

**DOTD PAVEMENT PRR
MINIMUM DESIGN GUIDELINES
RURAL
NON INTERSTATE ROUTES
REPLACEMENT AND MAJOR REHABILITATION**

CURRENT ADT	TRUCKS < 10%			TRUCKS ≥ 10%			BRIDGE WIDTHS**
	LANE WIDTH	SHOULDER		LANE WIDTH	SHOULDER		
		Width	Type		Width	Type	
0 - 400	9' - 10' (11' desirable)	#	Aggregate	10' (11' desirable)	#	Aggregate	Existing
401 - 1500	11'	#	Aggregate	11'	#	Aggregate	Existing
1501 - 4000	11' (12' desirable)	#	2' min. paved is desired	12'	#	2' min. paved is desired	Existing
> 4000	11' (12' desirable)	#	2' min. paved is desired	12'	#	2' min. paved is desired	Existing

* 9' acceptable to remain with concurrence from District Traffic Operations Engineer

Width as necessary to maintain existing crown. 2' minimum is desired.

** If clear width < travel width plus shoulder widths, delineate approaches by striping and/or signing. Update approach guard rail and end treatments, as applicable.

Roadway Cross slope = 2.5%

Horizontal Clearance = Match existing.

Horizontal Curvature = Match existing. If curve advisory speed < roadway posted speed minus 15 mph, low cost safety improvements shall be considered.

Use 12' lanes in curves if degree of curve exceeds 5° for ADT 401 - 1500 and 4° for ADT > 1500.

Vertical Curvature = Match existing.

Stopping Sight Distance (SSD) = Match existing. If SSD < required for roadway posted speed minus 20 mph, low cost safety improvements shall be considered.

Superelevation & Transitions = Match existing but not less than minimum shown in "Superelevation Values for Preservation/Rehabilitation/Replacement (PRR) Projects".

When existing foreslope rates can be maintained within existing right-of-way, desirable values for superelevation and transitions should be used.

Foreslope = Match existing. If crash history, 3n:1v or flatter is desirable.

Roadway Grade = Match existing.

Vertical Clearance = Match existing.

Structural Capacity = Match existing. Capacity must be checked by Bridge Design Section if any work is done to bridge deck and/or bridge rails.

For minor rehabilitation and preservation projects, refer to "Guidance for Preservation/Rehabilitation/Replacement (PRR) Projects".

For reconstruction projects (new structure including subbase, new alignment, major changes to alignment, or addition of travel lanes), refer to DOTD Minimum Design Guidelines.

For ADA requirements, refer to "Guidance for Preservation/Rehabilitation/Replacement (PRR) Projects".

A formal exception is required, via justification in the PRR Report, if any of the above criteria is not met.

For non Interstate NHS routes, 3R Minimum Design Guidelines also apply.

9/1/2010

Approved:

Rudolph J. Davis
DOTD Chief Engineer

Date

9.30.10

**DOTD PAVEMENT PRR
MINIMUM DESIGN GUIDELINES
URBAN & SUBURBAN
NON-INTERSTATE ROUTES
REPLACEMENT AND MAJOR REHABILITATION**

CURRENT ADT	SECTION	TRUCKS < 10%		TRUCKS ≥ 10%		BRIDGE WIDTHS
		LANE WIDTH*	PAVED SHLDR WIDTH*	LANE WIDTH*	PAVED SHLDR WIDTH*	
ALL	CURB	9'	0'	**	**	Existing
0 - 2000	NO CURB	9'	#	10'	#	Existing
>2000	NO CURB	10' (11' desirable)	#	11' (12' desirable)	#	Existing

* Minimum Widths

** Sum of Lane and Shoulder Width = 12' minimum

Width as necessary to maintain existing crown. 2' minimum is desired.

Roadway Cross Slope = Match existing for curbed sections. 2.5% desirable.

Roadway Cross slope = 2.5% for non curbed sections.

Horizontal Clearance = Match existing.

Horizontal Curvature = Match existing. If curve advisory speed < roadway posted speed minus 15 mph, low cost safety improvements shall be considered.

Vertical Curvature = Match existing.

Stopping Sight Distance (SSD) = Match existing. If SSD < roadway posted speed minus 20 mph, low cost safety improvements shall be considered.

Superelevation & Transitions = Match existing but not less than minimum shown in "Superelevation Values for Preservation/Rehabilitation/Replacement (PRR) Projects".

Foreslope = Match existing. If crash history, 3h:1v or flatter is desirable (No Curb).

Roadway Grade = Match existing.

Vertical Clearance = Match existing.

Structural Capacity = Match existing. Capacity must be checked by Bridge Design Section if any work is done to bridge deck and/or rails.

Urban & Suburban applies to functional classification of roadway and not geographic location.

For minor rehabilitation and preservation projects, refer to "Guidance for Preservation/Rehabilitation/Replacement (PRR) Projects".

For reconstruction projects (new structure including subbase, new alignment, major changes to alignment, or addition of travel lanes), refer to DOTD Minimum Design Guidelines.

For ADA requirements, refer to "Guidance for Preservation/Rehabilitation/Replacement (PRR) Projects".

A formal exception is required, via justification in the PRR Report, if any of the above criteria is not met.

For non interstate NHS routes, 3R Minimum Design Guidelines also apply.

9/1/2010

Approved:


DOTD Chief Engineer

Date