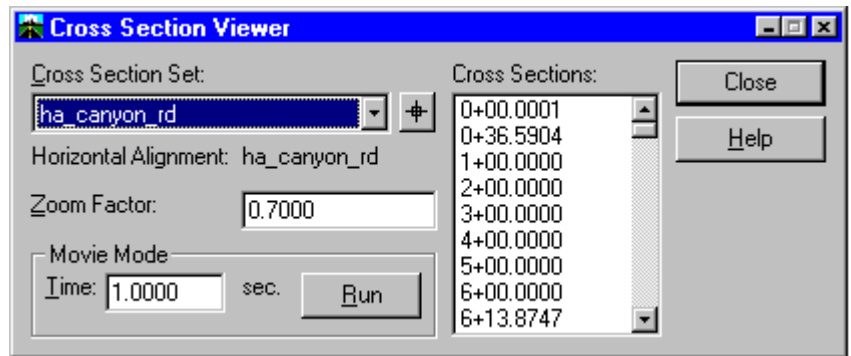
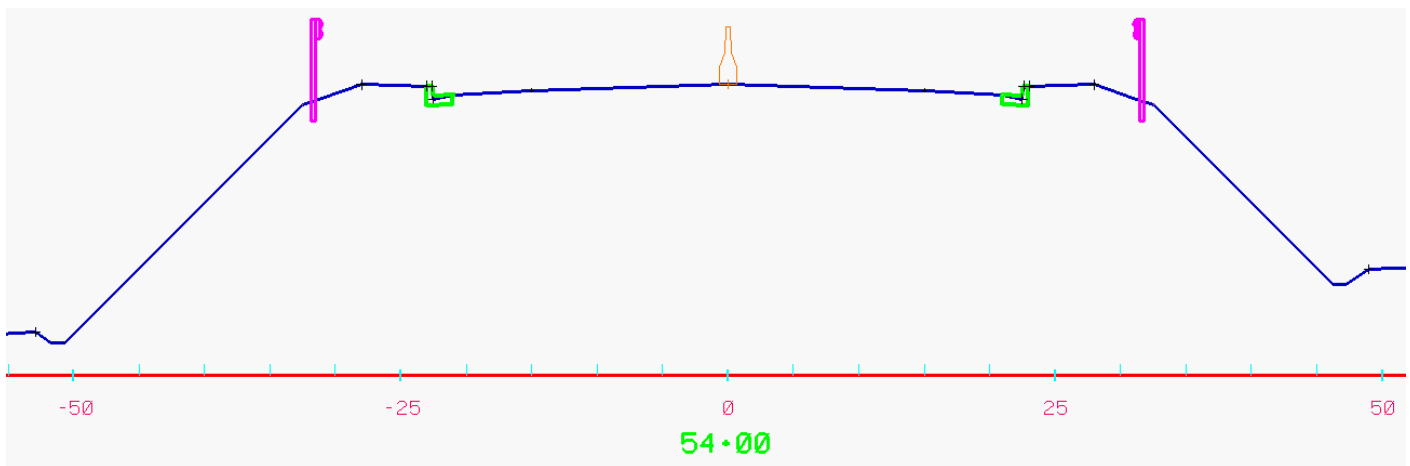


Cross Section Viewer

The Cross Section View (InRoads>Evaluation>Cross Section>Cross Section Viewer) lists each Cross Section in each Cross Section Set. Notice that most sections were cut at even stations. The other sections are geometric cardinal point or superelevation event points (this can be toggled on or off in the Create Cross Section command).



A Zoom Factor of 1.0 precisely fits the Section in the CAD window. Less than 1 zooms in closer. Clicking on a station will quickly Zoom in that individual Section. The keyboard Up or Down arrows can be used to “scroll” through the Sections. Section 54+00 is shown below. Notice the cells InRoads placed for the barrier, guardrails, and curbs.



