



## **Delivery Lot Summary Report: Delivery Lot 5**

**October 29, 2015**

**USGS Contract: G10PC00026**

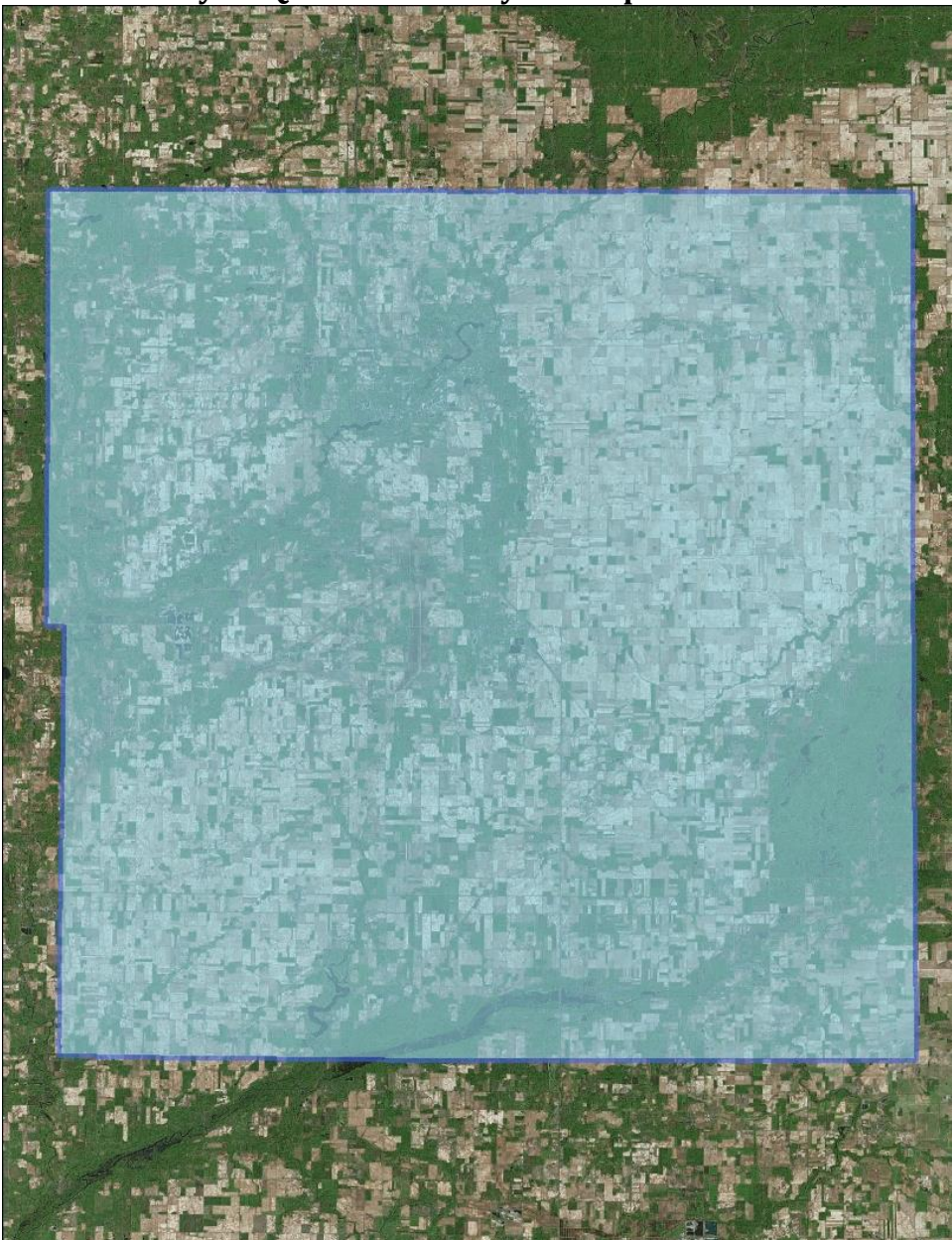
**USGS Task Order: G15PD00343**

**Task Order Name: Gratiot County MI QL2 Lidar (FY15-BAA)**

**Contractor: