



$$X_2 = L \left[ \frac{12(\text{NC SLOPE})}{24(e) - 12(\text{NC})} \right]$$

$$X_3 = L \left[ \frac{12(\text{NC SLOPE})}{12(e)} \right]$$

V = 50 mph			
e	R (ft)	L(ft)	
		A	B
NC	7870	0	0
0.020	5700	48	72
0.022	5100	53	79
0.024	4600	58	86
0.026	4170	62	94
0.028	3800	67	101
0.030	3480	72	108
0.032	3200	77	115
0.034	2940	82	122
0.036	2710	86	130
0.038	2490	91	137
0.040	2300	96	144
0.042	2110	101	151
0.044	1940	106	158
0.046	1780	110	166
0.048	1640	115	173
0.050	1510	120	180
0.052	1390	125	187
0.054	1280	130	194
0.056	1160	134	202
0.058	1040	139	209
$e_{\text{max}} = 0.060$	$R_{\text{min}} = 833$	144	216

KEY:  
V = DESIGN SPEED (mph)  
R = RADIUS OF CURVE (ft)  
e = FULL SUPERELEVATION RATE (ft/ft)  
L = MINIMUM LENGTH OF SUPERELEVATION RUNOFF (FROM ADVERSE CROWN REMOVED TO FULL SUPER) (ft)  
A = "L" FOR 1-LANE WIDTH OF ROTATION  
B = "L" FOR 2-LANE WIDTH OF ROTATION  
NC = NORMAL CROWN

- GENERAL NOTES:
- SE RATE IS DETERMINED FROM A RADIUS EQUAL TO, OR SLIGHTLY SMALLER THAN, THE RADIUS OF THE CURVE.
  - "L" IN THE TABLE IS FOR ROTATION ABOUT THE CENTERLINE OF 2 LANES ("A") AND 4 LANES ("B") OF TRAVELED WAYS (1 LANE AND 2 LANES EACH SIDE OF THE ROTATION POINT RESPECTIVELY). MINIMUM LENGTH OF RUNOFF FOR VARIOUS WIDTHS OF ROTATION ARE AS FOLLOWS:  
FOR ROTATING A WIDTH OF 3 TRAVEL LANES:  $L = (1.33) \times L$  IN COLUMN B)  
FOR ROTATING A WIDTH OF 4 TRAVEL LANES:  $L = (1.67) \times L$  IN COLUMN B)
  - A VERTICAL CURVE WITH A LENGTH (IN FEET) EQUAL TO THE DESIGN SPEED (IN mph) SHOULD BE PLACED AT EXCESSIVE ANGULAR BREAKS.

\*\*4. THE 0.24 DIFFERENCE IN ELEVATION FROM PLAN GRADE LINE TO EDGE OF TRAVELED WAY IS BASED ON 12' TRAVEL LANES, 2% NORMAL CROWN SLOPE, AND THE LOCATION OF PLAN GRADE AT THE CENTERLINE OF ROADWAY. ALTHOUGH THE HORIZONTAL LOCATION OF PLAN GRADE AT THE CENTERLINE IS PREFERRED AND ILLUSTRATED ON THIS STANDARD DRAWING, PLAN GRADE LOCATION IS VARIABLE (I.E. PLAN GRADE AT THE MEDIAN EDGE OF TRAVEL LANE) AND SHOULD BE VERIFIED ON THE TYPICAL SECTION(S).

BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION
REVISION	<b>SUPERELEVATION TRANSITION CASE II ROTATION ABOUT EDGE OF TRAVELED WAY (URBAN FACILITY, V=50 mph)</b>
DATE	ISSUE DATE: _____

WORKING NUMBER  
SDSE-2F  
SHEET NUMBER