The invert elevations shall be secured on all existing drainage structures or pipes. Entrance profiles shall be taken on all existing entrances their entire length. Where, due to excessive length, this would be impractical, the length should be restricted to an appropriate distance by the survey supervisor to provide adequate coverage for the designer. If a stream is three (3) or more feet wide, four break lines should be used for a more accurate depiction of the stream.

Sec. 4.12 Bridge Site Plans - Streams

Bridge Site Plans at streams shall be taken in accordance with **Chapter 7** of this manual.

Sec. 4.13 Bridge Site Plans – Highways and Railroads

For Bridge Site plans - Highways and Railroads, secured by Photogrammetric Surveys, see $\underline{\textbf{Sec. 5.06}}$ of this manual.

Existing fee right-of-way, property line data and prescriptive easements will be shown on all bridge plans. $^{\Diamond}$

Topo and DTM will be taken fifty feet (50 ft) each side of the existing roadway centerline. Profiles are to be taken on centerline, twenty-five feet (25 ft) left and right of centerline and fifty feet (50 ft) left and right of centerline. However, when it is necessary to extend the width, profiles are to be taken at twenty-five feet (25 ft) intervals, seventy-five feet (75 ft), left or right of centerline, etc.

These profiles are to be drawn in a new .dgn file called sUPC#b(bridge #).dgn plotted to a scale of one inch to ten feet (1" = 10") both vertically and horizontally. If the area is of extended width, the profiles may be offset to the right of the situation plan area and plotted in the usual matter.

Profiles for the road being crossed, railroad being crossed, railroad spurs, entrances, etc., are to be plotted to a convenient scale and shown.

Where the site plan is at a railroad crossing, instructions in **Sec. 4-5** and **Sec. 4-7** of this manual should be adhered to as they pertain to railroads. The weight of the rail should be shown prominently on the site plan.

Elevation ticks shall be taken at twenty-five feet (25 ft) intervals from the centerline or baseline of the road or railroad being crossed 100' left and right of the crossing.

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^{*}March 3, 2014