Annotating Cross-Section slopes

Proposed Engineering Model Quality Control

As secondary as the graphics are to the model, the graphics that wind up on the Construction plans are still the fundamentally most important part of the InRoads Design/Publish workflow. Few companies are moving dirt solely from the DTM model (a few use laser and/or GPS guidance on their earthmoving equipment and are saving millions of dollars, but they are still on the “bleeding edge”). Since what is on the Cross Sections is what gets built, it is critical, especially on projects where Right of Way impacts are critical, to QC the cross-sections. Additionally, even when the day comes when we skip creating 2D plans for 3D work (we beam our finished DTM to the Automated Scraper), typical sections and slope treatments are specified in the Design Requirements by slope and width relative to an alignment.

Cross-Sections give us the ability to display our proposed road model in the same manner as was used in the definition in the Design Specifications.

-
1. Take a close look at the any of the cross sections you just created.
-

Exploring InRoads

Can you tell what the side slopes are? Do you have any idea as to the precise transverse slopes of the roads? Are there grade breaks between lanes?

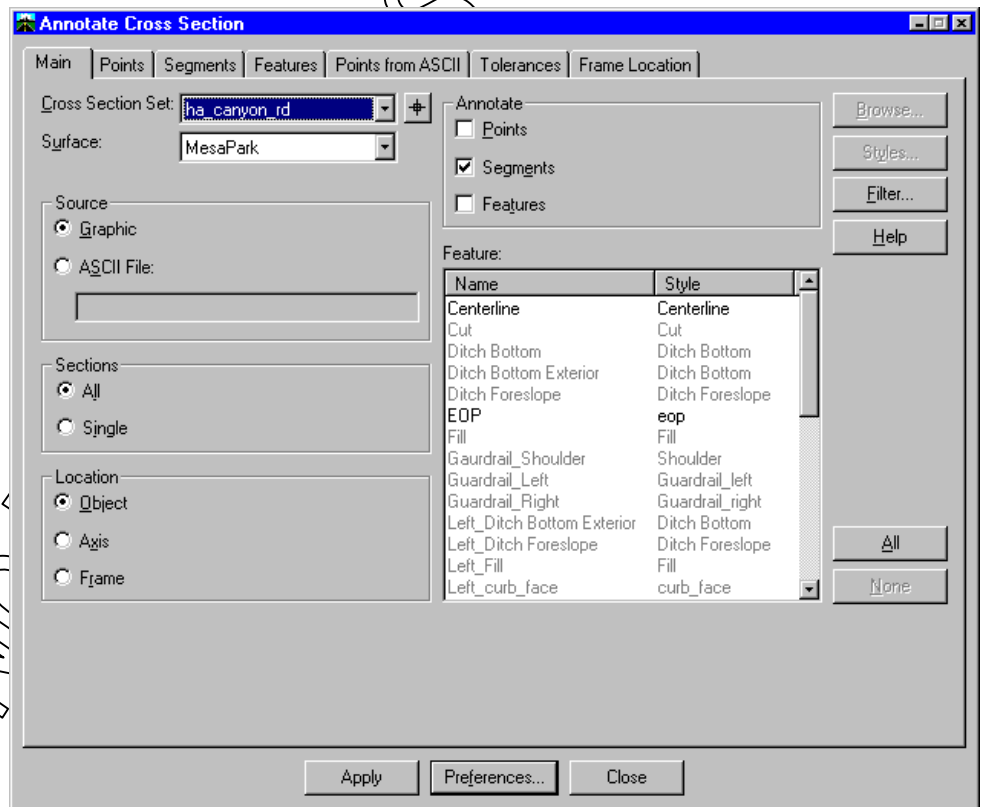
The Annotate Cross Section command provides the user the ability to satisfy the absolutely critical proposed surface Quality Control requirement: precise cross slope and width annotation/evaluation. This can be used by the InRoads user to verify such things as transitions, superelevation and complex side slope solutions. The contractor can use the cross section sheets to verify slope stake reports before prior to sending the staking crew out to the field.

Annotate Cross Sections provides a robust cross section annotation solution. Some of the things it can do is:

- Annotate slopes, widths of terrain surface segments
- Annotate surface point elevations and offsets
- Annotate offsets, elevations, Names, Descriptions, and Types of DTM Features

2. Select InRoads>Evaluation>Cross Sections>Annotate Cross Sections

3. Hit Apply to see what happens (we'll discuss some of the settings in a moment).



4. Zoom in to one of the Cross Sections (or use the Cross Section Viewer).

