

287

POSTS

~~Final Cross Sections~~

LEVEL BOOK

NO. 880 F

~~284/87 - 331/00~~

W 287

# 287

287

287

Our Leather Bound Engineers Note Books are carried in the following rulings:

- No. 380 LEVEL BOOK. Left and Right Hand Page the same as Left Hand Page of this Book.
- No. 382 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 4 x 4 to the inch, Center Line Red.
- No. 384 MINING TRANSIT BOOK. Left Hand Page as in this Book, Right Hand Page 8x8 to the inch, Center Line Red.
- No. 385 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 8 vertical and 4 horizontal lines to the inch, Center Line Red.

We also carry the Note Books listed above, bound in extra strong Fabri-Hide (otherwise the same quality of book), which can be furnished at a somewhat lower price.

In ordering Fabri-Hide covered books, add the letter "F" to catalog number.

**THE FREDERICK POST CO.**  
*ENGINEERING and DRAFTING SUPPLIES*  
IRVING PARK STATION

CHICAGO, ILL.  
**MICROFILMED**

**JAN 11 1965**

O.R. - S.D. 2nd. Main Pipe Line.  
U.S.G.S. Datum.

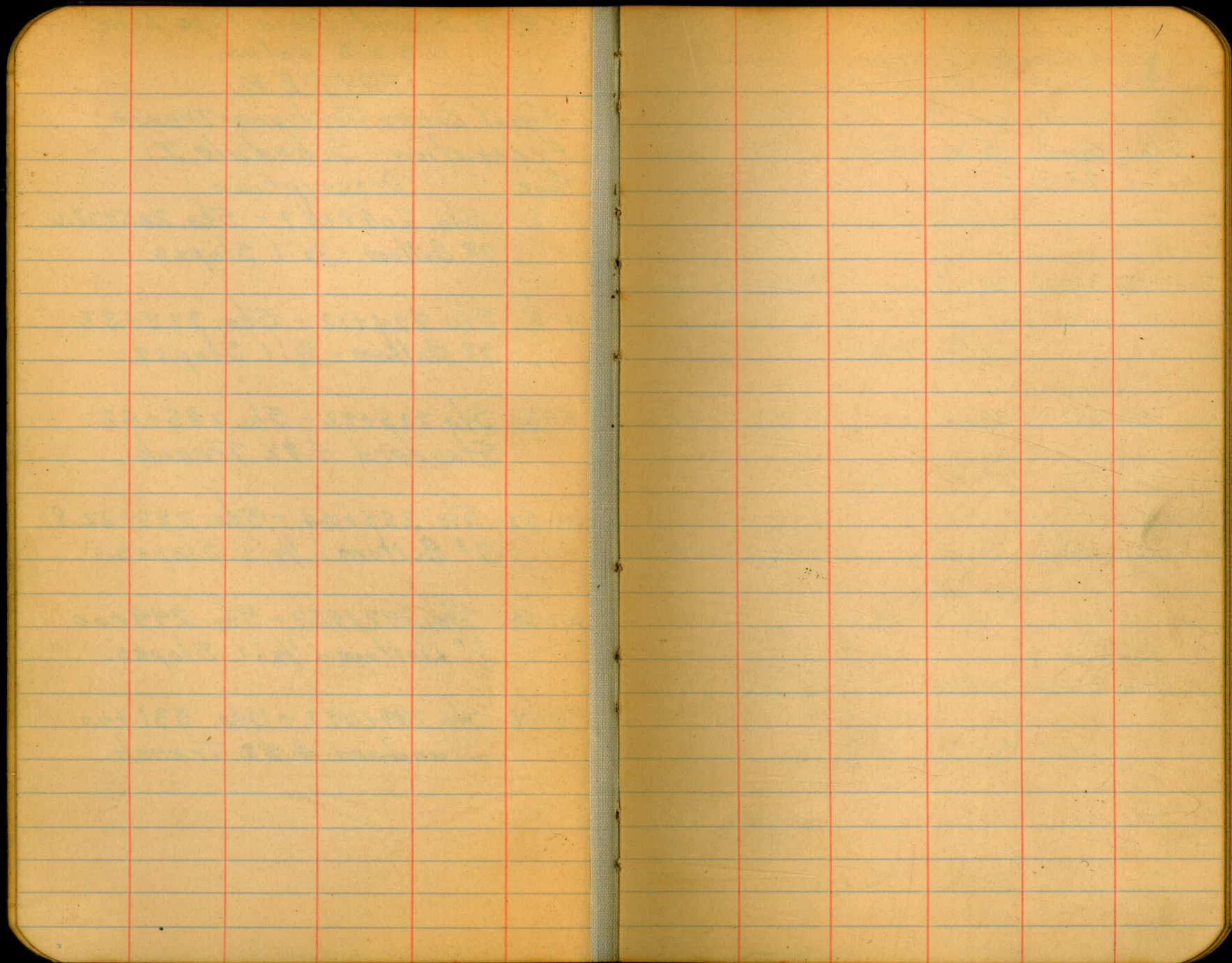
### INDEX.

Final Cross Sections - Trench  
Excavation - Schedule I.

Page	Description
1-2	Sta. 204+18.7 - Sta. 205+28.6. 7° Bottom - 1/2:1 Slopes.
3-5	Sta. 224+12 - Sta. 225+82 7° Bottom - 1/2:1 Slopes.
5-50	Sta. 225+92 - Sta. 285+42 Standard 4.82 Trench.
50-52	Sta. 285+44 - Sta. 287+22.8 7° Bottom - 1/2:1 Slopes.
53-54	Sta. 297+95.7 - Sta. 299+00 7° Bottom - 1/2:1 Slopes.
54-78	Sta. 299+09.7 - Sta. 331+00 Standard 4.82 Trench.

MICROFILMED

JAN 11 1988



O.R.-S.D. 2nd. Main Pipe Line  
 Final Cross Sections. Schedule I.  
 Sta. 204+18.7 to Sta. 331+00

Contd. from Book #286 Page 79.

Sta. Grade Elev. Dist. L.C.  $\frac{1}{2}$   
 7° Bottom -  $\frac{1}{2}$ :1 Slopes.

Sta.	Grade	Elev.	Dist.	L.C.	$\frac{1}{2}$	P.C.	End Area	Av. End Area	C.V.
204+18.7	382.0	390.8		$\frac{8.9}{8.0}$	$\frac{8.0}{4.0}$	8.8	97.54	140.24	62.47
			15.3						
+34	382.9	392.6		$\frac{8.9}{8.0}$		9.7	122.95	148.07	87.75
			16.0						
+50	383.9	397.3		$\frac{10.8}{8.9}$		13.4	173.21	181.13	67.09
			10.0						
+60	384.5	398.1		$\frac{12.1}{9.5}$		13.6	189.06	269.04	298.94
			30.0						Tm,m.
+90	386.3	407.0		$\frac{18.4}{12.7}$	$\frac{20.1}{4.0}$	20.7	349.03	356.78	92.50
			7.0						

Feb. 7, 1930  
 Clear + Cool.

Converse - Notes  
 Hill - Grades  
 Elliott -  $\frac{1}{2}$   
 Simpson - Rod.

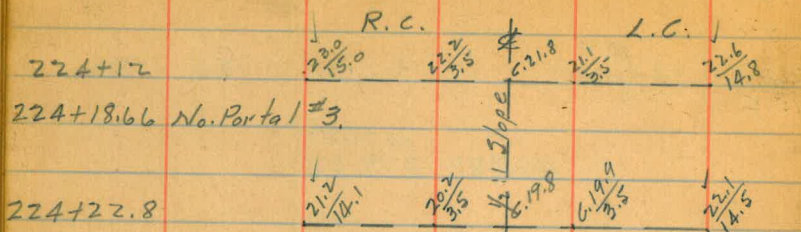
1

7° Bottom - 1/2 : 1 Slope.

Sta.	Grade	Elev.	Dist.	L.C.	∅	R.C.	End Area	Av. End A.	Cu. Yds
+97	386.7	406.9		$\frac{19.4}{13.2}$	$\frac{19.7}{3.0}$	20.2	$\frac{24.0}{15.5}$	ck. T.M.M. 367.52 ✓	
			17.6					428.97	ck. T.M.M. 279.62 ✓
205+14.6	386.9	412.3		$\frac{19.7}{13.3}$	$\frac{24.1}{3.5}$	25.4	$\frac{26.6}{3.5}$	$\frac{28.3}{10.0}$	$\frac{28.9}{18.0}$
								493.42 ✓	
								518.31	113.26 ✓
205+20.5	386.9	413.6		$\frac{21.4}{14.2}$	$\frac{26.1}{3.5}$	26.7	$\frac{28.9}{3.5}$	$\frac{29.5}{18.3}$	543.20 ✓
									✓ R.C.

205+20.5	R.C.			L.C.					
	$\frac{6.29.5}{18.3}$	$\frac{6.28.9}{3.5}$	6.26.7	$\frac{6.26.1}{3.5}$	$\frac{6.21.4}{14.2}$				
205+24.66	So. Portal #3.							5125.74 Cu. ft.	189.84
								S.W.C.	G.W.C.
205+35.5	$\frac{6.30.9}{19.0}$	$\frac{6.30.9}{3.5}$	6.29.9	$\frac{6.30.9}{3.5}$	$\frac{6.24.9}{16.0}$			L.H.H.	L.H.H.

