

**Key**

Find the station and elevation of the point of intersection, sketch the unequal tangent vertical curve, and compute elevations and percent grade at full stations and the low point:

PVC station = 9+00  
 PVC elevation = 339.78 feet  
 G1 = -3.75%  
 G2 = +5.25%  
 PVT station = 19+25  
 PVT elevation = 365.54 feet

G1%	= -3.750%	G1%	= +2.513%
G2%	= +2.513%	G2%	= +5.250%
A	= 1.0047	A	= 0.1918
B	= -3.7500	B	= 2.5132
C	= 339.7800	C	= 337.8524
r	= 2.0094	r	= 0.3837

STA	X	CRV ELEV	% SLOPE
9+00.00	0	339.78	-3.750
10+00	1	337.03	-1.741
11+00	2	336.30	+0.269
12+00	3	337.57	+2.278
12+11.69	3.1169	337.85	+2.513
13+00	0.8831	340.22	+2.852
14+00	1.8831	343.27	+3.236
15+00	2.8831	346.69	+3.619
16+00	3.8831	350.50	+4.003
17+00	4.8831	354.70	+4.387
18+00	5.8831	359.28	+4.770
19+00	6.8831	364.24	+5.154
19+25.00	7.1331	365.54	+5.250
10+86.63	1.8663	336.28	0.000