

USACE Elkhart River North Branch

Cosperville, Indiana

Spalding DeDecker Associates, Inc. (SDA) performed a hydraulic survey for the United States Army Corps of Engineers to be used for HEC-RAS analysis. SDA teamed with American Surveying and Engineering to complete thirty-one valley sections, four detailed bridge sections, and one weir section. All work was performed according to *FEMA's Guidelines and Specifications for Flood Hazard Mapping Partners, Appendix N: Data Capture Guidelines*, dated May, 2005.



The project was a **hydrographic survey**. Work was done in **State Plane Coordinates** based upon **NAD83**, and the **NAVD'88** vertical datum was used as the basis for our elevations. We completed detailed bridge sections, requiring familiarity with **bridge structure survey and nomenclature**. Work was performed according to *FEMA's Guidelines and Specifications for Flood Hazard Mapping Partners, Appendix N: Data Capture Guidelines*, dated May, 2005. Points collected were coded according to these standards, and the crews were required to identify **vegetation changes/friction points, top of water** elevations, and apparent high-water marks.

We provided deliverables according to *FEMA's Guidelines and Specifications for Flood Hazard Mapping Partners, Appendix N: Data Capture Guidelines*, dated May, 2005. This included ASCII point files listed by section, a CAD file with all of the points measured, detailed structure sketches, and digital photos. These specifications have detailed requirements for digital photography which include how to take the photographs, how to caption them, and how to name the files. The data was collected electronically in the field using FEMA's code list, imported through Leica Geo-office, and processed into AutoCAD for manipulation.

OWNER / CLIENT

United States Army Corps of Engineers
American Surveying and Engineering
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PROJECT START - END

September 2011 – October 2011

SDA PROJECT NO.

SM11-058

SDA SERVICES

Hydraulic Surveys