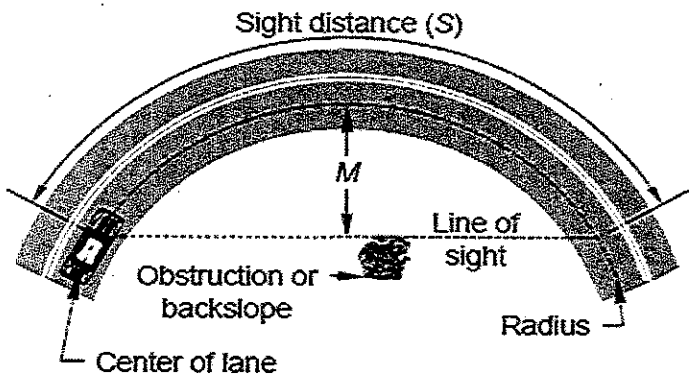
$$M = R\left[1-\cos\left(\frac{28.65S}{R}\right)\right] \qquad S = \frac{R}{28.65}\left[\cos^{-1}\left(\frac{R-M}{R}\right)\right]$$

Where:

M = Horizontal sightline offset measured from the centerline of the inside lane of the curve to the sightline obstruction (ft)

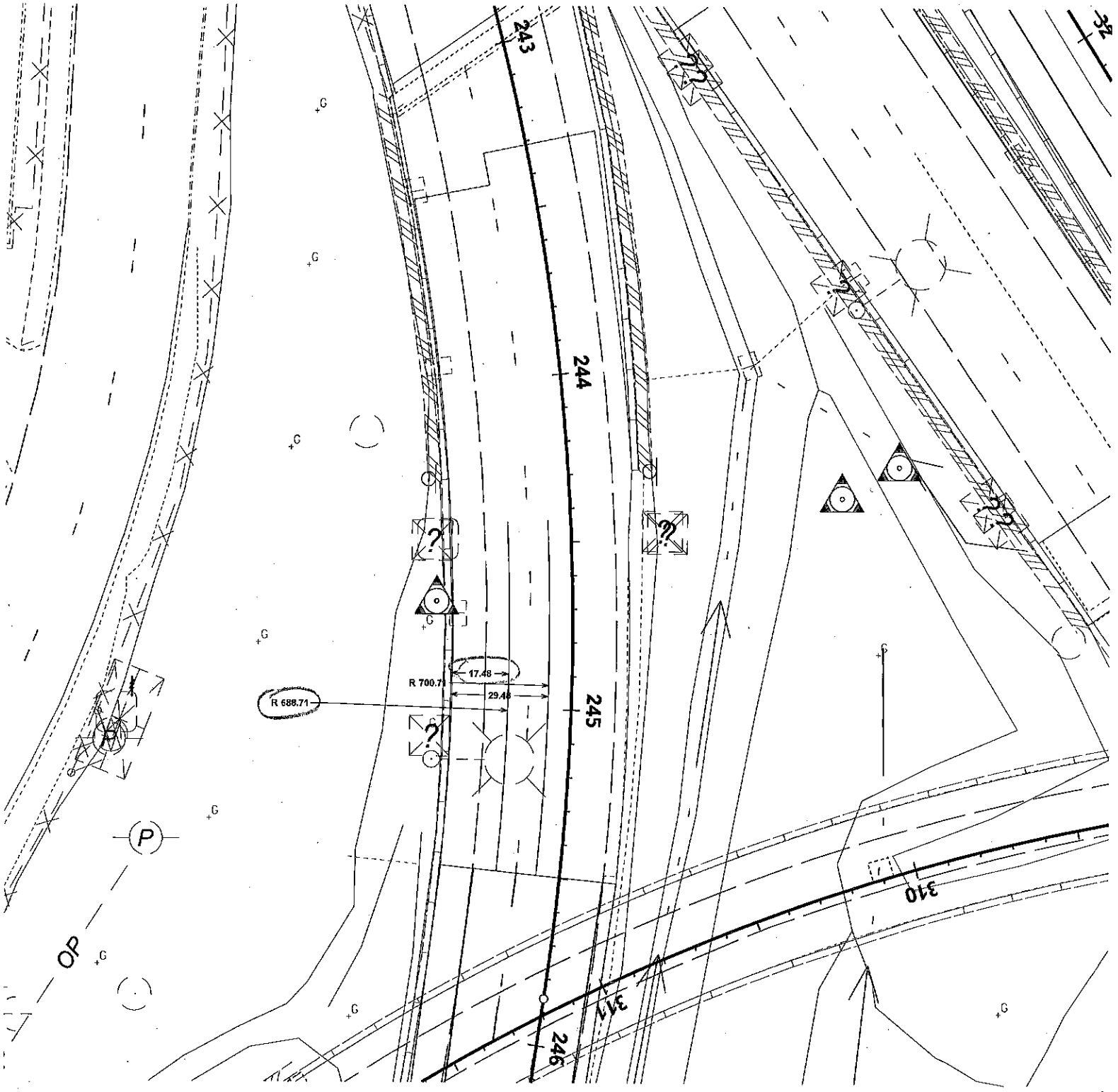
R = Radius of the curve (ft)

S = Sight distance (ft)



Sight Distance: Horizontal Curves
Exhibit 1260-9

			Enter Data For Calculations					Solved		
Alignment	**PC Station**	**PT Station**	**R**	**S**	**M**	**Design Speed**	**SSD**	**S**	**M**	**S>SSD?**
FWS	240+94.79	245+85.93	688.70		17.50	40	305	**311**		YES



243
244
245
246
310
311
R 700.71
17.48
29.48
R 688.71
P
OP