Photo Science, a Quantum Spatial Company**

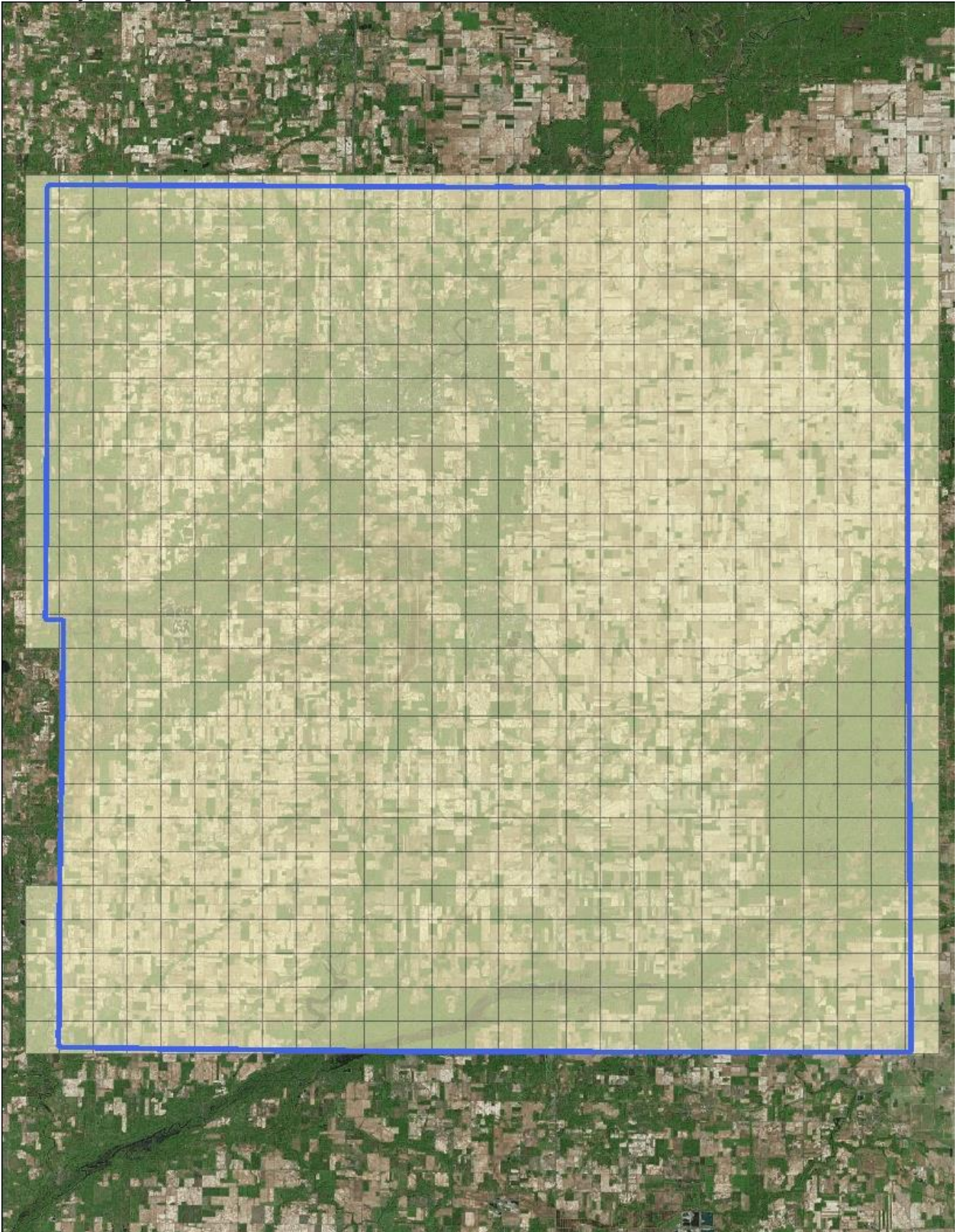
The following is a summary description of the edit call deliverables and other pertinent information that comprise the shipment of Delivery Lot 5 to USGS on October 29, 2015.