7° Bottom - 1/2:1 Slope



2500 ± Cu. Ft. - 72.59 ±  
 2355.51 Cu. Ft. 87.24  
 Ch. G.W.C. Ch. G.W.C.  
 " L.H.H. " L.H.H.

Sta.	Grade Elev.	Dist.	L.C.	R.C.	End Area	Av. E. Area	Cu. Yds		
224+22.8	388.8	408.6	22.1 14.5	19.9 3.5	19.8	20.2 3.5	262 14.1	Ch. T.M.M. 355.99	
		8.2						Ch. T.M.M. 345.66	
+31	388.8	407.8	21.1 14.0	20.3 5.0	19.0	18.8 4.0	19.4 6.0	20.0 13.5	Ch. T.M.M. 335.33
		13.0						Ch. T.M.M. 327.18	
+44	388.5	408.2	20.0 13.5		19.7	17.8 6.0	19.0 13.0	Ch. T.M.M. 319.03	
		21.0						Ch. T.M.M. 296.86	
+65	387.8	405.4	17.8 12.4	18.2 8.0	17.6	16.3 11.7	Ch. T.M.M. 274.68		
		12.0						Ch. T.M.M. 268.48	

105.11

7° Bottom - 1/2:1 Slope

4

Cu. Yds

+77	387.4 ✓	404.5	$\frac{18.2}{12.6}$	17.1 ✓	$\frac{15.4}{11.2}$	Ch. T.M. M. ✓ 262.29	✓	Ch. T.M. M. ✓ 259.78	153.95	
				16.0 ✓						
+93	386.9 ✓	404.3	$\frac{18.5}{12.7}$	$\frac{17.9}{5.0}$	17.4 ✓	$\frac{15.2}{6.0}$ $\frac{13.8}{10.4}$	Ch. T.M. M. ✓ 257.28	✓	Ch. T.M. M. ✓ 264.62	166.61
				17.0 ✓						
225+10	386.3 ✓	404.0	$\frac{17.5}{12.3}$	$\frac{18.0}{9.0}$	17.7 ✓	$\frac{17.1}{6.0}$ $\frac{15.3}{11.2}$	Ch. T.M. M. ✓ 271.96	✓	Ch. T.M. M. ✓ 236.09	218.60 ✓
				25.0 ✓						
+35	385.5 ✓	399.7	$\frac{14.6}{10.8}$	14.2 ✓	$\frac{13.8}{10.4}$	Ch. T.M. M. ✓ 200.22	✓	Ch. T.M. M. ✓ 214.14	95.18	
				12.0 ✓						
+47	385.1 ✓	401.0	$\frac{15.5}{11.2}$	15.9 ✓	$\frac{15.0}{7.0}$ $\frac{15.0}{11.0}$	Ch. T.M. M. ✓ 228.07	✓	Ch. T.M. M. ✓ 213.70	71.23	
				9.0 ✓						
+56	384.8 ✓	398.8	$\frac{13.6}{10.3}$	14.0 ✓	$\frac{15.1}{11.0}$	Ch. T.M. M. ✓ 199.33	✓	Ch. T.M. M. ✓ 207.32	125.85	
				16.39 ✓						

EQUATION

225+63.25 =  
225+44.86



7<sup>o</sup> Bottom - 1/2:1 Slope

225+54 384.3 ✓ 399.3

$\frac{15.4}{11.2}$  15.0

9.0

+63 384.0 ✓ 398.8

$\frac{12.2}{9.6}$   $\frac{14.9}{5.0}$  14.3

19.0

+82 383.6 394.4

$\frac{5.5}{6.2}$   $\frac{8.5}{5.0}$  10.8

4.82 Bottom - Standard Trench.

+92 383.6 ✓ 391.4

$\frac{7.8}{2.86}$  7.8

226 383.6 ✓ 387.9

$\frac{4.3}{2.21}$  4.3

+10 383.6 ✓ 390.9

$\frac{6.0}{2.41}$  7.3

✓ M.D.E.

✓ M.D.E.

Feb. 10, 1930 Converse - Notes  
Cool - Fog. Hill - Grades

Elliott -  $\pi$   
Simpson - Rod.

5

Ch. T.M.M.  
215.30 ✓

Ch. T.M.M.  
203.41 67.80

Ch. T.M.M.  
 $\frac{13.5}{5.0}$   $\frac{13.0}{10.0}$  191.52 ✓

Ch. T.M.M.  
154.76 108.91

Ch. T.M.M.  
 $\frac{11.5}{6.0}$   $\frac{10.0}{8.5}$  118.00 ✓

78.23 ✓  
80.37 ✓ 28.97 ✓

38.45 ✓  
42.74  
T.M.M.

Sub total to here 2,928.54  
✓ All.  
M.D.E.

29.61 ✓  
31.74 ✓ 8.77 ✓

20.77 ✓  
20.73  
T.M.M.

27.04 ✓  
27.00 ✓ 10.01 ✓

33.32 ✓  
33.26  
T.M.M.

31.77 ✓  
32.20 ✓ 18.83 ✓

+26 383.6 389.9

$$\begin{array}{r} 5.2 \\ 2.4 \\ \hline 6.3 \end{array}$$

+39 383.6 392.5

$$\begin{array}{r} 7.2 \\ 2.7 \\ \hline 8.9 \end{array}$$

+50 383.6 392.6

$$\begin{array}{r} 9.0 \\ 9.0 \end{array}$$

227 383.5 391.7

$$\begin{array}{r} 8.2 \\ 2.1 \\ 10.9 \end{array}$$

+50 383.5 390.2

$$\begin{array}{r} 6.7 \\ 3.8 \\ 10.5 \end{array}$$

228 383.4 389.7

$$\begin{array}{r} 5.8 \\ 4.5 \\ 10.3 \end{array}$$

✓ m.o.e.

✓ m.o.e.

End Area  
Sq. Ft. d
$$\begin{array}{r} 30.22 \\ 31.13 \end{array}$$

$$\begin{array}{r} 7.2 \\ 2.7 \end{array}$$

$$\begin{array}{r} 36.50 \\ 36.92 \end{array} \quad 17.57$$

$$\begin{array}{r} 9.2 \\ 5.2 \end{array}$$

$$\begin{array}{r} 42.94 \\ 42.78 \end{array}$$

$$\begin{array}{r} 44.24 \\ 18.02 \end{array}$$

$$\begin{array}{r} 9.0 \\ 9.0 \end{array}$$

$$\begin{array}{r} 45.69 \\ 45.69 \end{array}$$

$$\begin{array}{r} 43.24 \\ 80.08 \end{array}$$

$$\begin{array}{r} 40.79 \\ 40.79 \end{array}$$

$$\begin{array}{r} 36.64 \\ 67.85 \end{array}$$

$$\begin{array}{r} 32.48 \\ 32.48 \end{array}$$

$$\begin{array}{r} 30.25 \\ 56.02 \end{array}$$

$$\begin{array}{r} 28.01 \\ 28.01 \end{array}$$

$$\begin{array}{r} 27.53 \\ 50.98 \end{array}$$

Comp. T.M.M.

dhd.

+50 382.2 387.8

5.6

End Areas  
Sq. Ft.

27.05<sup>v</sup>

25.84<sup>o</sup> 47.85<sup>o</sup>

229 380.9 386.0

5.1

24.63<sup>v</sup>

24.39 45.17<sup>o</sup>

+50 379.6 384.6

5.0

24.15<sup>v</sup>

24.39<sup>o</sup> 45.15<sup>o</sup>

2 230 378.4 383.5

5.1

24.63<sup>v</sup>

23.19<sup>o</sup> 42.95<sup>o</sup>

+50 377.2 381.7

4.5

21.74<sup>v</sup>

21.98<sup>o</sup> 20.35<sup>o</sup>

2 775 376.5 381.1

4.6

22.22<sup>v</sup>

22.22<sup>o</sup> 20.57<sup>o</sup>

m.o.e.

m.o.e.

Compt. T.M.M.

Chd.

231 375.9 ✓ 380.5

4.6 ✓

End Areas  
Sq. Ft.  
22.22 ✓22.22 ✓  
20.57 ✓

+25 375.3 ✓ 379.9

4.6 ✓

22.22 ✓

23.19 ✓  
21.47 ✓

+50 374.6 ✓ 379.6

5.0 ✓

24.15 ✓

23.91 ✓  
15.50 ✓

+67.5 374.2 ✓ 379.1

4.9 ✓

23.67 ✓

23.43 ✓  
28.20 ✓

232 373.4 ✓ 378.2

4.8 ✓

23.18 ✓

25.60 ✓  
14.22 ✓  
66.37 ✓

+70 371.6 ✓ 377.4

5.8 ✓

28.01 ✓

24.63 ✓  
18.25 ✓

✓ m. P. E.

✓ m. O. E.

Compt. Tm. m.

Chd.

End Areas  
Sq. Ft.

+90	371.2 ✓	375.6	4.4 ✓	21.25 ✓	
					20.77 ✓ 7.69 ✓
233	370.9 ✓	375.1	4.2 ✓	20.29 ✓	
					22.22 ✓ 16.46 ✓
+20	370.4 ✓	375.4	5.0 ✓	24.15 ✓	
					24.39 ✓ 31.62 ✓
+55	369.5 ✓	374.6	5.1 ✓	24.63 ✓	
					27.54 ✓ 45.90 ✓
234	368.4 ✓	374.7	6.3 ✓	30.45 ✓	
					27.54 ✓ 32.64 ✓
+32	368.4 ✓	373.5	5.1 ✓	24.63 ✓	
					25.36 ✓ 16.91 ✓

v m. R. E.

v m. R. E.

