

Legend:-  
 $W$  = Width of Pavement (in feet).  
 $C$  = Crown (in inches).  
 $.080357$  times Crown = Constant.

Rule:- Use Parabola Formula to find  $Y$  and deduct Constant.

Example:- Using  $W=18'$ ;  $C=1.75''$   
 Then  $\frac{W}{2} = 9.0'$ ;  $\frac{3W}{16} = 3.375'$ ;  
 $\frac{W}{2} + \frac{3W}{16} = 12.375'$ ;  $C \times .080357 = .140625''$   
 $1.750000'' + .140625'' = 1.890625'' =$   
 Crown + Constant.

DETAILS OF GIVEN EXAMPLE

$d$	$(d)^2$	$Y$	CONSTANT	$Y$ -CONSTANT
* 3.375	11.390625	0.140625	0.140625	0.000000
4.375	19.140625	0.236304	0.140625	0.095679
5.375	28.890625	0.356674	0.140625	0.216049
* 5.625	31.640625	0.390625	0.140625	0.250000
6.375	40.640625	0.501736	0.140625	0.361111
7.375	54.390625	0.671489	0.140625	0.530864
* 7.875	62.015625	0.765625	0.140625	0.625000
8.375	70.140625	0.865934	0.140625	0.725309
9.375	87.890625	1.085069	0.140625	0.944444
* 10.125	102.515625	1.265625	0.140625	1.125000
10.375	107.640625	1.328897	0.140625	1.188272
11.375	129.390625	1.597415	0.140625	1.456790
* 12.375	153.140625	1.890625	0.140625	1.750000

\* Eighth Intervals of Pavement Width.

Proof:  $\frac{2}{14}$  of 1.75 = 0.250;  $\frac{5}{14}$  of 1.75 = 0.625;  
 $\frac{9}{14}$  of 1.75 = 1.125;  $\frac{14}{14}$  of 1.75 = 1.750.

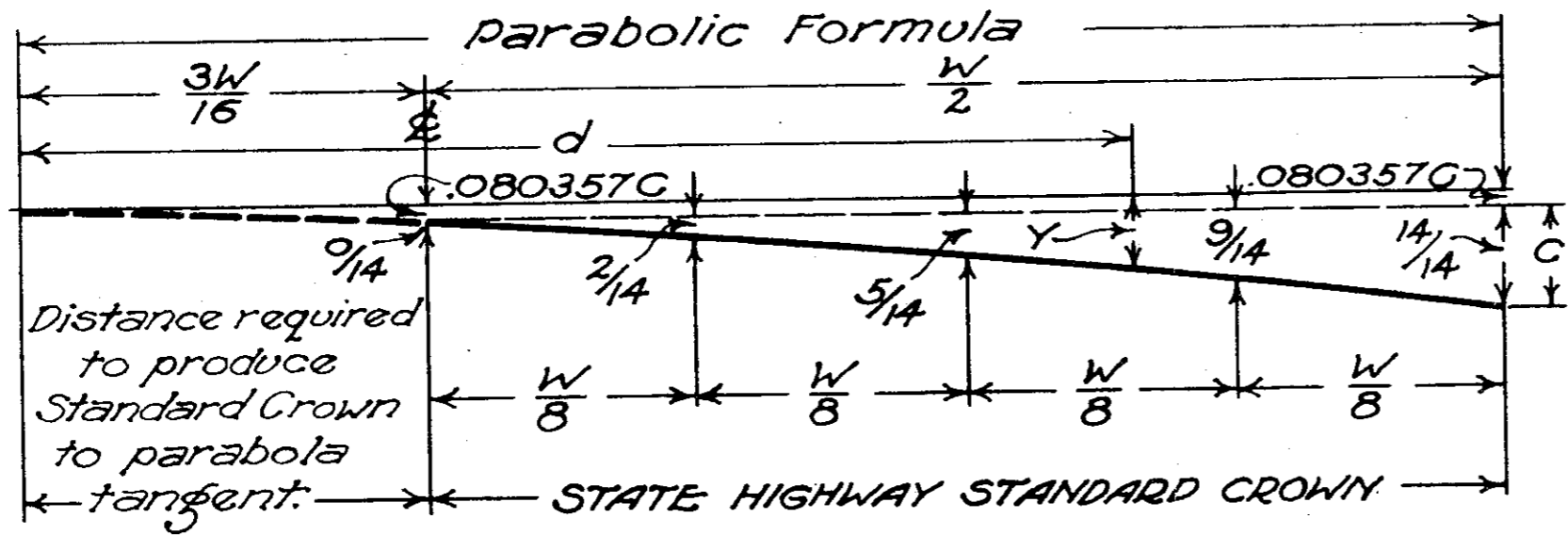
ORDINATES IN INCHES AT INTERVALS IN FEET FROM  $\pm$  PAV.

