

DESIGN REPORT INSTRUCTIONS

The Design Report documents decisions made when selecting design criteria established in the 2017 LADOTD Minimum Design Guidelines or the 2019 Low-Volume Roads Design Guidelines. Since the guidelines allow a range of design values for most criteria, it is necessary to document why a particular design value is used on a project. The information below will detail the process for submitting the Design Report.

Preliminary Design Report

- The **Preliminary Design Report** is to be included with all feasibility studies, environmental documents and the 60% preliminary plan submittal
- The preliminary status in the top right corner should be checked for this submittal
- Comments to the Design Report will be sent back to the designer along with the comments for the submittal
- The **Preliminary Design Report** does not need to be signed at this time

Final Design Report

- The **Final Design Report** is to be included with the 100% preliminary plan submittal
- The final status in the top right corner should be checked for this submittal
- All plan comments as well as Design Report comments are to be addressed
- Signatures on the front page of the report are required at this stage

Revised Design Report

- A **Revised Design Report** is only required when one or more design criteria has changed from the **Final Design Report**
- The revised status in the top right corner should be checked for this submittal
- A brief description of the revision should be described in the Description of Work box
- Only values that have changed should be filled in, all other fields should be left blank
- Signatures on the front page on the report are required at this stage

Signatures

Recommended by

- Engineer of Record – Engineer signing the plans
- DOTD Road Design Task Manager
- DOTD Bridge Design Task Manager
- DOTD Project Manager – Project Manager listed in Project Systems
- Responsible Charge – (Local Public Agency (LPA) and Off-System projects only)

Approved by

- Chief Executive Authority (LPA and Off-System projects only)
- DOTD Section Head, Assistant District Administrator, or Designee

Notes:

2019 Low-Volume Roads Design Guidelines – Preferred design elements as indicated on the DOTD Minimum Design Guidelines are considered Not Applicable on low-volume roads, so only Acceptable and Proposed values should be entered into the appropriate fields. If matching the existing design element is the Acceptable design element value, the actual value shall be entered as the Acceptable value and not “match existing”.

Safety Performance – If the Level Of Service Safety (LOSS) is 3 or 4 for either All Severity Crashes or Injury Crashes, consult with the District Traffic Operations Engineer (DTOE) to determine if safety countermeasures or baseline safety improvements can be included in the project. Suggested countermeasures and baseline safety improvements are located at [Safety Countermeasures](#) and [Baseline Safety Improvements](#), respectively. If access to crash data or technical assistance is needed, contact LADOTD’s Highway Safety Section.

Design Guideline Waivers – Whenever “acceptable” design guideline values are utilized in lieu of “preferred” values, a Design Guideline Waiver is required. This Design Report will be used to document Design Guideline Waivers, and will be approved by the process detailed above. The separate Design Waiver Request form will not be required for design guideline waivers (see below).

Design Waivers – The separate Design Waiver Request form will not be utilized to request design guideline waivers. It will continue to be used for waivers to EDSMs, Design Manuals, policies, etc.

Design Exceptions – When neither “acceptable” nor “preferred” design guideline values are utilized, a Design Exception Request form must be completed and approved by the DOTD Chief Engineer with the separate Design Exception Request form. The completed and signed Design Report should be included with the Design Exception request, and should identify the design element(s) that require a design exception.

To further assist in determining when a Design Guideline Waiver/Exception is necessary, see the [Design Exception Flowchart](#) .



*Design Report
for*

Status:
 Preliminary
 Final
 Revised

Project Information:

State Project No.	
Federal Aid Project No.	
Control Section(s)	
Project Name	
Route(s)	
Parish(es)	

Description of Work (or Revision Description)

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Seal

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Traffic

Control Section			
Current ADT			
Design ADT			
D (%)			
K (%)			
T (%)			
TDDHV (%)			

Recommended By:

DOTD Road Design Task Manager:	Title:
Signature:	Date:
DOTD Bridge Design Task Manager:	Title:
Signature:	Date:
DOTD Project Manager:	Title:
Signature:	Date:
LPA Responsible Charge (For LPA and Off-System Projects Only):	Title:
Signature:	Date:

Safety Performance

All Severity Crashes			
Injury Crashes			
High PSI			

*Route and
Design Classification*

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Work Classification

Work Type			
System			
Oversight			

Design Waivers

Design Exceptions

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Approved By:

Chief Executive Authority (For LPA an Off-System Projects Only):	Title:
Signature:	Date:
DOTD Section Head or Designee:	Title:
Signature:	Date:

Design Guideline Waivers are approved as noted in the attached instructions. All Design Exceptions must be approved by the Chief Engineer with the Design Exception form.

