

EXHIBIT A – SCOPE OF SERVICES

Typical surveying tasks will include stream cross-section data, hydraulic structure data (bridges, culverts and storm sewers) and high-water mark data. The data collected will be used to update hydraulic models and high-water mark surveys will be used for the verification of hydraulic models. Survey guidelines will be according to DuPage County specifications and will generally follow those in FEMA's "Guidance for Flood Risk Analysis and Mapping, Data Capture-Workflow Details, November 2021".

Consultant Scope of Services

- Perform stream surveys of hydraulic structures and stream cross-sections. Other data collection may include spot surveys of high-water locations and elevations for significant storm events and low-water entry elevations for residential/commercial structures.
- Computer Manning's roughness values for each cross section surveyed.
- Prepare field sketches of all hydraulic structures surveyed.
- Take photographs of all hydraulic structures and at all cross-section locations. All photos will be labeled for documentation. Photos of cross sections will be used to aid in Manning's roughness calculations.
- Prepare exhibits specific to information obtained in the field.
- Prepare cross section location maps.
- Perform cut/fill calculations, develop topography for a certain area.
- Perform field survey data reduction and summarize data in certain formats as determined by the Department.
- Deliverables must be submitted for each task ordered, as applicable, including but not limited to: structure and cross section data on CD, copies of field books (including traverse plots and closure calculations), photographs of structures and cross-sections, table describing horizontal and vertical control points, sketches, and digital files of survey data.
- Other services as needed.

EXHIBIT B – DELIVERABLES

The following deliverables (hard copy and/or digital) will be submitted to the County before completion of the contract.

- Structure (culvert/bridge/weir) data
- Cross-section data
- Copies of field books, including traverse plots and closure calculations
- Photographs of structures and cross-sections
- Table describing horizontal and vertical control points
- Table of survey code descriptions
- Sketches
- Digital files of survey points
- Cross-section location maps
- Topographic mapping
- Plats of survey, signed and sealed
- Legal descriptions