**LEXINGTON COUNTY, SOUTH CAROLINA**

 ***Quality Assurance Notes***

* Checkpoints are located on pages 10-11 within Survey Report entitled ***“Final Report0203\_Lexington”***
* Reference Page 11, of NGTOC ***“LiDAR Quality Assessment Report.”*** Line 4, “Required FVA Value is 0.804 U.S. Feet or less” is incorrect. This FVA target value should be 1.19 U.S. Feet instead of 0.804 (please see table examples below). This correction should also reflect that the QA Accuracyz testing for the FVA value are also within the v13 Specifications, i.e. to say that this **dataset has passed its FVA accuracy test** requirements.
* Water surface elevation for Lake Murray has been **raised to 355.375 feet**

***ASPRS Guidelines: Vertical Accuracy Reporting for LiDAR Data (Page 3)***

|  |  |  |  |
| --- | --- | --- | --- |
| NMASEquivalent Contour Interval | NSSDARMSE(z) | NSSDAAccuracy(z) | Required Accuracy for Reference Data for“Tested to Meet” |
| 0.5 | 0.15 ft or 4.60 cm | 0.30 ft or 9.10 cm | 0.10 ft |
| 1 | 0.30 ft or 9.25 cm | 0.60 ft or 18.2 cm | 0.20 ft |
| 2 | 0.61 ft or 18.5 cm | 1.19 ft or 36.3 cm | 0.40 ft |
| 4 | 1.22 ft or 37.0 cm | 2.38 ft or 72.6 cm | 0.79 ft |
| 5 | 1.52 ft or 46.3 cm | 2.98 ft or 90.8 cm | 0.99 ft |
| 10 | 3.04 ft or 92.7 cm | 5.96 ft or 181.6 cm | 1.98 ft |

***Dewberry Quality Assurance Test Report (Page 4)***

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **100 % of Totals**  | **RMSEZ (ft) Spec=0.6 ft**  | **Mean (ft)**  | **Median (ft)**  | **Skew**  | **Std Dev (ft)**  | **# of Points**  | **Min (ft)**  | **Max (ft)**  |
| Consolidated  | 0.43  | 0.01  | 0.07  | -1.41  | 0.43  | 138  | -1.93  | 0.86  |
| Open Terrain  | 0.45  | 0.01  | 0.14  | -1.51  | 0.45  | 43  | -1.66  | 0.86  |
| Brush  | 0.36  | 0.20  | 0.24  | -1.36  | 0.30  | 20  | -0.69  | 0.65  |
| High Grass  | 0.36  | 0.03  | 0.02  | 0.45  | 0.37  | 24  | -0.57  | 0.82  |
| Forest  | 0.53  | -0.26  | -0.10  | -2.11  | 0.47  | 30  | -1.93  | 0.26  |
| Urban  | 0.38  | 0.12  | 0.18  | 0.37  | 0.37  | 21  | -0.83  | 0.59  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Land Cover Category** | **# of Points** | **FVA ― Fundamental Vertical Accuracy (RMSEZ x 1.9600) Spec=1.20 ft** | **CVA ― Consolidated Vertical Accuracy (95th Percentile) Spec=1.20 ft** | **SVA ― Supplemental Vertical Accuracy (95th Percentile) Spec=1.20 ft** |
| Consolidated | 138 |  | 0.82 |  |
| Open Terrain | 43 | 0.88 |  | 0.81 |
| High Grass | 20 |  |  | 0.65 |
| Brush | 24 |  |  | 0.76 |
| Forest | 30 |  |  | 1.06 |
| Urban | 21 |  |  | 0.73 |