

**WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DESIGN DIRECTIVE**

<p>DD-304 RAILROAD-HIGHWAY GRADE CROSSINGS <i>October 17, 2006</i></p>
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The following guidelines are to be used when a railroad-highway grade crossing is contained within a project.

1. Part 8 of the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) will be used for proper traffic control devices. As a minimum, two reflectorized crossbucks will be placed.
2. The DOT Inventory Number of each crossing must be shown on the plans.
3. The signal house for the crossing should be designed and located outside the clear zone.
4. Guardrail should not be used for shielding new signals or signal house. If guardrail is required for other reasons, the signals and house will be installed behind the guardrail.
5. If the railroad-highway grade crossing is near an intersection controlled by highway traffic signals, provisions shall be made to preempt the highway traffic signals for the crossing signals.
6. Intersections should be no closer than 75 feet to a railroad-highway grade crossing. Adequate storage distance must be provided for the longest vehicle expected to use the crossing.
7. Roadway shoulders shall be carried across the railroad track without interruption. If no shoulder exists, the crossing shall extend 3 feet beyond the traveled way on each side of the road, measured perpendicular to the road.
8. Roadway drainage should not be directed onto the crossing surface or tracks. Ditches or drainage systems near the crossing must be designed to permit the crossing underdrain to outlet.
9. Roadway profile grades at the crossing should be as flat as possible, but must match the cross slope of the tracks.
10. Additional roadway drainage shall not be put in the railroad's drainage system without considering the effect on the railroad's drainage system.