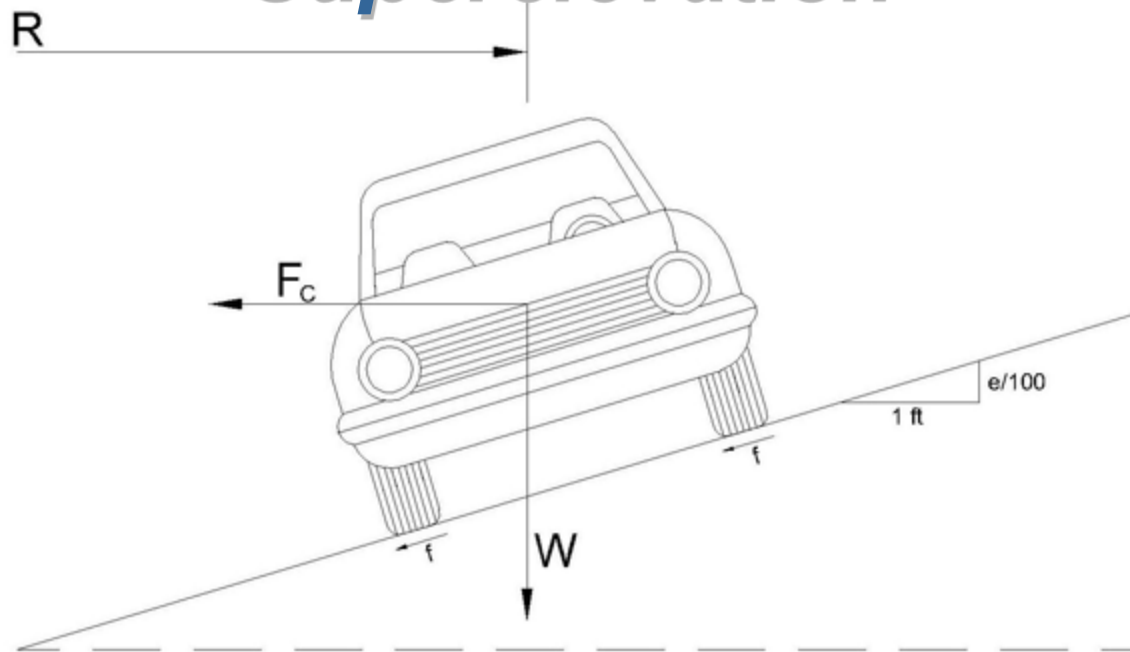


FDOTSS3 Design and 3D Modeling

Chapter 8

Superelevation



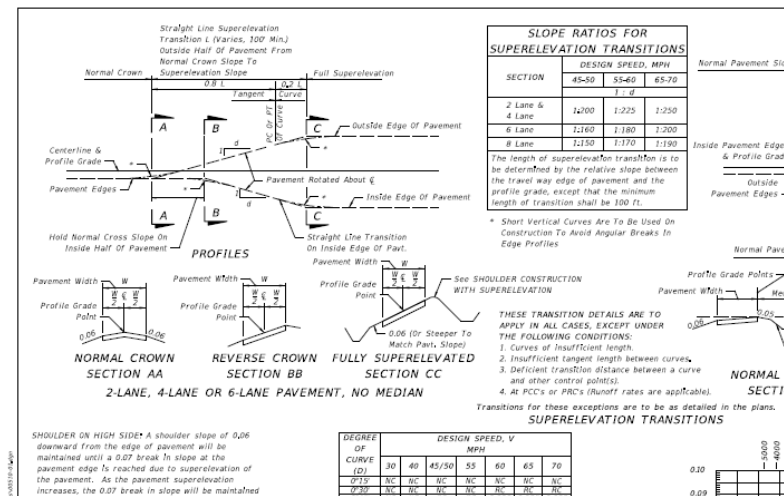
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Engineering/CADD System Office

February 4, 2015

Superelevation Design

- ◆ FDOT Design Standard Index 510 and 511
- ◆ FDOT Plans Preparation Manual Volume 1, Chapter 2



Topic #625-000-007
Plans Preparation Manual, Volume 1 - English
January 1, 2013
Revised - January 1, 2015

Table 2.9.2 Superelevation Rates for Urban Highways and High Speed Urban Streets ($e_{max} = 0.05$)

Degree of Curve D	Radius R (ft.)	TABULATED VALUES				
		DESIGN SPEED (mph)				
		30	35	40	45	50
2° 00'	2,865	NC	NC	NC	NC	NC
2° 15'	2,546				NC	RC
2° 45'	2,083				NC	
3° 00'	1,910				RC	
3° 45'	1,528					
4° 00'	1,432					
4° 45'	1,298					
5° 00'	1,146					
5° 15'	1,091		NC			0.023
5° 30'	1,042		RC			0.027
5° 45'	996					0.030
6° 00'	955					0.035
6° 15'	917				RC	0.040
6° 30'	881				0.022	0.045
6° 45'	849				0.024	0.050
7° 00'	819	NC			0.027	Dmax = 6° 30'
7° 15'	790	RC			0.030	
7° 30'	764				0.033	
7° 45'	739				0.037	
8° 00'	716				0.041	
8° 15'	694				0.045	
8° 30'	674				0.050	
8° 45'	655				0.055	
9° 00'	637				0.060	
9° 30'	603				0.065	
10° 00'	573				0.070	
10° 30'	546				0.075	
11° 00'	521				0.080	
11° 30'	498				0.085	
12° 00'	477				0.090	
13° 00'	441				0.095	
14° 00'	409				0.100	
15° 00'	382				0.105	
16° 00'	358				0.110	
17° 00'	337				0.115	
18° 00'	318				0.120	
19° 00'	302				0.125	
20° 00'	286				0.130	

NC = Normal Crown (-0.02) RC = Reverse Crown (+0.02)

Session Overview

- ◆ Create Superelevation Shapes Design Model
- ◆ Create Superelevation Sections
- ◆ Create Superelevation Lanes
- ◆ Calculate/Import Superelevation
- ◆ Editing Superelevation Shapes (graphics and Project Explorer)
- ◆ Template Superelevation Controls (flags and rollover)
- ◆ Assign Superelevation Sections to Corridors
- ◆ Open Cross Section Viewer
- ◆ Superelevation Reports and Diagram Editing
- ◆ **Superelevation Point Controls!**

QUESTIONS AND COMMENTS

Thank you for attending !

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