16' PAVEMENT		18' PAVEMENT		20' PAVEMENT	
INT.	ORDINATE	INT.	ORDINATE	INT.	ORDINATE
*0.00	.000000	—	*0.00	.000000	—
1.00	.093751	$\frac{3}{32}$	1.00	.095679	$\frac{3}{32}$
*2.00	.214286	$\frac{7}{32}$	2.00	.216049	$\frac{7}{32}$
3.00	.361608	$\frac{3}{8}$	*2.25	.250000	$\frac{1}{4}$
*4.00	.535715	$\frac{17}{32}$	3.00	.361111	$\frac{3}{8}$
5.00	.736507	$\frac{3}{4}$	4.00	.530864	$\frac{17}{32}$
*6.00	.964286	$\frac{31}{32}$	*4.50	.625000	$\frac{5}{8}$
7.00	1.218750	$\frac{17}{32}$	5.00	.725309	$\frac{23}{32}$
*8.00	1.500000	$1\frac{1}{2}$	6.00	.944444	$\frac{15}{16}$
			*6.75	1.125000	$1\frac{1}{8}$
			7.00	1.188272	$\frac{13}{16}$
			8.00	1.456790	$\frac{15}{32}$
			*9.00	1.750000	$1\frac{3}{4}$
			*10.00	2.000000	2 —

\* Eighth Intervals of Pavement Width.

# STANDARD CROWNS

DIVISION OF HIGHWAYS  
OHIO



~ LEGEND ~  
 W = Width of Pavement (in feet).  
 C = Crown (in inches).  
 .080357 times Crown = Constant.

RULE:- Use parabolic formula to find Y and deduct Constant.

EXAMPLE:- Using W = 20'; C = 2.00"  
 Then  $\frac{W}{2} = 10'-0"$ ;  $\frac{3W}{16} = 3.75'$ ;  
 $\frac{W}{2} + \frac{3W}{16} = 13.75'$ ;  $.080357C = .160714"$   
 $2.000000" + .160714" = 2.160714" =$   
 Crown + Constant.

DETAILS OF GIVEN EXAMPLE  
 FOR 20 FOOT PAVEMENT

d	(d) <sup>2</sup>	Y	CONSTANT	Y - CONSTANT OR ORDINATE		INTERVALS IN FEET FROM E
				DECIMAL OF INCH	INCHES	
# 3.75	14.0625	.160714	.160714	.000000	0/64	# 0.00
4.75	22.5625	.257857	.160714	.097143	6/64	1.00
5.75	33.0625	.377857	.160714	.217143	14/64	2.00
# 6.25	39.0625	.446429	.160714	.285715	18/64	# 2.50
6.75	45.5625	.520714	.160714	.360000	23/64	3.00
7.75	60.0625	.686428	.160714	.525714	34/64	4.00
# 8.75	76.5625	.875000	.160714	.714286	46/64	# 5.00
9.75	95.0625	1.086428	.160714	.925714	59/64	6.00
10.75	115.5625	1.320714	.160714	1.160000	110/64	7.00
# 11.25	126.5625	1.446429	.160714	1.285715	118/64	# 7.50
11.75	138.0625	1.577859	.160714	1.417145	127/64	8.00
12.75	162.5625	1.857857	.160714	1.697143	145/64	9.00
# 13.75	189.0625	2.160714	.160714	2.000000	200/64	# 10.00

# EIGHTH INTERVALS OF PAVEMENT WIDTH

PROOF:-  $2/14$  of 2.00" = .285715";  $5/14$  of 2.00" = .714286";  
 $9/14$  of 2.00" = 1.285715";  $14/14$  of 2.00" = 2.000000"

BUREAU OF CONSTRUCTION  
 OHIO  
 DEPARTMENT OF HIGHWAYS  
**STANDARD CROWN**  
 FOR ALL TYPES OF PAVEMENT  
 EXCEPT CONCRETE  
 STANDARD  
 CONSTRUCTION DRAWING **115**  
 FEB. 7, 1933  
 APPROVED *E. J. [Signature]* CHIEF ENGR. CONST.