Comptd. Th. M.

dtd.

End Areas  
Sq. Ft.

+50 368.4 ✓ 373.8

5.4 ✓

26.08 ✓

27.05 ✓

25.05 ✓

+75 368.4 ✓ 374.2

5.8 ✓

28.01 ✓

27.29 ✓

25.27 ✓

235 370.0 ✓ 375.5

5.5 ✓

26.57 ✓

28.26 ✓

31.40 ✓

~~15.70~~

+30 371.9 ✓ 378.1

6.2 ✓

29.95 ✓

31.48 ✓

23.32 ✓

+50 373.2 ✓ 380.0

6.8 ✓

33.00 ✓

34.06 ✓

31.54 ✓

+75 374.8 ✓ 382.0

7.2 ✓

35.12 ✓

26.51 ✓

33.80 ✓

✓ M.D.E.

✓ M.D.E.

Compt. T.M.M.

Chd.

Subtotal 3970.67  
ALL ✓

				End Areas Sq. Ft.	
236	374.8 ✓	382.5	7.7 ✓	37.90 ✓	
					38.19 ✓ 21.22 ✓ <del>21.64</del>
+15	374.8 ✓	382.6	7.8 ✓	38.47 ✓	
					35.48 ✓ 26.28 ✓
+35	374.8 ✓	381.5	6.7 ✓	32.48 ✓	
					26.87 ✓ 34.83 ✓
+70	374.8 ✓	379.2	4.4 ✓	21.25 ✓	
					18.36 ✓ 8.16 ✓
+82	375.3 ✓	378.5	3.2 ✓	15.46 ✓	
					23.46 ✓ 15.64 ✓
237	376.1 ✓	382.6	6.5 ✓	31.45 ✓	
					34.12 ✓ 37.41 ✓
		1.0963			
	✓ M.D.E.		✓ M.D.E.	Completed. T.M.M.	
				Old.	

End Areas  
Sq. Ft.

+29.6 379.8 ✓ 387.3

7.5

36.78 ✓

.5853

35.42 ✓  
20.73 ✓  
~~20.47~~

+45.4 382.5 ✓ 389.5

7.0

34.05 ✓

1.100

31.52 ✓  
34.67 ✓

+75.1 386.3 ✓ 392.3

6.0

28.98 ✓

29.22 ✓  
32.47 ✓

238+05.1 387.5 ✓ 393.6

6.1

29.46 ✓

1.6629

30.97 ✓  
51.50 ✓

+50 387.5 ✓ 394.2

6.7

32.48 ✓

31.97 ✓  
41.44 ✓

+85 387.5 ✓ 394.0

6.5

31.45 ✓

1.1074

30.22 ✓  
33.47 ✓  
~~25.41~~

✓ M. A. E

✓ M. D. S

Compta. T.M.M.

Chd.



239+14.9 385.7 ✓ 391.7

6.0 ✓

1.6701

+60.1 379.9 ✓ 385.8

5.9 ✓

.9222

+85 378.3 ✓ 381.9

3.6 ✓

+90 378.0 ✓ 382.1

4.1 ✓

240+23 378.0 ✓ 384.5

6.5 ✓

+50 378.0 ✓ 385.3

7.3 ✓

✓ M.D.E.

✓ M.D.E.

End Areas  
Sq. Ft.

28.98 ✓

28.74 ✓ 48.11 ✓  
~~21.16~~

28.50 ✓

22.95 ✓ 21.16 ✓  
~~25.33~~

17.39 ✓

18.60 ✓ 3.44 ✓

19.80 ✓

25.63 ✓ 31.32 ✓

31.45 ✓

33.56 ✓ 33.56 ✓

35.67 ✓

30.40 ✓ 28.15 ✓

Compld. Th. Th.

Chd.

+75 378.0 ✓ 383.2 ✓

5.2 ✓

End Areas  
Sq. Ft.

25.12 ✓

32.37 ✓ 23.98 ✓

+95 378.0 ✓ 386.0 ✓

8.0 ✓

39.62 ✓

39.54 ✓ 36.46 ✓  
65.75 ✓

.9222

241+19.9 378.0 ✓ 384.1 ✓

6.1 ✓

29.46 ✓

26.81 ✓ 29.79 ✓  
12.51 ✓

+49.9 376.8 ✓ 381.8 ✓

5.0 ✓

24.15 ✓

1.1038

25.36 ✓ 27.99 ✓

+79.7 373.2 ✓ 378.7 ✓

5.5 ✓

26.57 ✓

1.0482

29.28 ✓ 30.69 ✓

242+08 368.7 ✓ 375.3 ✓

6.6 ✓

31.98 ✓

30.72 ✓ 25.03 ✓

✓ M.D.E.

✓ M.D.E.

Cmpt'd. Th. M.

Ch.

+30 365.2 ✓ 371.3

6.1 ✓

+50 362.0 ✓ 368.4

6.4 ✓

+65 359.6 ✓ 366.4

6.8 ✓

243 354.0 ✓ 360.7

6.7 ✓

+35 351.2 ✓ 356.7

5.5 ✓

+50 350.0 ✓ 356.0

6.0 ✓

✓ M. R. G.

✓ M. D. G.

End Areas  
Sq. Ft.

29.46 ✓

30.21 ✓ 22.38 ✓

30.95 ✓

31.98 ✓ 17.77 ✓  
~~18.12~~

33.00 ✓

32.74 ✓ 42.44 ✓

32.48 ✓

29.53 ✓ 38.28 ✓

26.57 ✓

27.78 ✓ 15.43 ✓  
~~15.74~~

28.98 ✓

31.25 ✓ 13.89 ✓

Compld. T.M.M.

Chd.

End Areas  
Sq. Ft.

+62 349.0 ✓ 355.9

6.9 ✓

33.52 ✓

34.87 ✓ 29.71 ✓

+85 347.2 ✓ 354.6

7.4 ✓

36.22 ✓

41.28 ✓ 22.94 ✓  
~~23.39~~

244 346.0 ✓ 355.1

9.1 ✓

46.34 ✓

48.30 ✓ 17.89 ✓

+10 345.2 ✓ 354.9

9.7 ✓

50.25 ✓

49.26 ✓ 9.12 ✓

+15 345.1 ✓ 354.5

9.4 ✓

48.26 ✓

35.72 ✓ 5.29 ✓

+19 345.0 ✓ 349.8

4.8 ✓

23.18 ✓

21.01 ✓ 5.45 ✓

✓ M.R.E.

✓ M.R.E.

Cmpta. M.M.

Chd.

				End Areas Sq. Ft.		
+26	344.9 ✓	348.8	3.9 ✓	18.84 ✓		
					29.53	4.37 ✓
					<del>29.93</del>	<del>4.43</del>
+30	344.8 ✓	352.9	8.1 ✓	40.21 ✓		
					44.24 ✓	16.39 ✓
+40	344.6 ✓	354.0	9.4 ✓	48.26 ✓		
					47.61 ✓	49.37 ✓
+68	345.7 ✓	354.9	9.2 ✓	46.96 ✓		
					39.47 ✓	46.78 ✓
245	347.0 ✓	353.6	6.6 ✓	31.98 ✓		
					31.47 ✓	58.28 ✓
					<del>61.43</del>	
+50	347.0 ✓	353.6	6.4 ✓	30.95 ✓		
					29.73 ✓	55.06 ✓

✓ M.R.E.

✓ M.R.E.

Compt. T.M.M.

Chd.

End Areas  
Sq. Ft.

18

246 347.4 ✓ 353.3

5.9

28.50 ✓

28.02 ✓  
51.89.

+50 347.6 ✓ 353.3

5.7

27.53 ✓

26.33 ✓  
48.76.

247 349.4 ✓ 354.6

5.2

25.12 ✓

25.36 ✓  
46.96.

+50 351.2 ✓ 356.5

5.3

25.60 ✓

27.53 ✓  
25.49.

+75 352.1 ✓ 358.2

6.1

29.46 ✓

28.02 ✓  
25.94.

248 353.0 ✓ 358.5

5.5

26.57 ✓

25.12 ✓

Comptd. T.M.M.

46.52.

Chd.

Comptd. A.C.L.

A.C.L. chd. A.C.L.

✓ M.D.E.

End Areas  
Sq. Ft.

2	+50	354.8	359.7	4.9	23.67	
						22.46 20.80
	+75	355.7	360.1	4.4	21.25	
						24.88 4.61
2	+80	356.1	362.0	5.9	28.50	
						30.75 22.78
249		357.9	364.7	6.8	33.00	
						34.89 32.30
	+25	360.2	367.7	7.5	36.78	
						35.15 32.55
1	+50	362.4	369.3	6.9	33.52	
						36.29 57.80
						Completed. A.C.L.
						A.C.L. chd. A.C.L.
						Chd.

M.A.E

+93 366.2 ✓ 374.1 7.9

250 366.9 ✓ 374.3 7.4

+25 367.2 ✓ 374.5 7.3

+50 367.4 ✓ 373.6 6.2

+75 367.6 ✓ 374.6 7.0

+85 367.7 ✓ 373.0 5.3

✓ M.D.E

End Areas  
Sq. Ft.

