

### *Sec. 8.01* **General**

Construction surveys shall be made in accordance with the **General Provision in Section 105.13 & 517** of the Road and Bridge Specifications and the **Construction Manual** with its corresponding sections.

The Contract Surveyor or District Survey Manager (whichever is performing the stakeout) should become familiar with the plans, Road and Bridge Specifications, and contract prior to the Pre-Construction Conference so any concerns can be addressed at that meeting.

Unless specifically instructed by the District Survey Manager, the Survey Crew is not to perform checks on any survey work performed by the contractor.

### *Sec. 8.02* **Alignment**

The construction centerline shall be established using the alignment data sheet and the established coordinate values that are included in the plan set. All control points used during construction stakeout should be referenced and recorded for future use. Any discrepancies in the construction alignment should be brought to the immediate attention of the project inspector.

All notes relative to the retracing of the plan alignment shall be recorded in the digital, ASCII file, or field book in the standard manner, and should be retained by the survey party for the use of retracing the line after construction, if needed ([Figures 8-B through 8-D](#)). For marking centerline and reference stakes, please see [Figure 8-I](#).

### *Sec. 8.03* **Levels, Benchmarks and Project Elevations**

Project benchmarks are shown on the alignment data sheet in the plan set. These benchmarks should be checked prior to their use in stakeout. Differential leveling should be run between benchmarks and recorded in field notes. Any appreciable differences in benchmark elevation should be recorded in field notes and check levels should be run to verify the difference. The project inspector should be notified of the discrepancies so he can notify the District Survey Manager. If additional benchmarks are set on the project, a list of these benchmarks with a description and elevation should be given to the project inspector and contractor. For examples of level notes see [Figures 8F, 8G, and 8H](#).

### *Sec. 8.04* **DTM's**

DTM's will not be required on plan quantity projects. Of the majority of projects currently designed, regular excavation is plan quantity. For those projects that are designed as non-plan quantity, then original ground DTM's will need to be secured during the slope stake process. These will be done so accurate excavation quantities can be computed for the project. In these rare instances, the District Survey Manager can be contacted for proper procedures in securing DTM's.