

Title: 3R//4R Guidelines, Road Width and Median Curb Height

Memorandum Date: April 27, 2012

Design Exception Request Date: April 10, 2012

Region: North Central

Approval Status: Approved

Project Location					
Highway	Control Section	At km	From km	To km	Existing AADT
630	02		1.900(WB)	3.250 (WB)	10,720
	02		0.46 (EB)	6.460 (EB)	

Project Type (Mark all that apply with an X)			
Functional Planning:	New Construction:	Reconstruction:	Paving/Surfacing: X
Bridge:	Operations:	Geotechnical:	Environmental:
Other:			

Summary
<p>The following design exception request are for the following:</p> <ol style="list-style-type: none"> Road Width, Westbound proposed width 8.2 m (Km 1.90 to Km 3.25). Based on the ATHGDG, Chapter G – 3R/4R Guidelines, the suggested minimum width for a divided highway is 9.5 m. Median Curb Height, Eastbound, proposed curb height 35 mm (Km 0.46 to Km 6.46). Based on the ATHGDG, Chapter G – 3R/4R Guidelines, the minimum acceptable curb height on existing roadways should be is 50 mm on the median side and adjacent to boulevards.
Rationale for Approval/Rejection
<p>Design Exception 1:</p> <ul style="list-style-type: none"> The existing WB width of 8.2 m will not be reduced as a result of the proposed surfacing work. The existing width of 8.2 m or less with existing curbs beyond the proposed surfacing limits would be consistent with the existing width from about Km 0 to Km 6.46. The existing WB width of 8.2 m will not be reduced as a result of the proposed surfacing work. The existing width of 8.2 m or less with existing curbs beyond the proposed surfacing limits would be consistent with the existing width from about Km 0 to Km 6.46. Site constrains of the existing curb section and right of way on the north side of Highway 630:02. Collision history for the five year period from 2005 to 2009: The WB and EB lanes of Hwy 630:02 total collision rates and frequency respectively are similar. <p>Design Exception 2:</p> <ul style="list-style-type: none"> The request is for maintaining the existing median curb height which was found to be as low as 35 mm in some localized areas, mostly in the vicinity of the intersections. The minimum 3R/4R curb height of 50 mm was met throughout the majority of the project limits.

Additional Mitigation Required

No mitigation is required.

Key Words

3R/4R Guidelines, Curb height, Pavement width

Photograph/Diagram

2011.09.20 630:02:L1 DL:L1 km 2.528 JCT HWY 14 JCT OF HWY 21 53.512143 -113.208663 729.0



