

# PLANE METHOD CURB RETURN DESIGN

COUNTY OF RIVERSIDE  
TRANSPORTATION DEPARTMENT  
ENGINEERING DIVISION

Plan Method Curb	IP Number:		Project No:	
Return Design	Checked By:		Date:	
	Approved By:		Sheet No:	

## CURB RETURN ELEVATION DATA

PI 1 \_\_\_\_\_  
 A \_\_\_\_\_  
 B \_\_\_\_\_  
 G1 \_\_\_\_\_  
 G2 \_\_\_\_\_

## CURB RETURN CURVE DATA

$\Delta$  \_\_\_\_\_ in degrees

RADIUS \_\_\_\_\_  
 L \_\_\_\_\_  
 T \_\_\_\_\_

### ELEVATION AT M.O.C

C1 =  $1/2 (A+B)$  \_\_\_\_\_  
 a1 = (PL1)-C1 \_\_\_\_\_  
 R1 =  $\text{COS} 1/2 \Delta (1 + \text{COS} 1/2 \Delta)$  \_\_\_\_\_  
 M1 =  $C1 + (R1 * a1)$  \_\_\_\_\_

### ELEVATION AT 1/4 POINT

T2 = (RADIUS)\*(TAN 1/4  $\Delta$ ) \_\_\_\_\_  
 PI 2 =  $A + (T2 * G1)$  \_\_\_\_\_  
 C2 =  $1/2 (A + M1)$  \_\_\_\_\_  
 a2 = PI2 - C2 \_\_\_\_\_  
 R2 =  $\text{COS} 1/4 \Delta (1 + \text{COS} 1/4 \Delta)$  \_\_\_\_\_  
 M2 =  $C2 + (R2 * a2)$  \_\_\_\_\_

### ELEVATION AT 1/4 POINT

PI 3 =  $B + [T2 * (-G2)]$   
 C3 =  $1/2 (B + M1)$   
 a3 = (PI 3) - C3  
 M3 =  $C3 + (R2 * a3)$

