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<sup>\*</sup> 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.

Groundline elevations are to be shown in the last block on the right end of the sheet. Groundline elevations should be shown every 5' or 5 meters for Urban projects and 10' or 5 meters for Primary and Interstate projects.

An index is to be shown on the first cross section sheet showing sheet numbers assigned to the mainline, connections, ramps, frontage roads, etc.

Cross section sheets are to reflect all applicable project numbers in the appropriate blocks and are numbered in order beginning with "1".

## DETERMINING WIDTH OF PAVEMENT

Preliminary design typical sections are to be thoroughly checked for compliance with the applicable Geometric Design Standards (see Appendix A). Interchange Ramp typical section geometrics are to be checked for adequate pavement widths for the curvature used as explained in AASHTO's <u>A Policy on Geometric Design of Highways and Streets</u>. Minimum ramp pavement widths are to be as shown in the Geometric Design Standards (see Appendix A).

## DETERMINING AREAS AND QUANTITIES

Earthwork areas are computed to the bottom-most line of pavement trenching. End Areas are shown immediately below ground lines with the cut area in the third block to the left of the construction baseline preceded by the letter "C" and the fill area in the third block to the right preceded by the letter "F".

<sup>\*</sup> Rev. 7/06