### **Gratiot County MI QL2 AOI Delivery Lot Map:**





**Delivery Lot 5 Map:**



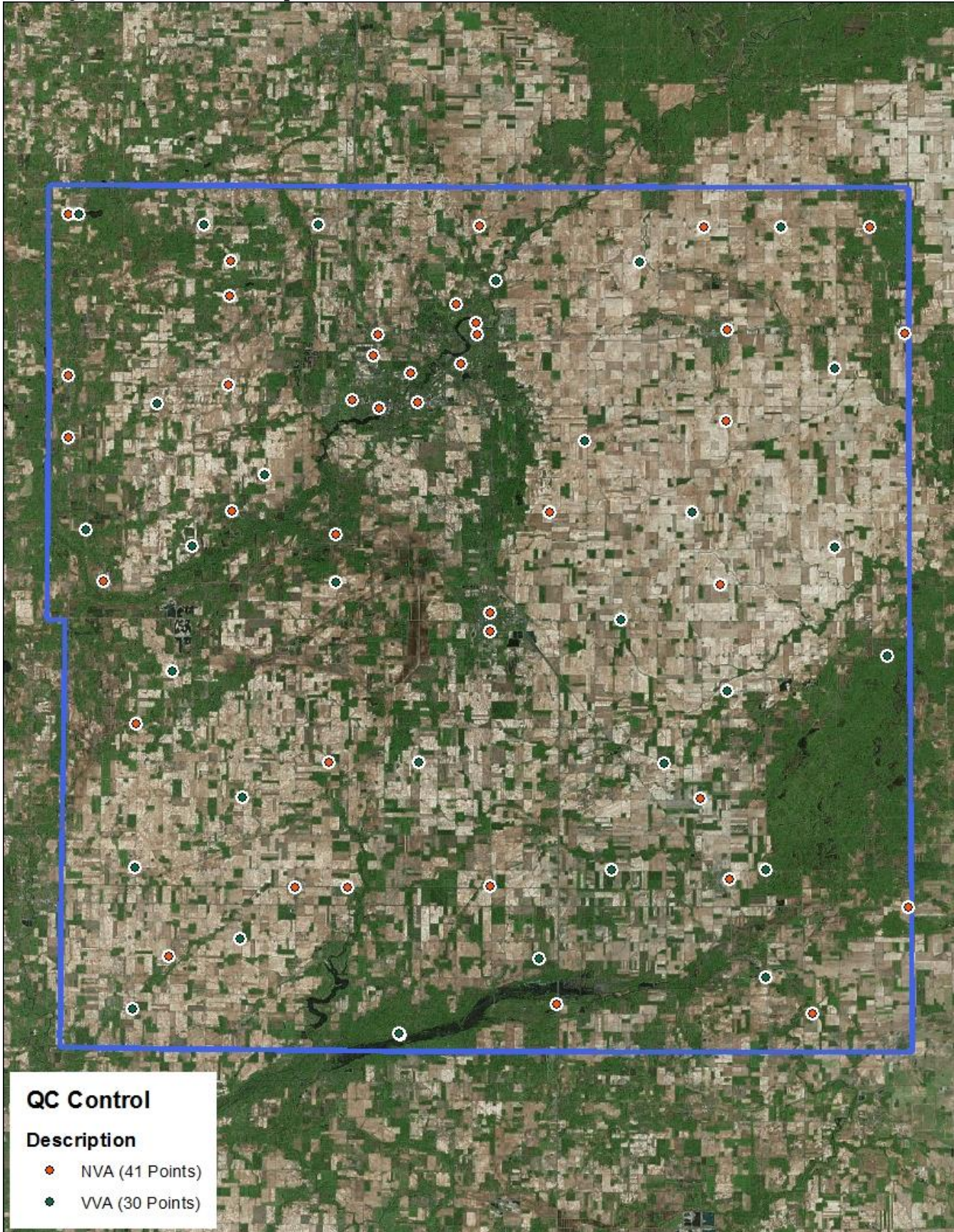


**Lot 5 Raw Point Cloud Map:**





Lot 5 QA Control Points Map:



**Task Order Spatial Reference System:**

- Horizontal: Michigan South SPCS, NAD83 (2011), Zone: 2113, International Feet
- Vertical: NAVD88, GEOID12a, US Feet

**Deliverables Summary:**

1. C.1.d.(i) Raw Point Cloud Data (calibrated and control adjusted): Included
  - LAS v1.4 Point Record Format 6
  - Total Number of Swath Files: 41
  - Total File Size: 171 GB (183,756,861,440 bytes)
  - Individual Swath Outline Shape File
2. C.1.d.(ii) Classified Point Cloud: Included
  - LAS v1.4, Point Record Format 6 including File Source ID w/ assigned value of 0
  - Classification Schema:
    - (01) Code 1 – Processed, but unclassified
    - (02) Code 2 – Bare-earth ground
    - (03) Code 7 – Noise
    - (04) Code 9 – Water
    - (05) Code 10 – Ignored Ground (Breakline Proximity)
    - (06) Code 17 – Bridge Deck
    - (07) Code 18 – High Noise
  - Total Number of Tiles: 695
  - Tile Dimensions: 5,000' x 5,000'
  - Total File Size: 156 GB (168,568,725,504 bytes)
  - Delivery Lot 5 Tile Shape Files (Lot 5 Boundary & Lot 5 Individual Tiles)
3. C.1.d.(iii) Bare Earth Surface (Raster DEM): Included
  - Format: ERDAS .IMG
  - Resolution: 5 foot grid cell size
  - Hydro Conditioning: Hydro Flattened
  - Total Number of Tiles: 695
  - Tile Dimensions: 5,000' x 5,000' (same used for Classified Point Cloud)
  - Total File Size: 2.72 GB (2,926,440,448 bytes)
4. C.1.d.(iv) Breaklines: Included
  - Format: ESRI File Geodatabase
  - Coverage: Lot 5 Continuous, Non-Tiled
  - Total File Size: 808 KB (827,392 bytes)
5. C.1.d.(v) LiDAR Intensity Image: Included
  - Format: Grayscale, 8-bit, GeoTiff
  - Resolution: 5 foot grid cell size
  - Total Number of Tiles: 695
  - Tile Dimensions: 5,000' x 5,000' (same used for Classified Point Cloud)
  - Total File Size: 900MB (944,119,808 bytes)



- 6. C.1.d.(vi) Control:
  - Delivery Lot 5 QA Control Check Point Location Shape File Extract: Included
  - Delivery Lot 5 QA Control Check Point Published Values Extract .xls file: Included
- 7. C.1.d.(vii) Metadata: Included
  - Format: FGDC compliant, XML
  - File Types: Project, Lift, Tiled deliverable product group (classified .las, DEM, & Intensity)
- 8. C.1.d.(viii) Project Report
  - Delivery Lot Summary Report: Included
  - Overall Project Report: Included
- 9. Lot 5 QA & Accuracy Reporting
  - FOCUS Report: Included
  - Lot 5 NVA/VVA Testing Results: .xls file Included
  - LAS Analysis (Excel File): Included
  - Raster Analysis (Excel File): Included

**Lot 5 Provisional Accuracy Reporting:**

- Number of QA Check Points falling within Delivery Lot 5 by Tested Land Cover Type:
  - Non-Vegetated Points (NVA): 40
  - Vegetated Points (VVA): 30
- Testing:

**Raw FVA**

	Count	Minimum	Maximum	St. Dev	RMSE	95%	95th	Mean	Median	Skew
RAW NVA	40	-0.400	0.100	0.108	0.158	0.309	-	-0.12	-0.12	-0.10

**FVA, SVA, CVA**

	Count	Minimum	Maximum	St. Dev	RMSE	95%	95th	Mean	Median	Skew
Non Vegetated (NVA)	40	-0.324	0.148	0.119	0.162	0.318	-	-0.11	-0.11	0.33
Vegetated (VVA)	30	-0.395	0.256	0.173	0.171	-	0.234	-0.02	0.04	-0.25
LIDAR Calibration	0	-	-	-	-	-	-	-	-	-

**Delivery Lot Notes/Comments:**

No issues or concerns have been found with the dataset.