39.05 ✓

37.64 ✓ 9.76 ✓

36.22 ✓

35.95 ✓ 46.60 ✓

35.67 ✓

32.81 ✓ 18.23 ✓

29.95 ✓

32.00 ✓ 29.63 ✓

34.05 ✓

29.83 ✓ 11.05 ✓

25.60 ✓

20.72 ✓ 11.51 ✓

Comptd. T.M.M. A.C.L. chd A.C.L.

Chd.

5682.17 A.C.L.  
5681.97  
Sub.



251 367.9 ✓ 371.2 3.3

.4148

+11.2 368.0 ✓ 368.0 0.0

2.5037

+78.8 368.7 ✓ 368.7 0.0

.7851

252 369.0 ✓ 372.5 3.5

+27 369.2 ✓ 375.0 5.8

+50 369.5 ✓ 375.4 5.7

✓ M.O.E.

End Areas  
Sq. Ft.

15.94 ✓

7.97  
7.47 3.31.

0 ✓

0.0 0.0.

0 ✓

8.46 6.64.

16.91 ✓

22.46 22.46.

28.01 ✓

27.77 23.66.

27.53 ✓

28.50 26.39.  
Comptd. A.L.L.  
A.L.L. chd A.L.L.

Comptd. T.M.M.

Chd.

End Areas  
Sq. Ft.

+75	369.7 ✓	375.8	6.1	29.46 ✓	28.02 ✓	25.99 ✓
253	370.0 ✓	375.5	5.5	26.57 ✓	25.85 ✓	33.51 ✓
+35	369.2 ✓	374.4	5.2	25.12 ✓	25.12 ✓	1396 ✓
+50	368.8 ✓	374.0	5.2	25.12 ✓	23.43 ✓	26.03 ✓
+80	368.1 ✓	372.6	4.5	21.74 ✓	21.98 ✓	16.28 ✓
254	367.6 ✓	372.2	4.6	22.22 ✓	22.70 ✓	8.91 ✓

M.O.E.

Compld. M.M.  
Chd.A.C.L. chd. A.C.L.  
A.C.L.

					End Areas Sq. Ft.	
+10	367.4 ✓	372.2		4.8	23.18 ✓	
			1.1038			25.36 ✓ 27.99 ✓
+39.8	364.6 ✓	370.3		5.7 2.7 8.4	27.53 ✓	
			1.0074			29.49 ✓ 29.71 ✓
+67	360.1 ✓	366.6		6.5	31.45 ✓	
						24.90 ✓ 25.82 ✓
+95	355.5 ✓	359.3		3.8	18.35 ✓	
						22.94 ✓ 12.75 ✓
255+10	353.0 ✓	358.7		5.7	27.53 ✓	
						27.53 ✓ 30.59 ✓
+40	353.0 ✓	358.7		5.7	27.53 ✓	
						25.12 ✓ 9.30 ✓
						Comptd. T.M.M. A.C.L. chd A.C.L.
						Chd.

End Areas  
Sq. Ft.

+50 355.7 ✓ 360.4

4.7

22.70 ✓

.6593

26.58 ✓ 17.52

+67.8 360.4 ✓ 366.7

6.3

30.45 ✓

.6

33.34 ✓ 20.00

+84 364.1 371.5

7.4  
7.536.22  
~~36.78~~

.4852

34.61 ✓ 16.79

+97.1 367.2 ✓ 374.0

6.8

33.00 ✓

.4797

31.48 ✓ 15.04

256+10 369.2  
369.5 375.7

6.2

29.95 ✓

.6185

30.97 ✓ 19.15

+26.7 371.9 ✓ 378.5

6.6

31.98 ✓

.6408

32.23 20.65

Corr. ptd. A.C.L.

Comptd. T.M.M. A.C.L. chd. A.C.L.

✓ M.A.E

Chd.

256+44 373.5<sup>✓</sup> 380.2

6.7

.4667

+56.6 374.7<sup>6</sup> 380.86.2  
6.1

.0963

+70 374.9<sup>✓</sup> 381.3

6.4

.6148

+86.6 375.3<sup>✓</sup> 381.1

5.8

.4963

257 375.1<sup>✓</sup> 381.3

6.2

+25 374.8<sup>✓</sup> 381.4

6.6

✓ M.D.E.

End Areas  
Sq. Ft.32.48<sup>✓</sup>✓ 31.22<sup>✓</sup> 14.57~~29.95~~  
29.4630.45<sup>✓</sup> 15.1130.95<sup>✓</sup>29.48<sup>✓</sup> 18.1228.01<sup>✓</sup>28.98<sup>✓</sup> 14.3829.95<sup>✓</sup>30.97<sup>✓</sup> <sup>N.</sup> 28.68<sup>✓</sup>  
29.6031.98<sup>✓</sup>30.72<sup>✓</sup> 28.44<sup>✓</sup>

Comptd. T.M.M. A.C.L. chd. A.C.L.

Chd.

End Areas  
Sq. Ft.

+50 374.5 380.6

6.1

29.46<sup>✓</sup>28.50 26.39<sup>✓</sup>

+75 374.2 379.9

5.7

27.53<sup>✓</sup>27.05<sup>✓</sup> 25.05<sup>✓</sup>

258 373.9 379.4

5.5

26.57<sup>✓</sup>26.09<sup>✓</sup> 24.16<sup>✓</sup>

+25 373.6 378.9

5.3

25.60<sup>✓</sup>24.39<sup>✓</sup> 22.58<sup>✓</sup>

+50 373.3 378.1

4.8

23.18<sup>✓</sup>23.18<sup>✓</sup> 21.46<sup>✓</sup>

+75 373.0 377.8

4.8

23.18<sup>✓</sup>27.07 25.06<sup>✓</sup>Comptd. T.M. A.C.C. chd. A.C.C.  
Chd.

✓ M.A.E.

259 371.0 ✓ 377.4 6.4

End Areas  
Sq. Ft.

30.95 ✓

32.77 ✓  
27.07 24.28 ✓

+20 369.4 ✓ 376.5 7.1

34.59 ✓

31.06 ✓ 34.51 ✓  
29.24 23.01 ✓

+50 367.0 ✓ 372.7 5.7

27.53 ✓

28.26 ✓ 26.17 ✓

+75 365.0 ✓ 371.0 6.0

28.98 ✓

26.08 ✓ 9.66 ✓

+85 365.0 ✓ 369.8 4.8

23.18 ✓

11.59 ✓ 7.73 ✓

260703 365.0 ✓ 365.0 0.0

0 ✓

0.0 ✓  
0.0 ✓  
Compld A.L.L.

Compld. T.M.M. A.L.L. Chd A.L.L.

Chd.

✓ M.D.E.

End Areas  
Sq. Ft.

+51.5 368.5 ✓ 368.5

0.0

0 ✓

13.04 ✓ 9.90.

+72 370.0 ✓ 375.4

5.4

26.08 ✓

29.03 ✓ 13.98.

+85 371.0 ✓ 377.6

6.6

31.98 ✓

32.23 ✓ 17.91.

261 372.1 ✓ 378.8

6.7

32.48 ✓

29.28 ✓ 27.11.

+25 374.0 ✓ 379.4

5.4

26.08 ✓

25.84 ✓ 23.93.

+50 374.0 ✓ 379.3

5.3

25.60 ✓

25.60 ✓ 23.70.  
Compld ALL.

Compld. T.M.M. A.L.L. chd A.G.L.

Chd.

✓ M.R.E.



End Areas  
Sq. Ft.

+75 374.0 ✓ 379.3

5.3

25.60 ✓

26.81 ✓ 24.82

262 374.0 ✓ 379.8

5.8

28.01 ✓

28.50<sup>2</sup> 21.11

+20 374.0 ✓ 380.0

6.0

28.98 ✓

26.57 ✓ 29.52

+50 374.0 ✓ 379.0

5.0

24.15 ✓

26.08 ✓ 24.15

+75 373.3 ✓ 379.1

5.8

28.01 ✓

26.81 ✓ 24.82

263 372.7 ✓ 378.0

5.3

25.60 ✓

25.12 ✓ 22.52

.8963

Comptd. T.M.M. A.C.L. chd. A.C.L.

✓ M.R.E.

Cld.

End Areas  
Sq. Ft.

+24.2 372.0 ✓ 377.1 5.1

24.63 ✓

1.1111

2608 ✓ 28.98.

+54.2 370.2 ✓ 375.9 5.7

27.53 ✓

.5853

31.88 ✓ 18.66.

+70 368.0 ✓ 375.4 7.4

36.22 ✓

.5148

35.14 ✓ 18.09.

+83.9 366.2 ✓ 373.2 7.0

34.05 ✓

.7495

42.83 ✓ 31.89.

264 +0.4 362.1 ✓ 371.8 9.9

51.60 ✓

.3495

49.28 ✓ 16.98.

+13.3 360.2 ✓ 369.4 9.2

46.96 ✓

.5444

45.70 ✓ 24.88.

Compta. T.M.M. A.L.L. chd A.L.L.

Chd.

✓ M.D.E.

6903.38 A.L.L.  
Sub. 6892.65

End Areas  
Sq. Ft.

