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**ONEIDA COUNTY** 

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www.co.oneida.wi.us Quick Link on Land Records System

Date:May 26, 2016Memo to:USGS: Kim, Randy and othersFrom:Michael J Romportl

We have received the most recent review of our datasets sent via email by Kim Mantey on 5/11/16. It was our request on 2/9/16 that Randy and the USGS QC group do a final review of the spatial reference information. It was our understanding then that if the spatial reference information checked out in the .las and .img samples, we would proceed with re-delivering the data as agreed upon and documented on 12/1/16.

Timeline overview:

10/22/15: 1st conference call to with Randy and his team to discuss first review of data

11/13/15: we receive an email from Kim clarifying the coordinate issue

11/30/15: 2nd conference call with Randy, Kim, Ron Wencl (confirmed/clarified spatial ref issue is the only remaining concern)

1/20/16: Confirmation emails from Randy and Kim that coordinate system issue is final remaining item to be resolved

2/9/16: We submitted sample .img and .las for test of spatial ref information

5/11/16: we receive an email with confirmation that spatial ref info checks out, but new set of issues is raised.

Leading up to the email on 5/11/16, we had agreed to address the following items at your request:

- Convert all DEM files from .flt to .img.
- Clip DEMs to the project boundary, which is 500-feet beyond each county boundary
- Update spatial reference info in the .las and .img to include new EPSG codes and WKT for WISCRS Oneida Co (7623) and WISCRS Vilas Co (7638)
- Create swath .xml and project .xml metadata. The vertical tested accuracies will be reported in the swath and project .xml.
- Report accuracies according to FVA at 95% confidence level and SVA/CVA at 95<sup>th</sup> percentile for each county.

It appears that you have other concerns which have been raised for the first time on May 11, well after the first review. We are even more surprised that there is still a request for UTM and/or State Plane coordinates after we developed a process for applying the new EPSG codes and WKT for county coordinates in WI.

Here is our response to the most recent issues:

- 1. We will convert GPS Week Time to Absolute Time.
- 2. We will set the first bit of the global encoding field.
- 3. We made a conscious decision to put the unreliable overlap points in Class 11. The overlap points that are deemed useable are classified in the appropriate class. We agreed with our contractor and our third party QC consultant to classify the data in this way. We believe this meets the Point Classification outlined in lidar base spec v1.0 (pgs. 6-7) that states: *If overlap points are required to be differentiated by the data producer or cooperating partner, they must be identified using a method that does not interfere with their classification. Other techniques as agreed upon in advance.* We don't intend to modify the classification of overlap in these datasets. We will offer to add a description of how overlap points were classified in the metadata.
- 4. The classification of overlap points in Vilas Co is the same as in Oneida Co.
- 5. As a collective group of land information professionals in Wisconsin, we have put forth a lot of effort to get WISCRS county coordinate systems published with EPSG codes. This is important because county coordinates are the basis for land information systems in ALL counties in Wisconsin, including base data like lidar. The county coordinate EPSG codes were published for WISCRS on November 25, 2015. Kim provided clarification in her email on 11/13/15 that stated 3DEP will handle any spatial reference that has an EPSG code as long as it is properly defined in the .las and rasters. According to the May 11 email, we have properly applied the EPSG codes to the spatial reference of the sample .las and .img. We do not intend convert the data to UTM or State Plane as requested.

We are reaching out one more time before taking any steps forward on the re-delivery of Oneida and Vilas counties Lidar data. This document outlines the steps we are willing to take prior to re-delivery. We feel that we have made a major effort to meet the USGS requests and ask USGS to reevaluate their request so an agreement can be reached to deliver you the final data. Please understand, this is a 'purchase agreement' for lidar from 2013 at a very affordable price; however, we cannot meet every formatting or submittal expectation like you have for projects done under GPSC or cooperative agreements.

These projects were funded by our counties and are used by our local constituents and municipal and state entities. In fact, this data has also been used successfully by FEMA for the Wolf River watershed area where FEMA is updating the flood zones, and is also being used by the Wisconsin DNR to update the wetland maps in Oneida County. In addition, several local surveying and engineering companies have tested and used this data for private elevation data projects and have reported the data is remarkably accurate. This Lidar data serves our needs very well and you will find it will also fit your needs.

Oneida and Vilas County have made an extremely good faith effort to make most of the changes you are requesting so that these high quality, high accuracy datasets are available to regional and national users via the National Map, which is a common goal that we share. We anticipate your response to this and look forward to taking the next steps on acceptance of this data.

Thank you

Mike