

MDOT/ACEC Design Basic Training
Guardrail Design
August 11, 2026
9:00 a.m. to 4:30 p.m.
Hybrid Training
In person, Earle Learning Center; Virtual, via Teams

AGENDA

Our presenter today is Carlos Torres. Carlos is the Roadside Safety Engineer Specialist and the Chairperson of the Barrier Advisory Committee for MDOT. He has held that role since 2004.

9:00 a.m.-12:00 p.m. Guardrail Design

Topics to be covered in this training include:

- Provide an overview of guardrail design
 - o Clear zone concept
 - o Roadside topography and its effects on guardrail design
 - o Overview of different guardrail types and related features
 - Guardrail types
 - Approach terminals
 - Departing terminals
 - Anchorages
 - Curved guardrail
 - Long span details
 - Other guardrail features
 - o Guardrail design terminology and applications
 - o Methodology for calculating minimum length of need
 - o Knowing which guardrail features to use for different applications
 - o Solve a guardrail design example problem
- Provide a brief overview of MDOT standards and guidelines related to guardrail

12:00 p.m. - 1:00 p.m. - Lunch Break -

1:00 p.m. - 4:30 p.m. Guardrail Design – continuation of above topics

Total CEHs offered for A.M. and P.M. sessions: 6.50 (A.M. only = 3.0, P.M. only = 3.5, pending approval)

Thank you for attending today's training. The following are helpful links:

Event Links: A.M. Session: [Attend A.M. Session Virtually](#) P.M. Session: [Attend P.M. Session Virtually](#)
Questions: [Development Training Page](#) Survey: [Guardrail Design Survey](#)

The CEH's are being listed as a guide and the Michigan Department of Transportation (MDOT) is not awarding CEH's. Please note that a final determination on what qualifies as a CEH credit ultimately lies between the license holder and the Michigan Department of Licensing and Regulatory Affairs (LARA).