+28	356.1	364.9	8.8	44.44 <sup>v</sup>	
		.5259			40.06 <sup>v</sup> 21.07 <sup>v</sup>
+42.2	352.1	359.4	7.3	35.67 <sup>v</sup>	
		.6593			30.64 <sup>v</sup> 20.20 <sup>v</sup>
+60	345.7	351.0	5.3	25.60 <sup>v</sup>	
		.3852			27.53 <sup>v</sup> 10.60 <sup>v</sup>
+70.4	342.0	348.1	6.1	29.46 <sup>v</sup>	
		.5907			33.97 <sup>v</sup> 18.37 <sup>v</sup>
+85	336.2	344.0	7.8	38.47 <sup>v</sup>	
					33.24 <sup>v</sup> 28.32 <sup>v</sup>
265+08	336.2	342.0	5.8	28.01 <sup>v</sup>	

M.R.E.

Comptd. T.M.M.

Chd.

29.48<sup>v</sup>

A.C.L.

7.64<sup>v</sup>

Comptd. A.C.L.

Chd A.C.L.

+15 336.2 ✓ 342.6 6.4

+35 341.8 ✓ 346.7 4.9

+50 346.0 ✓ 352.0 6.0

+62 349.4 ✓ 356.5 7.1

.6518

+79.6 354.3 ✓ 361.3 7.0

.7556

266 359.4 ✓ 366.3 6.9

.3222

✓ M.A.G.

End Areas  
sq. ft.

30.95 ✓

27.31 ✓ 20.23

23.67 ✓

26.33 ✓ 14.63

28.98 ✓

31.79 ✓ 14.13

34.59 ✓

34.32 ✓ 22.37

34.05 ✓

33.79 ✓ 25.53

33.52 ✓

32.75 ✓ 10.55

Completed. T.M.M. A.L.L. Chd. A.L.L.

Chd.

+08.7 361.5 ✓ 368.1

6.6

.6038

+25 364.6 ✓ 371.3

6.7

.4889

+38.2 367.0 ✓ 373.6

6.6

.2185

+50 368.5 375.1

6.6

+68 370.8 377.1

6.3

+85 371.9 379.3

7.4

.4778

End Areas  
Sq. Ft.

31.98 ✓

32.23 ✓ 19.44

32.48 ✓

32.23 ✓ 15.76

31.98 ✓

31.98 ✓ 13.98

31.98 ✓

31.42 ✓ 20.95

30.45 ✓

33.34 ✓ 20.99

36.22 ✓

37.35 ✓ 17.85

Compld. T.M.M. A.L.L. Chd. A.C.C.  
Comptd A.L.L.

Chd.

+97.9 372.8 380.6 7.8

4481

267+10 373.2 381.4 8.2

+30 373.9 381.1 7.2

+50 374.7 377.4 2.7

+63 375.1 375.4 0.3

+86 376.0 380.5 4.5

End Areas  
Sq. Ft.38.47<sup>v</sup>39.63<sup>v</sup> 17.7640.79<sup>v</sup>37.96<sup>v</sup> 28.1235.12<sup>v</sup>24.08<sup>v</sup> 17.8913.04<sup>v</sup>7.25<sup>v</sup>  
~~14.25~~ 3.491.45<sup>v</sup>11.60<sup>v</sup> 9.8821.74<sup>v</sup>23.67<sup>v</sup> 12.27<sup>v</sup>

Comptd. T.M.M. A.L.L. chd A.C.L.  
Chd.

268 376.5 381.8 5.3

End Areas  
Sq. Ft.

25.60<sup>v</sup>

27.53<sup>v</sup> 25.49<sup>v</sup>

+25 377.4 383.5 6.1

29.46<sup>v</sup>

27.05<sup>v</sup> 25.05<sup>v</sup>

+50 378.3 383.4 5.1

24.63<sup>v</sup>

24.15<sup>v</sup> 21.65<sup>v</sup>

.8963

+74.2 379.2 384.1 4.9

23.67<sup>v</sup>

23.19<sup>v</sup> 25.77<sup>v</sup>

269+0.42 379.2 383.9 4.7

22.70<sup>v</sup>

.5537

26.83<sup>v</sup> 29.71<sup>v</sup>

+34.1 377.0 383.4 6.4

30.95<sup>v</sup>

.5889

33.31<sup>v</sup> 19.62<sup>v</sup>

Comptd. Thrm. A.C.L. Chd. A.C.L.

Chd.

+50.	374.6	381.9		7.3	35.67 <sup>✓</sup>	
			.5112			37.94 <sup>✓</sup> 19.39 <sup>✓</sup>
+63.8	372.5	380.6		8.1	40.21 <sup>✓</sup>	
			.5407			42.33 <sup>✓</sup> 45.78 <sup>✓</sup>
+93.	365.9	374.7		8.8	44.44 <sup>✓</sup>	
						42.03 <sup>✓</sup> 18.68 <sup>✓</sup>
270+05	362.2	370.2		8.0	39.62 <sup>✓</sup>	
			.6185			33.34 <sup>✓</sup> 20.62 <sup>✓</sup>
+21.7	357.1	362.7		5.6	27.05 <sup>✓</sup>	
			.3778			13.53 <sup>✓</sup> 5.11 <sup>✓</sup>
+31.9	357.1	357.1		0.0	0 <sup>✓</sup>	
			1.5074			0.0

End Areas  
Sq. Ft.

Comptd. T.M.M.

Chd.



End Areas  
Sq. Ft.

+72.6 357.1 357.1 0.0

0 ✓

,2741

9.42 2.58 ✓

+80 357.1 361.0 3.9

18.84 ✓

26.98 19.99 ✓

271 361.1 368.3 7.2

35.12 ✓

36.23 13.42 ✓

+10 363.1 370.7 7.6

37.33 ✓

18.67 3.46 ✓

+15 364.1 364.1 0.0

0 ✓

19.81 3.67 ✓

+20 365.1 373.1 8.0

39.62 ✓

35.54 39.49 ✓

Comptd. T.M.M. A.C.L. Chd. A.C.L.  
Chd.

					End Areas Sq. Ft.
+50	371.0	377.5		6.5	31.95 ✓
					✓ 32.23 29.84
+75	374.2	381.0		6.8 1.8 7.6	33.00 ✓
			1.1185		✓ 30.99 34.66
272+05.2	378.2	384.2		6.0	28.98 ✓
			.5982		✓ 28.26 15.49
+20	379.6	385.3		5.7	27.53 ✓
			.5593		✓ 26.08 14.59
+35.1	381.0	386.1		5.1 1.4 6	24.63 ✓
					✓ 25.12 27.91
+65.1	381.7	387.0		5.3	25.60 ✓
			1.1079		✓ 25.12 27.82 Comptd. A.C.C.
					Compld. T.M.M. A.C.C. Chd. A.C.C. Chd.

End Area  
Sq. Ft.

+95 380.4 385.5

5.1

24.63<sup>v</sup>25.36<sup>v</sup> 28.18.

273+25 378.0 383.4

5.4

26.08<sup>v</sup>26.08<sup>v</sup> 24.15.

+50 376.0 381.4

5.4

26.08<sup>v</sup>25.36<sup>v</sup> 1390.

.5482

+64.8 374.8 379.9

5.1

24.63<sup>v</sup>24.39<sup>v</sup> 26.92

1.1038

+94.6 371.4 376.4

5.0

24.15<sup>v</sup>28.07<sup>v</sup> 21.21.

.7556

274+15 367.5 374.1

6.6

31.98<sup>v</sup>32.49<sup>v</sup> 10.83.

Comptd. T.M.M. A.L.L. Chd. A.C.L.

Chd.

End Area  
Sq. Ft.

+24 365.8 372.6 6.8

33.00<sup>v</sup>

36.31<sup>v</sup> 20.17

+39 361.8 369.8 8.0

39.62<sup>v</sup>

39.34<sup>v</sup> 20.40

+53 358.1 366.0 7.9

39.05<sup>v</sup>

37.64<sup>v</sup> 19.52

+67 353.3 360.7 7.4

36.22<sup>v</sup>

33.84<sup>v</sup> 18.05

.5333

+81.4 348.3 354.8 6.5

31.45<sup>v</sup>

31.45<sup>v</sup> 21.67

.6889

275 341.2 347.7 6.5

31.45<sup>v</sup>

34.12<sup>v</sup> 15.80

Comptd. T.M.M. A.L.L. chd. A.L.L.  
Chd.

Comptd A.C.L.  
A.L.L.

8045.96 A.L.L.  
Sub 7990.50

Feb. 12. 1930 Converse - Notes  
 Clear + Cool. Hill. - Grades  
 Elliott - Rod.  
 Simpson - Rod.

End Area  
 Sq. Ft.

+12.5 336.4 343.9

7.5

36.78<sup>v</sup>

✓  
 33.87 9.41.

+20 336.4 342.8

6.4

30.95<sup>v</sup>

✓  
 29.00 32.22

+50 336.4 342.0

5.6

27.05<sup>v</sup>

✓  
 33.05 42.84

+85 336.4 344.3

7.9

39.05<sup>v</sup>

✓  
 34.75 19.31.

276 341.8 348.1

6.3

30.45<sup>v</sup>

✓  
 29.96 22.19.

+20 349.0 355.1

6.1

29.46<sup>v</sup>

✓  
 31.23 23.14

Computed by J.M.M. A.G.L. Chd. A.G.L.

Chd.

