

I-435/SR69 Interchange, KS

HNTB Customer:

Demo-Project: Kansas Highway Interchange I-435/SR69

March 2010 Dates:

Size: ~2.5 miles of road/ ~61 acres Type: Full D®/TOPO of Interchange

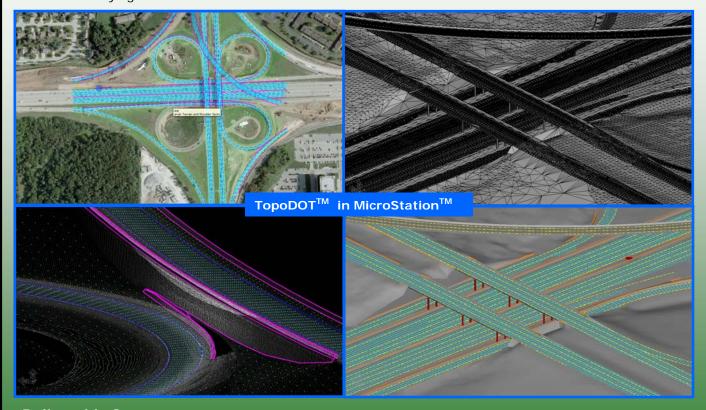
Project Mngr: Michael Cook

PROJECT HIGHLIGHTS

- Mobile Platform with Riegl VQ250 **LiDAR Scanner**
- Processed with TopoDOT[®] in MicroStation®
- Detailed topography extracted in 3 days by only one processor
- DTM included Bridges and Superelevations for 2.5 miles of road

Demo-Project Summary:

Certainty 3D,LLC processed 3D Imaging Technology to produce a full DTM/Topographic survey for HNTB. 3D Image data was collected efficiently using a Mobile Platform which includes a Riegl VQ260 LiDAR scanner. An area of 61 acres of data was collected, and covered approximately 2.5 miles of Kansas Interstate. Aerial Imagery provided via TopoAerial[™]. A highly detailed topography was extracted from this data. Survey includes Roadways (5x1 ft grid on road surfaces), Terrain Features (6x6 ft grid on terrain surfaces), Road Markings (5 ft intervals), Barriers and Retaining walls (10-20 ft intervals), Bridges and Columns, Super elevations, and other features. The combination of these extracted features gives an extremely detailed DTM. Project processing time was approximately 24 hours or 3 days and was done by one processor. The application of 3D Imaging Technology brought both the total project time and cost down, and still yielded a superior product compared to traditional surveying methods.



Deliverable Summary

Certainty 3D, LLC

- Data processed using Certainty 3D's TopoDOT[®] application in MicroStation[™]
- All 3D image data is traceable back to control network survey reference
- TopoDOT® generated model delivered in MicroStation™ CAD formats
- Completed Topography including all breaklines and elevations using Kansas DOT specifications