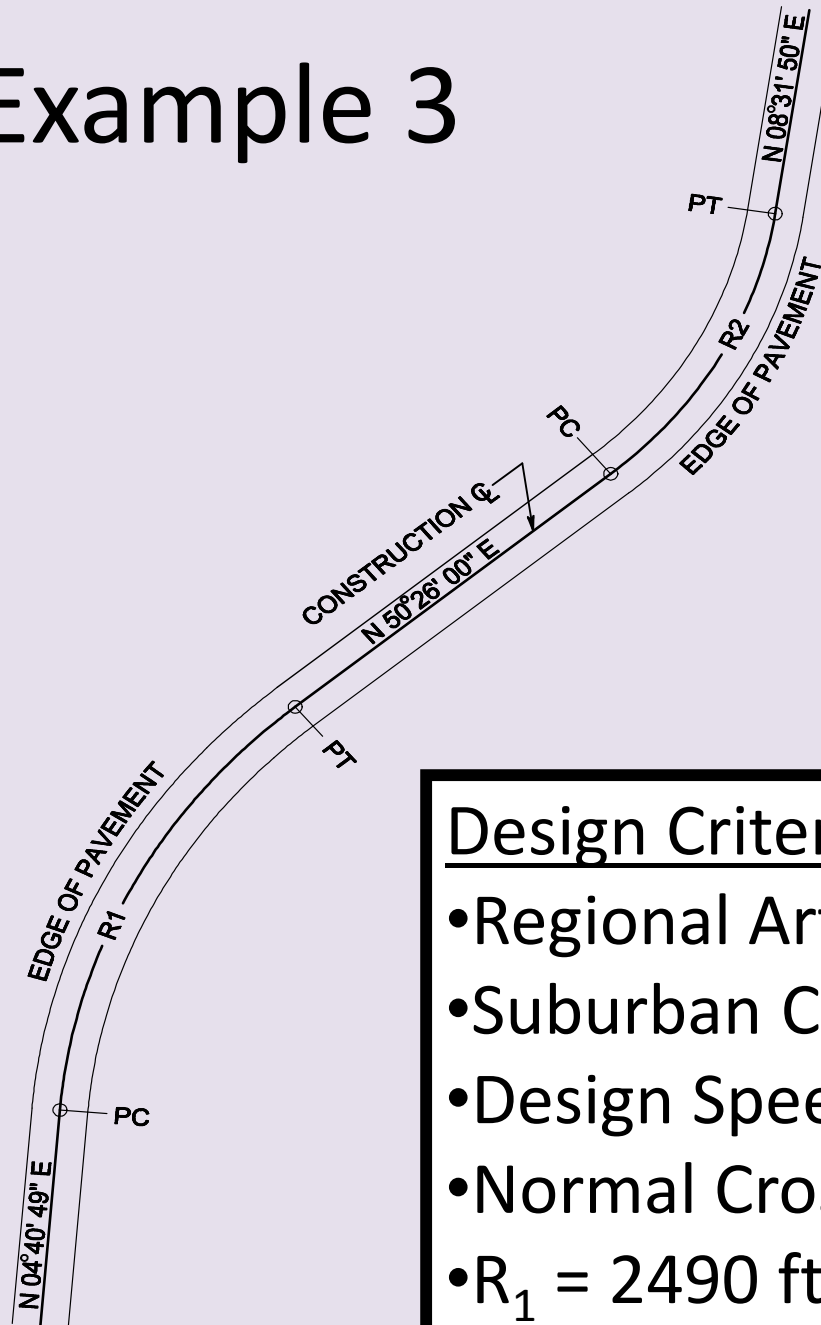


# Example 3



1. Given the design criteria below, complete the supertransition Exhibit.
2. Complete the curve data Exhibit and determine parts a) thru d)

## Design Criteria:

- Regional Arterial,
- Suburban Corridor (two-lane)
- Design Speed  $V = 60$  mph
- Normal Cross Slope,  $NC = 2.0\%$
- $R_1 = 2490$  ft,  $R_2 = 1640$  ft

# Example 3

Fill in the blanks in the curve data below.

CURVE DATA		
Description	R1	R2
$\Delta$		
Radius (R)		
Tangent Length (T)		
Curve Length (L)		
PC Station		
PT Station		

**Determine the following:**

- a) Station where tangent runout begins entering Curve R1.
- b) Station where cross slope removal is completed entering Curve R1.
- c) Station where tangent runout ends prior entering Curve R2.
- d) Station where normal cross slope is reached exiting Curve R2.

# Example 3

Given:  $e_{\max} = 6\%$

See Exhibit 3-32 for  $L_r$ . Calculate  $L_r$  and T.

Curve	Superelevation Runoff ( $L_r$ )	Tangent Runout ( $L_t$ )	Superelevation Transition ( $T=L_t + L_r$ )	Required Superelevation ( $e$ )
ft.	ft.	ft.	ft.	%
$R_1$ = 2490'	133	53.20 ~53	186	5.0
$R_2$ = 1640'	160	53.33 ~53	213	6.0