+40	356.2	363.0		6.8	33.00 <sup>v</sup>	
						32.23 11.94 <sup>v</sup>
+50	359.8	366.3		6.5	31.45 <sup>v</sup>	
			.6223			33.29 20.72 <sup>v</sup>
+66.8	364.5	371.7		7.2	35.12 <sup>v</sup>	
			.6741			35.95 24.23 <sup>v</sup>
+85	368.8	376.3		7.5	36.78 <sup>v</sup>	
						34.63 14.11 <sup>v</sup>
+96	371.6	378.3		6.7	32.48 <sup>v</sup>	
						32.23 16.71 <sup>v</sup>
277+10	374.0	380.6		6.6	31.98 <sup>v</sup>	
			.5778			30.72 17.75 <sup>v</sup>

Comptd. T.M.M.

Chd.

A.C.L. Chd. A.C.L.

Comptd A.C.L.

+25.6	376.7	382.8	6.1	29.46 <sup>v</sup>
		.6949		30.21 <sup>v</sup> 19.47
+43	378.5	384.9	6.4	30.95 <sup>v</sup>
		.4592		29.97 <sup>v</sup> 13.76
+55.4	379.8	385.8	6.0	28.98 <sup>v</sup>
		.7259		28.50 <sup>v</sup> 20.69
+75	380.5	386.3	5.8	28.01 <sup>v</sup>
		.3852		28.74 <sup>v</sup> 11.07
+85.4	380.8	386.9	6.1	29.46 <sup>v</sup>
		.9111		29.46 <sup>v</sup> 26.84
278+10	380.8	386.9	6.1	29.46 <sup>v</sup>
				29.71 <sup>v</sup> 16.51

Comptd. T.M.M. A.C.L. Chd A.C.L.

Chd.

End Area  
Sq. Ft.

Comptd. A.C.L.

+25 380.1 386.3 6.2

.5518

End Area  
Sq. Ft.29.95<sup>v</sup>29.71<sup>v</sup> 16.39<sup>v</sup>

+39.9 379.3 385.4 6.1

.7445

29.46<sup>v</sup>32.84<sup>v</sup> 24.45<sup>v</sup>

+60 377.3 384.7 7.4

36.22<sup>v</sup>33.09<sup>v</sup> 18.38<sup>v</sup>

+75 375.8 382.0 6.2

29.95<sup>v</sup>33.09<sup>v</sup> 30.64<sup>v</sup>

279 373.3 380.7 7.4

36.22<sup>v</sup>

.7445

35.67<sup>v</sup> 26.56<sup>v</sup>

+20.1 371.3 378.5 7.2

.7370

35.12<sup>v</sup>25.29<sup>v</sup> 18.64<sup>v</sup>

Comptd. T.M.M. A.C.L. Chd. A.C.L.  
Chd.



End Area  
39. ft.

+40 370.2 373.2

3.2

15.46<sup>✓</sup>14.74<sup>✓</sup> 5.46

+50 369.6 372.5

2.9

14.01<sup>✓</sup>14.74<sup>✓</sup> 8.19

+65 370.2 373.4

3.2

15.46<sup>✓</sup>23.21<sup>✓</sup> 12.90

+80 370.7 377.1

 $\frac{6.4}{2.51}$ 

6.4

 $\frac{6.4}{2.51}$ 30.95<sup>✓</sup>34.14<sup>✓</sup> 12.65

+90 371.5 379.1

 $\frac{7.6}{2.66}$ 

7.6

 $\frac{8.2}{2.96}$ 37.33<sup>✓</sup>37.90<sup>✓</sup> 14.04280 372.2<sup>✓</sup> 380.0 $\frac{7.8}{2.66}$ 

7.8

 $\frac{8.6}{3.06}$ 38.47<sup>✓</sup>37.76<sup>✓</sup> 39.96

Comptd. T.M.M. A.C. Chd. A.L.L.

Chd.

End Area  
Sq. Ft.

+25	374.2	381.8	$\frac{6.6}{2.56}$	7.6	$\frac{8.4}{3.01}$	37.05	37.19	13.78
+35	375.0	382.8	$\frac{6.4}{2.5}$	7.8	$\frac{8.4}{3.0}$	<del>37.36</del> 37.33	36.10	20.06
+50	376.2	383.3	$\frac{6.0}{2.4}$	7.1	$\frac{8.4}{3.0}$	34.86 <del>35.39</del> 34.83	37.10	34.35
+75	376.3	384.2	$\frac{6.8}{2.6}$	7.9	$\frac{9.2}{3.2}$	39.34	41.12	22.85
+90	376.3	384.9	$\frac{7.6}{2.8}$	8.6	$\frac{9.4}{3.16}$	42.89	41.41	15.34
281	376.4	384.5	$\frac{7.0}{2.66}$	8.1	$\frac{9.0}{3.76}$	39.92	44.92	83.19

Compta T.M.M.  
Chd.

A.C.L. Chd. A.C.L.

End Area  
Sq. Ft.

+50 376.5 386.0

 $\frac{8.0}{2.9}$ 

9.5

 $\frac{11.6}{3.8}$ 

49.92

44.34 65.69

+90 376.7 384.4

 $\frac{6.6}{2.56}$ 

7.7

 $\frac{9.4}{3.26}$ 

38.75

33.36 12.36

282 376.7 382.4

 $\frac{4.8}{2.41}$ 

5.7

 $\frac{7.0}{2.61}$ 

27.97

30.00 27.78

+25 376.8 383.4

 $\frac{5.4}{2.41}$ 

6.6

 $\frac{7.8}{2.86}$ 

32.02

29.87 16.60

+40 376.8 382.4

 $\frac{4.6}{2.41}$ 

5.6

 $\frac{7.2}{2.71}$ 

27.71

17.72  
18.33 13.13

+60 376.9 378.5

 $\frac{1.2}{2.41}$ 

1.6

 $\frac{2.0}{2.41}$ 7.73  
8.94

10.38

10.99

11.53

Comptd. T.M.M. A.C.L. Chd. A.C.L.  
Chd.

End Areas  
Sq. Ft.

+90 377.0 379.7

 $\frac{2.3}{2.41}$  2.7 $\frac{3.1}{2.41}$ 

13.04

9.18 4.42

283+03 377.0 378.1

 $\frac{0.6}{2.41}$  1.1 $\frac{1.6}{2.41}$ 

5.31

17.50 7.78

+15 378.0 383.9

 $\frac{5.8}{2.41}$  5.9 $\frac{7.0}{2.66}$ 

29.69

34.08 18.93

+30 379.1 387.1

 $\frac{6.6}{2.56}$  8.0 $\frac{8.6}{3.06}$ 

38.46

38.04 28.18

+50 380.5 388.1

 $\frac{6.4}{2.51}$  7.6 $\frac{7.0}{3.16}$ 

37.61

34.03 31.51

+75 382.2 388.3

 $\frac{5.2}{2.41}$  6.1 $\frac{7.8}{2.86}$ 

30.45

27.25 25.23

Comptd. T.M.M.

A.C.L.

Comptd. A.C.L.

Chd. A.C.L.

Chd.

284 382.2 389.2

 $\frac{5.8}{2.41}$ 

7.0

 $\frac{8.2}{2.96}$ 

34.04

 $\frac{36.55}{31.55}$ 

33.84

+25 382.2 390.1

 $\frac{6.8}{2.61}$ 

7.9

 $\frac{7.0}{3.16}$ 

39.05

 $\frac{39.05}{36.16}$ 

+50 382.2 389.9

 $\frac{7.7}{2.76}$ 

7.7

 $\frac{8.8}{3.11}$ 

39.04

 $\frac{47.55}{44.03}$ 

+75 382.2 392.3

 $\frac{10.4}{3.51}$ 

10.1

 $\frac{11.6}{3.81}$ 

56.06

 $\frac{59.56}{59.57}$ 

22.06

+85 382.2 393.8

 $\frac{10.2}{3.46}$ 

11.6

 $\frac{12.6}{4.06}$ 

63.06

 $\frac{66.98}{37.21}$ 

285 382.2 394.7

 $\frac{12.4}{3.96}$   
4.01

12.5

 $\frac{12.6}{4.06}$ 

70.90

 $\frac{58.93}{54.56}$ 

Computed. T.M.M.

A.L.L. Chd. A.L.L.

Chd.

Computed. A.L.L.

4.82 Bottom - Standard Trench.

285 +25 382.2 391.4

$\frac{9.2}{3.21}$

9.2

$\frac{9.2}{3.21}$

End Areas  
Sq. Ft.

46.96  $\frac{9}{A.L.L.}$

35.56  $\frac{9}{A.L.L.}$  1.32

+26 382.2 387.2

$\frac{5.0}{2.41}$

5.0

$\frac{5.0}{2.41}$

24.15  $\frac{9}{A.L.L.}$

25.12  $\frac{9}{A.L.L.}$  14.89

+42 382.2 387.6

$\frac{5.4}{2.41}$

5.4

$\frac{5.4}{2.41}$

26.08  $\frac{9}{A.L.L.}$

Completed T.M.M.  
Ch

71.35  $\frac{9}{A.L.L.}$  5.29

7° Bottom - 1/2:1 slopes.

