer Building Footprint Delivery		\$ 8,799.89	\$ 29,919.63
30% Summer Ortho Acceptance	\$ 21,119.74		\$ 8,799.89
50% Summer Building Footprint Acceptance		\$ 8,799.89	\$ -

- c) **30% payment- Orthoimage and Building Footprint Approval** – Upon County approval of the winter flight orthoimagery deliverables, and again upon County approval of the summer flight orthoimagery deliverables, County shall pay Contractor upon receipt of such invoices the remaining costs incurred for completion of winter and/or summer flight orthoimagery deliverables, as appropriate. In addition, upon County approval of the winter flight building footprints, and again upon County approval of the summer flight

building footprints, County shall pay Contractor within 60 days of receipt of such invoices the remaining costs incurred for completion of winter and/or summer flight footprints, as appropriate. Payments shall not exceed a total of 30% of the total Contract amount, broken down as follows:

Year 1: \$29,998.50  
 Year 2: \$29,998.50  
 Year 3: See Table c below  
 Table c

	6" Orthos \$ 319,996.00	Building Footprints \$ 79,999.00	Total Remaining to Invoice
40% Winter Acq & Survey Complete (78% of ortho effort)	\$ 99,838.75		\$ 300,156.25
50% Winter Building Footprint Delivery (78% of footprint effort)		\$ 31,199.61	\$ 268,956.64
30% Winter Ortho Delivery	\$ 74,879.06		\$ 194,077.57
30% Winter Ortho Acceptance	\$ 74,879.06		\$ 119,198.51
40% Summer Acq Complete	\$ 28,159.65		\$ 91,038.86
50% Winter Building Footprint Acceptance		\$ 31,199.61	\$ 59,839.25
30% Summer Ortho Delivery	\$ 21,119.74		\$ 38,719.52
50% Summer Building Footprint Delivery		\$ 8,799.89	\$ 29,919.63
30% Summer Ortho Acceptance	\$ 21,119.74		\$ 8,799.89
50% Summer Building Footprint Acceptance		\$ 8,799.89	\$ -

Payment terms are NET 60.

3. Delete the first paragraph of Section B.1, Scope of Work with Responsibilities and replace with the following:

#### B.1 Scope of Work with Responsibilities

Contractor's responsibilities are in accordance with, but not limited to this section, and Quotation RFQ1319956S, Scope of Work, and Attachment A-1, as attached hereto and incorporated as though fully set forth herein (collectively, Attachment A). Contractor's work shall include the following, in each case in full accordance with the specifications in the Scope of Work (Attachment A).

4. **Full Force and Effect.** The Agreement, as amended by this Amendment, remains in full force and effect.
5. **Capitalized Terms.** Any capitalized term used but not defined in this Amendment shall have the meaning given to it in the Agreement or the Addendum, as applicable.
6. **Counterparts.** This Amendment may be signed in one or more counterparts, each of which shall be deemed an original but all of which taken together shall constitute one and the same instrument. A facsimile or e-mail transmission of a signed version of this Amendment shall be legal and binding on all parties.

The parties shall be entitled to sign and transmit an electronic signature of this Amendment (whether by facsimile, PDF or other email transmission), which signature shall be binding on the party whose name is contained therein. Each party providing an electronic signature agrees to promptly execute and deliver to the other party an original signed Amendment upon request.

COUNTY OF SAN BERNARDINO

►   
 Curt Hagman, Chairman, Board of Supervisors

Dated: FEB 09 2021  
 SIGNED AND CERTIFIED THAT A COPY OF THIS  
 DOCUMENT HAS BEEN DELIVERED TO THE  
 CHAIRMAN OF THE BOARD

Aero-Graphics, Inc.  
 (Print or type name of corporation, company, contractor, etc.)

By ►   
 (Authorized signature - sign in blue ink)

Name Bernie Doud  
 (Print or type name of person signing contract)

Title Federal Programs Manager



By

Dated:

(Print or Type)

Address

19 January 2021

40 W. Oakland Avenue  
Salt Lake City, UT 84115

FOR COUNTY USE ONLY  
Approved as to Legal Form

Reviewed for Contract Compliance

Reviewed/Approved by Department

► *Bonnie Uphold*  
Bonnie Uphold, County Counsel

Date

2-1-21

Date

Date

**ATTACHMENT A-1**  
**( Effective February 6, 2021)**

All deliverables, coordinate system, deployment schedule and other project properties will be identical to 2019/2020 San Bernardino County / Aero Graphics flights, except the GSD will now be 6" with the flight plan to match, the imagery will be 4-band RGBI instead of RGB only, building footprints will be included, and the delivery schedule is adjusted as shown below. The image tiling scheme is flexible.

San Bernardino County 6" Orthoimagery and Building Footprints | Vexcel UltraCam Eagle Mark I - \$399,995

**Scope of Services**

- Ground control survey of approximately forty (40) points to ensure **proper positional accuracy of the ortho and building footprints**
- **Vexcel UltraCam Eagle M1 RGBI Digital Image Acquisition with 80%/30% fore/side overlap**
- **GNSS/IMU trajectory post-processing and analytical aerotriangulation to densify ground control network**
- **Building footprint digitization and attribution in SHP/GDB format**
  - Heads-up digitization from the 6" stereo imagery used for the ortho
  - Minimum building size 400 square feet within and touching the AOI boundary
  - Buildings obscured by trees or other overhanging obstacles will be modeled to the best extent possible; 80% forward overlap should maximize utility from photogrammetry
  - Collected at drip line
  - Attributed with height above mean sea level at the highest point of the structure (excluding non-structural features such as chimneys, air conditioning units, antennas, and flag poles)
  - Attributed with height above ground, measured from the highest point of the structure (as above) to the ground adjacent to the drip line (sloped ground method TBD)
  - Attributed with parcel number based on County-provided parcel layer
  - Delivery format SHP or GDB
- **Full 4-band RGBI image orthorectification, tiled as needed, delivered in GeoTIFF and other contract-specified formats**
- **Orthorectified imagery and building footprints delivered on USB 3.0 hard drive**

**Bid #5184 2021 San Bernardino County - UCE Mark I**

<b>Settings/Stats</b>	
<b>Altitude (ft, AGL)</b>	<b>9640</b>
<b>GSD</b>	<b>15.2cm</b>
<b>OL(%) average</b>	<b>80</b>
<b>SL(%) average</b>	<b>30</b>
<b>Lines</b>	<b>270</b>
<b>Images</b>	<b>~18000</b>

**Delivery Schedule\***

Building Footprints for Winter Flight	~November 5 2021
Orthorectified Imagery for Winter Flight	~November 15 2021
Building Footprints for Summer Flight	~November 5 2021
Orthorectified Imagery for Summer Flight	~November 15 2021

\*Preliminary dates but close – will have refined dates early next week.