

When crossings are necessary near bends and meanders, the trend of the meander should be noted. If erosion around the bend is evident, a comment so stating the conditions should be included in the survey notes.

### *Sec. 7.09.2* **Site Surveys**

The survey manager or supervisor shall meet with the hydraulic design unit, the bridge design unit, and roadway designer to determine the topographic, DTM, contour, and profile needs. The bridge site survey will use a combination of the sUPC, suUPC, scrUPC, sbUPC, and as necessary the spoUPC file, which the bridge designer can plot as he or she desires. The survey section will not provide a 1" = 10' bridge situation file on grid. The topography, contours, and profiles files will be provided so they can be appropriately referenced together in Microstation. LD-23 document will be in a separate document file. These survey requirements shall be contained in the survey authorization at the time the site survey is begun.

There are three (3) classes of site surveys. Any deviation from or addition to these classes must be explained in the survey authorization.

#### **Class I Site Survey - Standard Bridge Situation Survey**

This class of survey is required for all bridge sites and major culvert installations where the data is needed to perform a detailed hydraulic analysis. All of the information described in [Section 7.09.3](#) "Survey Data" shall be obtained. The bridge design unit will specify its choice between contours (Option 1) at the site or profiles (Option 2) along each edge of shoulder. **It is imperative that consultation between the District Hydraulic Unit, the Bridge Design Unit and the District Survey Manager prior to the survey taking place to identify the need for a full Class I Bridge Situation Survey. It may be necessary or beneficial to revert to a Modified Class I Site Survey.**

#### **Modified Class I Site Survey**

There are situations when only portions of the Class I Survey are required (i.e., only the flood plain cross-sections or only a single flood plain cross-section at the structure site). All requested data shall be obtained in accordance with [Section 7.09.3](#). **It is imperative that consultation between the District Hydraulic Unit and the District Survey Manager, prior to the survey taking place, occurs, to identify the special cases and the specific requirements for the particular survey.**

#### **Class II Site Survey - Abbreviated Bridge Situation Survey**

This class of survey is required for all bridge sites and major culvert installations where the data needed for a detailed hydraulic study is available from another source.

All of the information pertaining to the existing that is described in [Section 7.09.3](#) "Survey Data" shall be obtained. The stream profile, flood plain cross-sections and high water data are