+44 382.2 ✓ 392.0

$\frac{9.8}{8.4}$

9.8

$\frac{9.8}{8.4}$

Ch. T.M.M. ✓  
116.62

19.0

✓ Ch. T.M.M.  
144.62 101.77

9334.20  $\frac{9}{A.L.L.}$   
Subtotal 9278.78

+63 382.6 ✓ 395.1

$\frac{8.8}{7.9}$

12.5

$\frac{16.3}{9.0}$   $\frac{17.4}{12.2}$

Ch. T.M.M. ✓  
172.61

12.0

Ch. T.M.M.  
166.81 74.14

9510.11  $\frac{9}{A.L.L.}$   
Sub 9452.65

7° Bottom - 1/2:1 Slopes

						End Areas Sq. Ft.	C.Y.
+75	383.0 <sup>✓</sup>	395.4	$\frac{2.1}{8.1}$	$\frac{9.7}{5.0}$	12.4 <sup>✓</sup>	$\frac{14.1}{7.0}$ $\frac{16.6}{11.8}$	161.00
		25.0					146.28 <sup>✓</sup> 135.44 <sup>✓</sup>
286	383.8 <sup>✓</sup>	393.6	$\frac{8.7}{7.9}$		9.8 <sup>✓</sup>	$\frac{14.4}{10.7}$	131.56
		25.0					115.46 <sup>✓</sup> 106.91 <sup>✓</sup>
+25	384.6 <sup>✓</sup>	393.4	$\frac{9.9}{8.5}$		8.8 <sup>✓</sup>	$\frac{7.4}{7.2}$	99.36
		16.0					139.58 <sup>✓</sup> 82.71 <sup>✓</sup>
+41	385.1 <sup>✓</sup>	397.8	$\frac{15.0}{11.0}$	$\frac{14.6}{6.0}$	12.7 <sup>✓</sup>	$\frac{11.2}{9.4}$	179.81
		19.0					253.22 <sup>✓</sup> 178.19 <sup>✓</sup>
+60	385.7 <sup>✓</sup>	405.8	$\frac{19.5}{13.2}$		20.1 <sup>✓</sup>	$\frac{18.4}{12.7}$	326.62
		14.0					371.67 <sup>✓</sup> 192.72 <sup>✓</sup>
+74	386.1 <sup>✓</sup>	408.8	$\frac{20.5}{13.7}$		22.7 <sup>✓</sup>	$\frac{25.0}{16.0}$	416.72
		21.0					451.70 <sup>✓</sup> 351.32 <sup>✓</sup>

Chd. T.M.M.

70 Bottom - 1/2:1 Slopes.

+95 386.8 411.7  
 23.1 22.9 24.6 24.9  
 15.0 12.0 5.0

End Areas  
 Sq. Ft.

C.Y.

Ch. T.M.M. ✓  
 486.67  
 27.2  
 17.1

13.8

Ch. T.M.M. ✓  
 509.78 258.00

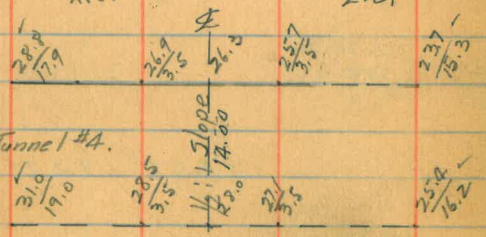
287+08.8 386.7 413.2  
 23.7 23.9 23.5 25.7 26.3  
 15.3 12.0 7.0 3.5

Ch. T.M.M. ✓  
 522.89  
 26.9 28.8  
 3.5 17.9

R.C.

L.C.

287+08.8



4600 ± C.Ft.

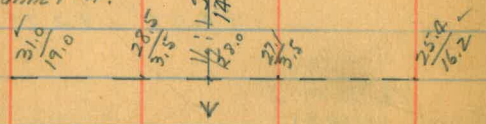
170.37 ± Cu. Yds

287+12.95  
 287+08.45 So. Portal Tunnel #4.

4634.61 Cu. Ft.  
 S.W.C.  
 A.H.H.

171.65  
 S.W.C.  
 A.H.H.

287+18.47

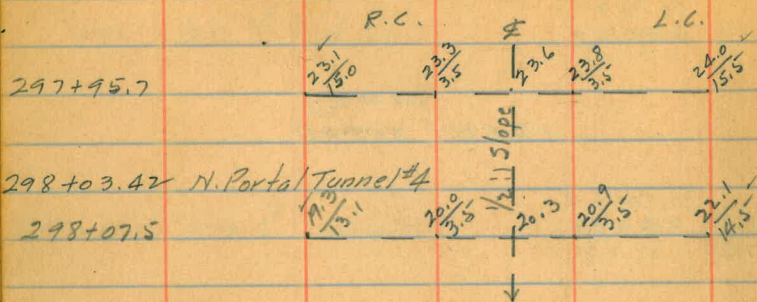




7° Bottom - 1/2 11 Slopes.

07.5  
11.2  
95.7

C.V.



2200 ± Cu. Ft.

2616.79 Cu. Ft.

B.W.C.  
L.H.H.

~~81.98~~

96.92

B.W.C.  
L.H.H.

Sta.	Grade	Elev.	Dist.	L.C.	±	R.C.	End Area	Av. E. A.	Co. Yds.
298+07.5	385.8	406.1		22.1 14.5	20.9 3.5	20.3	20.0 3.5	19.3 13.1	353.58 Ch. T.M.M.
			22.5						292.89 244.08
+30	385.8	401.5		16.3 11.6	15.7		15.0 11.0		232.19 Ch. T.M.M.
			20.0						193.24 143.14
+50	385.7	397.6		12.4 9.7	11.9		11.5 9.2		154.28 Ch. T.M.M.
			30.0						112.59 125.10
+80	384.5	391.2		7.5 7.2	6.7		6.4 6.7		90.89 Ch. T.M.M.
			20.0						64.16 47.53 Chd. T.M.M.

7° Bottom - 1/2:1 Slopes.

54

C.F.

299+00 ✓ 382.0 ✓ 387.7

$\frac{6.2}{6.6}$

5.7 ✓

$\frac{5.6}{6.3}$

Ch. M.M. ✓  
57.42 ✓

4.82 Bottom Standard Trench.

9.7

42.72 ✓ 15.35 ✓

299+09.7 380.7 ✓ 386.5

5.8

Ch. M.M. ✓  
28.01

17.3

29.48 ✓ 18.89 ✓

+27 377.8 ✓ 384.2

6.4

Ch. M.M. ✓  
30.95

13.0

33.31 ✓ 16.04 ✓

+40 375.6 ✓ 382.9

7.3

Ch. M.M. ✓  
35.67

10.3

33.56 ✓ 12.80 ✓

+50.3 373.9 ✓ 380.4

6.5

Ch. M.M. ✓  
31.45

24.90 27.48

29.8 1.1038

Ch. M.M.

2 +80.1 370.1 373.9 3.8

.3667

+90 369.6 376.6 7.0

3 300 369.2 380.3 11.1

.3741

+10.1 368.7 380.1 11.4

.1815

+15 368.6 377.4 8.8

+30 368.5 379.9 11.4

End Areas  
Sq. Ft.

18.35 ✓

26.20<sup>2</sup> 9.61

34.05<sup>2</sup> ✓

47.07  
47.57 17.43

60.09<sup>2</sup> ✓

61.20<sup>2</sup> ✓ 22.89

62.30<sup>2</sup> ✓

53.37<sup>2</sup> ✓ 9.69

44.44<sup>2</sup> ✓

53.37<sup>2</sup> ✓ 29.65

62.30<sup>2</sup> ✓

45.88<sup>2</sup> ✓ 44.18

Comptd. T.M.M. Chd. A.L.L. Chd. A.L.L.

Chd.

+56 368.4 374.5 6.1

End Areas  
Sq. Ft.

29.46<sup>v</sup>

32.57<sup>v</sup> 53.08

301 368.1 375.4 7.3

35.67<sup>v</sup>

36.23<sup>v</sup> 26.84

+20 367.6 375.1 7.5

36.78<sup>v</sup>

34.38<sup>v</sup> 38.20

+50 366.8 373.4 6.6

31.98<sup>v</sup>

31.47<sup>v</sup> 58.28

302 365.6 372.0 6.4

30.95<sup>v</sup>

32.24<sup>v</sup> 15.52

+13 365.7 372.6 6.9

33.52<sup>v</sup>

23.52<sup>v</sup> 6.10

Compta. P.M.M. A.L.L. Chd. A.L.L.  
Compta A.L.L.

Chd.

End Areas  
Sq. Ft.

+20 365.7 368.5 2.8

13.52<sup>v</sup>23.52<sup>v</sup> 6.97<sup>v</sup>

+28 365.8 372.7 6.9

33.52<sup>v</sup>33.52<sup>v</sup> 27.31<sup>v</sup>

+50 365.9 372.8 6.9

33.52<sup>v</sup>36.57<sup>v</sup> 67.72<sup>v</sup>

303 366.2 374.2 8.0

39.62<sup>v</sup>42.03<sup>v</sup> 34.25<sup>v</sup>

+22 367.1 375.9 8.8

44.44<sup>v</sup>38.72<sup>v</sup> 40.15<sup>v</sup>

+50 368.2 375.0 6.8

33.00<sup>v</sup>32.23<sup>v</sup> 20.29<sup>v</sup>

Comptd. T.M.M. A.L.L. Chd. A.C.L.  
 Comptd. A.L.L.  
 Chd. A.C.L.

End Areas  
Sq. Ft.

