

SECTION 2D - 9 - CROSS SECTIONS AND EARTHWORK QUANTITIES

PLOTTING CROSS SECTIONS

The names and phone numbers, including area code, and District, if applicable, of the following persons are to be shown in the upper left corner: Project Manager: (VDOT), Surveyed By: (L&D Survey Office Manager or Consultant Survey Project Manager), Design Supervised By: (Design Engineer in Responsible Charge) and Designed By:(Designer)*.

Cross sections are to be developed in the preliminary stage of the Concurrent Engineering Process and are to be updated as the design progresses. The cross sections sheets are to be archived with the plans at each milestone.

Cross sections sheets are to be developed utilizing the criteria set by the AES section.

Cross sections are plotted on a scale of 1" = 10' Imperial (1:100 Metric) and so noted at the top of each sheet. Curb and gutter projects, or other projects requiring greater detail, are plotted on a scale of 1" = 5' Imperial (1:50 Metric).

Cross section templates are to be plotted in accordance with the appropriate typical section, to the finished grade elevation shown. Care must be taken to correctly plot all superelevated sections, pavement widenings, pavement and shoulder transitions, gore areas, ramps, auxiliary lanes, etc. in accordance with the appropriate geometric, slope and superelevation standards ([See Appendix A-1](#)).

Pavement trenching for the proposed template will agree with the pavement design provided by the Material Division.

Construction baselines are to be labeled on the first and last sections on each sheet. Finish grade elevations are to be furnished on all cross sections at all hinge points (construction baseline, crown, edge of pavement, edge of shoulders, toe of ditches, etc) as appropriate and are to be labeled to one-hundredth of a foot on all cross sections, existing and proposed Right of Way limits as well as cut and fill areas and volumes are to be furnished on all cross sections for projects being developed using the GEOPAK software.

Stationing shall be shown on the cross sections for the begin and end of projects, connections, ramps, frontage roads, bridges, etc., and are to be shown centered with the baseline, at the appropriate locations.

Cross section template separators are to be shown on all cross sections in areas that the roadway intersects with other connections or at the beginning or end of a bridge structure to be constructed on a skewed angle. Template separators are required to avoid the overlap of earthwork quantities.

* Rev. 1/07