


TO: SUPERSEDED BY EI 95-013 EFFECTIVE 3/7/1995	<h1>ENGINEERING INSTRUCTION</h1> <p>NEW YORK STATE DEPARTMENT OF TRANSPORTATION</p>
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APPROVED:  <u>Deputy Chief Engineer, Facilities Design Subdivision</u>	Date: <u> 3/12/76 </u> Supersedes:
SUBJECT: GUIDE RAIL LOCATION SHOWN ON PLANS Subject Code: 7.26-2-10.00	

The change in shoulder width for Highway Design Classes Rural-1 through Rural-6 and Urban-1 through Urban-3, as required by Engineering Instruction 75-82, produces a 4'-3" additional width of embankment on the right in direction of travel where guide rail is required as compared to shoulder without guide rail (10' shoulder without guide rail and 12' shoulder plus 2'-3" widening where guide rail is required).

It is essential that location of the ends of guide rail be accurately shown on the plans to avoid problems during construction. The engineer in charge of the design should review the guide rail locations himself.

The plans should also accurately depict those areas where there is a transition from shoulder with guide rail to shoulder without guide rail. The rate of taper for the transition should be approximately 10 to 1.

In the past it has not been unusual to add additional guide rail during construction over quantities shown on the plans because the points of starting and stopping were not accurately determined during design. This has not been a problem as long as the EIC was able to properly determine these points. Now, however, the additional 4'-3" width of embankment required for guide rail necessitates that guide rail locations be accurately determined prior to start of construction.

With careful attention to the task, quite accurate guide rail tables can be prepared for new construction and reconstruction where full field survey data has been obtained. Locations of guide rail for R & P projects can be accurately estimated by a field review of the project.

MDG:ADK:BS