



**Arizona Department of Transportation**  
**ROADWAY ENGINEERING GROUP**

**MEMORANDUM**

**To:** Roadway Design Personnel  
ADOT and Consultants

**Date:** August 7, 2001

**From:** John L. Louis  
Assistant State Engineer  
Roadway Engineering Group

**Subject:** Guard Rail  
Minimum Height after Overlay  
Pavement Preservation Projects

The height of new W-beam guard rail to top of rail for new construction has been raised from 27" to 28". See revised (7/01) Standard Drawing C-10.20 and C-10.21. On pavement preservation projects a determination must be made of the height of existing guard rail which may remain in place after full width pavement overlays. This height was previously established as 24" and is now revised to 25", maintaining the 3" lower tolerance. The new 25" allowable height has been discussed and agreed upon as appropriate with the Federal Highway Administration. An upper allowable height of 31" is also appropriate but is seldom used or needed.

The following guidance shall therefore be utilized in determining whether existing guard rail should be reconstructed based upon adequate height:

**When evaluating existing guard rail height to remain in place with pavement rehabilitation, existing guard rail which would become less than 25" in height (measured from surface to top of rail at the face) as a result of overlay or other pavement treatment should be reconstructed to the new standard height.** Measurements shall be taken in the field for verification with an average condition considered and good engineering judgement applied in making the determination.

Thank you for your attention to this item.

JLL/THO

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