



# Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

## BDE PROCEDURE MEMORANDUM

**NUMBER:** 16-11

**SUBJECT:** BDE Manual Revision – Chapter 31

**DATE:** August 26, 2016

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Chapter 31 is being updated due to FHWA policy revisions regarding controlling design criteria, as noted in the Federal Register. Please see Chapter 31 of the BDE Manual, form BDE 3107, and form BDE 3108 online to view the revisions.

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### Background

In concert with the move to more risked-based federal oversight and the streamlining of procedures, the Federal Highway Administration (FHWA) has recently updated its policy regarding controlling criteria for design. By means of a May 5, 2016 policy memorandum, information pertaining to controlling criteria found in a previous April 15, 1985 policy memorandum has been superseded. The May 5, 2016 memorandum eliminated 3 criteria, renamed others, and focused the application of most design criteria on high speed roadways on the National Highway System (NHS) with design speeds greater than or equal to 50 mph (80 km/hr). The revised 10 controlling criteria on high speed facilities on the NHS are:

- Design Speed
- Lane Width
- Shoulder Width
- Horizontal Curve Radius
- Superelevation Rate
- Stopping Sight Distance (SSD)
- Maximum Grade
- Cross Slope
- Vertical Clearance, and
- Design Loading Structural Capacity.

Because of our current FHWA/IDOT Stewardship & Oversight Agreement, these revisions to the FHWA controlling design criteria will only affect the Level One Design Exception process which applies to interstate highways only. The revisions to the FHWA controlling criteria have also necessitated changes to form BDE 3107, “Level One Design Exception Criteria Checklist.” Section 31-7 of the BDE Manual and form BDE 3107 have been revised to only include the current 10 FHWA criteria. Form BDE 3107 has been revised

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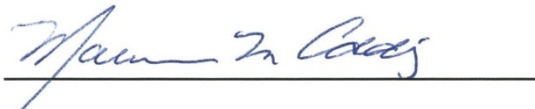
to include each criterion in the order corresponding chronologically to the appropriate BDE Manual Chapter number that references the criterion. Reference to the relevant BDE Manual Chapter has been included for each criterion for information and cross-reference purposes.

For low speed facilities (design speeds less than 50 mph (80 km/hr)), the 13 FHWA controlling criteria have been reduced to 2 for routes on the NHS. These 2 controlling criteria are:

- Design Loading Structural Capacity, and
- Design Speed.

However, because the FHWA/IDOT Stewardship & Oversight Agreement has already delegated the Level Two Design Exception process to IDOT, which applies to all routes except interstates, the Level Two Design Exception process will remain unchanged, and a single addition will be made to form BDE 3108, "Level Two Design Exception Criteria Checklist." Added emphasis is being placed by FHWA on design loading structural capacity for both structures and roadways. As a result, an additional item, item 9, "Structural capacity of roadway," has been added to form BDE 3108 to account for this new emphasis area not already captured on the form. Information on structural capacity of roadways can be found in Chapter 54, "Pavement Design."

As a result of these FHWA policy revisions, all references to the 13 controlling criteria found in Section 31-7 of the BDE Manual have been revised accordingly, form BDE 3107 has been revised extensively, and form BDE 3108 has been modified as noted above. Several other minor formatting updates were made to form BDE 3108 during this revision process. Please see Chapter 31 of the BDE Manual, form BDE 3107, and form BDE 3108 online to view the revisions.



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