



L = TAPER LENGTH  
 AB = BC = CD = L/3  
 AB' AND C'D' ARE PARABOLIC CURVES EXCEPT  
 ON CURVED ALIGNMENTS.

**FORMULA:**

$$Y = 2.25 \frac{WX^2}{L^2}$$

**PLAN**  
 NOT TO SCALE

L	DISTANCE FROM POINT "A" ALONG BASE LINE IN FT. (L')											
60'	5	10	15	20	25	30	35	40	45	50	55	60
72'	6	12	18	24	30	36	42	48	54	60	66	72
90'	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90
120'	10	20	30	40	50	60	70	80	90	100	110	120

W	OFFSET FROM BASE LINE IN FT. (W')											
10'	0.16	0.62	1.41	2.50	3.75	5.00	6.25	7.50	8.59	9.38	9.84	10.00
11'	0.17	0.69	1.55	2.75	4.12	5.50	6.88	8.25	9.45	10.31	10.38	11.00
12'	0.19	0.75	1.69	3.00	4.50	6.00	7.50	9.00	10.31	11.25	11.81	12.00

**NOTES:**

1. THE STORAGE LANE SHALL BE 150' LONG MINIMUM (NOT INCLUDING TAPER).
2. TO DETERMINE OFFSET DISTANCES FOR ANY LENGTH TAPER USE THE FORMULA FOR THE PORTIONS OF AB' AND C'D' WHICH ARE PARABOLIC CURVES. THE PORTION B'C' IS A TANGENT. IN THE CASE WHEN THE BASE LINE CURVED, THE OFFSETS ARE CALCULATED BY ASSUMING THE BASE LINE TO BE A TANGENT; THEY ARE THEN APPLIED TO THE CURVED BASE LINE. AB' AND C'D' ARE NO LONGER PARABOLIC AND B'C' IS NO LONGER A TANGENT.
3. THE STANDARD TAPER LENGTH IS 90 FT. USE OF OTHER LENGTHS IS SUBJECT TO THE APPROVAL OF THE CITY ENGINEER.

CHANGE	DESCRIPTION	DATE	INITIAL	APPROVED:	DATE: 5/21/18
				CITY ENGINEER	