



**STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION**

**ROADWAY DESIGN DIVISION**  
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**JOHN C. SCHROER**  
COMMISSIONER

**BILL HASLAM**  
GOVERNOR

**INSTRUCTIONAL BULLETIN NO. 16-08**

**UPDATED DESIGN EXCEPTION AND JUSTIFICATION FORM**

**Effective immediately**, The Design Exception and Justification Form shown in *Figure 3-1 – Design Exception and Justification Form* in *Section 3-110.02 – Design Exception Requests* of the Roadway Design Guidelines has been updated. The Roadway Design Guidelines available online does not yet reflect these changes; however, the updated Design Exception Form is attached to this instructional bulletin.

A handwritten signature in blue ink that reads "Jennifer Lloyd".

Jennifer Lloyd, PE  
Civil Engineering Director  
Roadway Design Division

KJL: ARH: VLN

July 11, 2016



STATE OF TENNESSEE  
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JOHN C. SCHROER  
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( )

BILL HASLAM  
GOVERNOR

TO: \_\_\_\_\_, Choose an item.

FROM: \_\_\_\_\_, Choose an item.

DATE: \_\_\_\_\_

SUBJECT: DESIGN EXCEPTION REQUEST AND JUSTIFICATION

Project No. \_\_\_\_\_

PIN No. \_\_\_\_\_

Project Description: \_\_\_\_\_

NHS YES NO

State Route YES NO

DESIGN CONTROLLING CRITERIA FOR WHICH EXCEPTION IS REQUESTED:

APPLICABLE FOR ALL NHS ROADWAYS

Design Speed  Design Loading Structural Capacity

APPLICABLE FOR NHS ROADWAYS WITH DESIGN SPEED ≥ 50 MPH

Lane Width  Cross Slopes   
Horizontal Curve Radius  Vertical Clearance   
Stopping Sight Distance  Superelevation Rate   
Shoulder Width  Maximum Grade

DESCRIBE THE REASONING OF THE DESIGN EXCEPTION REQUEST:

Figure 3-1  
Design Exception and Justification Form

**PROJECT DESIGN DATA:**

Highway Functional Classification: (Green Book 2011 Section 1.3)	Principal Arterial <input type="checkbox"/>	Arterial <input type="checkbox"/>
Rural or Urban area:	Connector <input type="checkbox"/>	Local road <input type="checkbox"/>
Roadway Design Standard Drawing:	_____	
Existing Design Speed:	_____	
Existing Posted Speed:	_____	
Proposed Design Speed:	_____	
Proposed Posted Speed:	_____	
Type of Terrain:	Level <input type="checkbox"/>	Rolling <input type="checkbox"/> Mountainous <input type="checkbox"/>
Traffic Data:	ADT (20____): _____	D: _____
	ADT (20____): _____	T: _____
	DHV: _____	V: _____

**GEOMETRIC DESIGN DATA FOR LOCATION OF THE REQUESTED DESIGN EXCEPTION:**

	Standard	Existing	Proposed	N/A
Cross Slope (tangent section):	2 %	_____	_____	<input type="checkbox"/>
Max. Superelevation Rate:	8 %	_____	_____	<input type="checkbox"/>
Minimum Radius of Curve:	_____	_____	_____	<input type="checkbox"/>
Minimum Stopping Sight Distance:	_____	_____	_____	<input type="checkbox"/>
Passing Sight Distance:	_____	_____	_____	<input type="checkbox"/>
Crest Vertical Curve "K":	_____	_____	_____	<input type="checkbox"/>
Sag Vertical Curve K:	_____	_____	_____	<input type="checkbox"/>
Maximum Grade:	14%	_____	_____	<input type="checkbox"/>
Design Loading:	HL-93	_____	_____	<input type="checkbox"/>

**ROADWAY TYPICAL SECTION**

Lane Width:	_____	_____	_____	<input type="checkbox"/>
Outside Shoulder width:	_____	_____	_____	<input type="checkbox"/>
Inside Shoulder width:	_____	_____	_____	<input type="checkbox"/>
Clear Zone width:	_____	_____	_____	<input type="checkbox"/>

**BRIDGE DESIGN FEATURES**

Traffic Lane Widths:	_____	_____	_____	<input type="checkbox"/>
Outside Shoulder Widths:	_____	_____	_____	<input type="checkbox"/>
Inside Shoulder Widths:	_____	_____	_____	<input type="checkbox"/>
Sufficiency Rating:	_____	_____	_____	<input type="checkbox"/>
Vertical Clearance	_____	_____	_____	<input type="checkbox"/>
To Navigational Waterway:	_____	_____	_____	<input type="checkbox"/>
To Other Highway:	16.5 ft.	_____	_____	<input type="checkbox"/>
To Railroad:	23 ft.	_____	_____	<input type="checkbox"/>

Figure 3-1 (Continued)  
Design Exception and Justification Form

**OTHER FACTORS CONSIDERED FOR THE EXCEPTION REQUEST:**

	YES	NO	N/A
<b>SAFETY</b>			
Accident history data has been reviewed.			
All roadway and roadside safety mitigation measures have been considered and provided.			
The proposed variance from the minimum roadway design standards does not adversely affect the safety of the facility.			
<b>The Highway Safety Manual is used to justify the design exception.</b>			
<b>OPERATIONS</b>			
The operation of the proposed typical cross-section is comparable with operation of the adjacent cross-sections.			
The proposed design does not cause a reduction in capacity or adversely affect traffic flow of the facility.			
The proposed design does not adversely effect long-term operations.			
<b>ROADWAY DESIGN</b>			
It is not feasible to meet the minimum roadway design standards due to right-of-way restrictions, environmental impacts, etc.			
The proposed design maintains the same level of service compared to the design based on minimum roadway design standards.			
The proposed design results in a significant cost savings compared to the design based on minimum roadway design standards.			
The proposed design can meet minimum roadway design standards in the future.			

**JUSTIFICATION OF DESIGN EXCEPTION:**

Please provide detailed justification for the each item checked NO above

Attachments

**DESIGN EXCEPTION IS REVIEWED AND RECOMMENDED FOR APPROVAL BY:**

\_\_\_\_\_  
Choose an item, Date

Reviewer Comments Attached

**APPROVED BY:**

\_\_\_\_\_  
Choose an item, Date

Figure 3-1 (Continued)  
Design Exception and Justification Form