State Project No.

Route

Control Section

Roadway Features:

<i>Design Feature</i>	<i>Preferred</i>	<i>Acceptable</i>	<i>Proposed Value</i>	<i>Design Waiver Required</i>	<i>Design Exception Required</i>	<i>Remarks or Explanation for Proposed Value</i>
Design Speed (mph)				<input type="checkbox"/>	<input type="checkbox"/>	
Lane Width (ft)				<input type="checkbox"/>	<input type="checkbox"/>	
Shoulder Width (ft)						
Inside				<input type="checkbox"/>	<input type="checkbox"/>	
Outside				<input type="checkbox"/>	<input type="checkbox"/>	
Shoulder Type						
Inside				<input type="checkbox"/>	<input type="checkbox"/>	
Outside				<input type="checkbox"/>	<input type="checkbox"/>	
Lateral Offset (ft)				<input type="checkbox"/>	<input type="checkbox"/>	
Clear Zone (ft)				<input type="checkbox"/>	<input type="checkbox"/>	
Cross Slope (%)				<input type="checkbox"/>	<input type="checkbox"/>	
Longitudinal Grade				<input type="checkbox"/>	<input type="checkbox"/>	
Slopes (ft/ft)						
Fore Slope				<input type="checkbox"/>	<input type="checkbox"/>	
Back Slope				<input type="checkbox"/>	<input type="checkbox"/>	
Median Width (ft)				<input type="checkbox"/>	<input type="checkbox"/>	
Is Median Barrier required?	<input type="checkbox"/> Yes <input type="checkbox"/> No					
If so, what type of barrier is proposed?						
<input type="checkbox"/> Cable	<input type="checkbox"/> 42" Single Slope Concrete					
<input type="checkbox"/> Other (explain)	<input type="checkbox"/> None (Design Exception Required)					
<i>Include a description of the proposed median barrier system in the space provided. Concrete median barrier heights and/or shapes other than 42 inch single slope will require justification via the design report.</i>						
Stopping Sight Distance: <i>Vertical and horizontal distances must be met.</i>						
Do plans meet Stopping Sight Distance requirements?				<i>Design Exception Required</i>	<i>Remarks or Explanation for Proposed Value</i>	
<input type="checkbox"/> Yes		<input type="checkbox"/> No		<input type="checkbox"/>		

Complete Streets: Accommodations for bikes and pedestrians must be considered. See Design Guidelines and Complete Streets EDSM II.2.1.14 for accommodation requirements.

Are Complete Streets accommodations required on this project?	<i>Design Exception Required</i>	<i>Remarks or Explanation for Proposed Value</i>
<input type="checkbox"/> Yes <input type="checkbox"/> No		
Do plans meet Complete Streets accommodations?	<input type="checkbox"/>	
<input type="checkbox"/> Yes <input type="checkbox"/> No		
Which modes of transportation are accommodated?	Describe	
<input type="checkbox"/> Pedestrians <input type="checkbox"/> Bicycles		

Horizontal Curves Radius/Superelevation:

Max Super-elevation rate (%) <i>e_{max}</i>	Design Speed (mph)	Required Minimum Radius (ft)			Minimum radius and appropriate superelevation are being used for all curves?	<i>Design Exception Required</i>	<i>Remarks or Explanation for Proposed Value</i>
		Normal Crown	Reverse Crown	Full Super			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	

Bridge Features:

<i>Design Feature</i>	<i>Preferred</i>	<i>Acceptable</i>	<i>Proposed Value</i>	<i>Design Waiver Required</i>	<i>Design Exception Required</i>	<i>Remarks or Explanation for Proposed Value</i>
Bridge Width (ft)						
Curb				<input type="checkbox"/>	<input type="checkbox"/>	
Shoulder				<input type="checkbox"/>	<input type="checkbox"/>	

Structural Capacity:

Do all structures meet requirements for Structural Capacity?	<i>Design Exception Required</i>	<i>Remarks or Explanation for Proposed Value</i>
<input type="checkbox"/> Yes <input type="checkbox"/> No		

Vertical Clearance:

Are minimum required roadway clearances met for all structure types?	<i>Design Exception Required</i>	<i>Remarks or Explanation for Proposed Value</i>
<input type="checkbox"/> Yes <input type="checkbox"/> No		

Additional Comments: