

Given:

$$\begin{aligned}\Delta &= 12^\circ 24' 37'' \\ R &= 900.00' \\ PC &= 19+24.56\end{aligned}$$

Find:

Tangent distances and tangent offsets to layout this curve on full stations.  
Additionally, calculate deflection angles and sub-chords to check.

$$\begin{aligned}(1) \quad \Delta &= 12^\circ 24' 37'' \\ (2) \quad R &= 900.00' \\ (3) \quad L &= \underline{194.94'} \\ (4) \quad C &= \underline{194.56'} \\ (5) \quad T &= \underline{97.85'} \\ (6) \quad M &= \underline{5.27'} \\ (7) \quad E &= \underline{5.30'} \\ (8) \quad D_A &= \underline{06^\circ 21' 58''} \\ (9) \quad D_C &= \underline{06^\circ 22' 10''} \\ (10) \quad df &= \underline{0.0318^\circ}\end{aligned}$$

STATION	$l$	$\alpha$	TD	TO	$\alpha/2$	SC
19+24.56	-0-	-0-	-0-	-0-	-0-	-0-
20+00	<b>75.44'</b>	<b>4°48'10"</b>	<b>75.35'</b>	<b>3.16'</b>	<b>2°24'05"</b>	<b>75.42'</b>
21+00	<b>175.44'</b>	<b>11°10'08"</b>	<b>174.33'</b>	<b>17.05'</b>	<b>5°35'04"</b>	<b>175.16'</b>
<b><u>21+19.50</u></b>	<b>194.94'</b>	<b>12°24'37"</b>	<b>193.42'</b>	<b>21.03'</b>	<b>6°12'18"</b>	<b>194.56'</b>