+67 268.9 375.4

6.5

31.45<sup>v</sup>24.42<sup>2</sup> 4.52<sup>2</sup>

+72 269.1 372.7

3.6

17.39<sup>v</sup>23.67<sup>2</sup> 5.26<sup>2</sup>

+78 369.3 375.5

6.2

29.95<sup>v</sup>30.45<sup>2</sup> 24.81<sup>2</sup>

30A 370.2 376.6

6.4

30.95<sup>v</sup>32.24<sup>2</sup> 29.85<sup>2</sup>

+25 371.2 378.1

6.9

33.52<sup>v</sup>31.99<sup>2</sup> 41.47<sup>2</sup>

+60 372.6 378.9

6.3

30.45<sup>v</sup>33.62<sup>2</sup> 22.41<sup>2</sup>

Comptd. T.M.M. A.L.L. Chd. A.L.L.

Chd. A.L.L.

+ 78 373.3 380.8

7.5

End Areas  
Sq. Ft.

36.78

33.37<sup>2</sup> 27.19

305 374.2 380.4

6.2

29.95

32.00<sup>2</sup> 29.63

+25 375.2 382.2

7.0

34.05

32.00<sup>2</sup> 29.63

+50 376.2 382.4

6.2

29.95

29.23<sup>2</sup> 16.22

+65 376.8 382.7

5.9

28.50

26.81<sup>2</sup> 29.79

+95 378.0 383.2

5.2

25.12

25.85<sup>2</sup> 19.15

Comptd. T.M.M. A.C.L. Chd. A.C.L.

Chd. A.C.L.

306 + 15 378.1 383.6

5.5

End Areas  
Sq. Ft.26.57<sup>9</sup>25.12<sup>9</sup> 9.30<sup>9</sup>

+ 25 378.2 383.1

4.9

23.67<sup>9</sup>25.36<sup>9</sup> 14.09<sup>9</sup>

+ 40 377.3 382.9

5.6

27.05<sup>9</sup>27.53<sup>9</sup> 15.19<sup>9</sup>

.5518

+ 54.9 376.4 382.2

5.8

28.01<sup>9</sup>27.53<sup>9</sup> 25.59<sup>9</sup>

.9296

+ 80 374.1 379.7

5.6

27.05<sup>9</sup>26.33<sup>9</sup> 19.51<sup>9</sup>

307 372.1 377.4

5.3

25.60<sup>9</sup>27.78<sup>9</sup> 10.29<sup>9</sup>

Comptd. T.M.M. A.C.L. Chd. A.C.L.

Chd. A.C.L.

12,608.96<sup>9</sup> A.C.L.  
553.50<sup>9</sup>  
sub 121



+10 371.2 377.4

6.2

End Areas  
Sq. Ft.

29.95

.3741

29.23 10.93

+20.1 370.2 376.1

5.9

28.50

366.7

29.73 <sup>w</sup>  
21.91  
10.90

+40 367.6 374.0

6.4

30.95

.3631

31.72 11.52

+49.8 366.3 373.0

6.7

32.48

5630

32.48 18.29

+65 363.3 370.0

6.7

32.48

41.70 21.93

+79.2 360.4 370.2

9.8

50.91

.6592

44.12 29.09

Comptd. T.M.M. A.L.L. Chd. A.L.L.

Chd. A.L.L.

				End Areas Sq. Ft.	
+97	356.1	363.7	7.6	37.33	
					31.23 4.63
308+01	354.9	360.1	5.2	25.12	
					26.33 20.48
+22	350.1	355.8	5.7	27.53	
					37.25 4.14
+25	349.4	358.6	9.2	46.96	
					51.36 15.22
+33	347.5	358.0	10.5	55.75	
					46.27 29.13
+50	343.4	350.9	7.5	36.78	
					35.42 39.36
					Comptd. A.L.L. A.L.L. Chd. A.L.L.
					Chd. A.L.L.

End Areas  
Sq. Ft

+80 334.1 341.1

7.0

34.05<sup>1/2</sup>30.07<sup>2/2</sup> 22.28

309 327.9 333.3

5.4

26.08<sup>1/2</sup>30.07<sup>2/2</sup> 33.41

+30 321.0 328.0

7.0

34.05<sup>1/2</sup>30.55<sup>2/2</sup> 22.63

+50 318.3 323.9

5.6

27.05<sup>1/2</sup>30.82<sup>2/2</sup> 32.07EQUATION

$$\begin{array}{l} 309 + 78.09 = 387.09 \\ 309 + 72.07 = 381.07 \end{array}$$

1.0404 28.09

7.1

34.59<sup>1/2</sup>36.53<sup>2/2</sup> 20.47

.5604

15.13

+87.2 312.4 320.2

7.8

38.47<sup>1/2</sup>39.63<sup>2/2</sup> 18.79

.4742

Comptd. T.M.M. A.C.L. Chd. A.C.L.

Chd. A.C.L.

310 314.3 322.5

8.2

End Areas  
Sq. Ft.40.79<sup>o/</sup>40.79<sup>o/</sup> 45.32

+30 318.7 326.9

8.2

40.79<sup>o/</sup>38.79<sup>o/</sup> 28.74

+50 321.7 ✓ 329.2

7.5

36.78<sup>o/</sup>31.19<sup>o/</sup> 40.66

1.3037

+852 327.8 333.1

5.3

25.60<sup>o/</sup>27.78<sup>o/</sup> 15.23

.5482

311 329.3 335.5

6.2

29.95<sup>o/</sup>28.02<sup>o/</sup> 15.57

+15 330.9 336.3

5.4

26.08<sup>o/</sup>25.84<sup>o/</sup> 33.50<sup>o/</sup>  
Comptd. A.C.L.

Comptd. T.M.M. A.C.L. Chd. A.C.L.

Chd. A.C.L.

+50 333.0 338.3

5.3  
1.3  
6.6

End Areas  
Sq. Ft

25.60<sup>o/</sup>

11038

28.28<sup>o/</sup> 31.22

+79.8 334.7 341.1

6.4  
1.8  
8.2

30.95<sup>o/</sup>

29.48<sup>o/</sup> 32.76

312+09.8 335.3 341.1

5.8

28.01<sup>o/</sup>

.5630

29.23<sup>o/</sup> 16.46

+25 334.3 340.6

6.3

30.45<sup>o/</sup>

.5482

29.48<sup>o/</sup> 16.16

+29.8 333.4 339.3

5.9

28.50<sup>o/</sup>

.3778

30.24<sup>o/</sup> 11.42

+50 332.0 338.6

6.6

31.98<sup>o/</sup>

30.97<sup>o/</sup> 22.37

Comptd. T.M.M. A.L.L. Chd. A.L.L.  
Comptd. A.L.L.  
Chd. A.L.L.

Grade Elev

+69.5 329.1 ✓ 335.3

6.2 ✓

313 323.5 ✓ 329.7

6.2 ✓

+90 316.0 ✓ 321.8

5.8 ✓

+70 308.0 ✓ 315.7

7.7 ✓

314+00 300.0 ✓ 310.6

10.6 ✓

314+21 298.5 ✓ 307.3

8.8 ✓

.0704

M.A.B. ✓

End Area  
Sq. Ft.

29.95 ✓

29.95 ✓ 33.83 ✓

29.95 ✓  
~~30.45~~

28.02 ✓ 41.51 ✓

26.08 ✓

31.99 ✓ 35.54 ✓

37.90 ✓

47.17 ✓  
~~45.51~~ 52.41 ✓

56.44 ✓

50.44 ✓  
~~44.55~~ 39.23 ✓

44.44 ✓

36.47 ✓  
~~31.15~~ 4.05 ✓Compld. M.A.B. - All Chd A.C.L.  
Chd. A.C.L.Resectioned because of grade change  
M.A.B. June 13, 1930

+24 298.3 ✓ 304.2

5.9 ✓

End Areas  
Sq. Ft.

28.50

32.085 ✓ 13.07 ✓

+35 297.5 ✓ 304.8

7.3 ✓

35.67

40.055 ✓  
~~37.000~~ 22.26 ✓

+50 296.4 ✓ 305.2

8.8 ✓

44.44 ✓

42.615 ✓  
~~38.000~~ 23.68 ✓

+65 295.3 ✓ 303.5

8.2 ✓

40.79 ✓

37.69 ✓  
~~34.000~~ 24.71 ✓

+82.7 294.0 ✓ 301.6

7.7 ✓

34.59 ✓

29.37 ✓  
~~21.30~~ 13.38 ✓

+95 294.0 ✓ 299.0

5.0 ✓

24.15 ✓

26.57 ✓ 17.22 ✓

✓ m. A. E.

Completion of B. A. L. Chd. A. L. L.

Chd. A. L. L.

Resectioned because of line change  
m. A. E. June 13, 1930

315+12.5 294.0<sup>✓</sup> 300.0

6.0

End Areas  
Sq. Ft.28.98<sup>✓</sup>29.47<sup>2</sup> 13.64<sup>2</sup>

+25 295.0 301.2

6.2

29.95<sup>4</sup>33.37<sup>2</sup> 18.59<sup>2</sup>

+40 296.2 303.7

7.5

36.78<sup>4</sup>32.88<sup>2</sup> 19.48<sup>2</sup>

+56 297.5 303.5

6.0

28.98<sup>4</sup>32.60<sup>2</sup> 16.90<sup>2</sup>

+70 298.6 306.0

7.4

36.22<sup>4</sup>29.22<sup>2</sup> 12.99<sup>2</sup>

+82 299.6 304.2

4.6

22.22<sup>4</sup>23.67<sup>2</sup> 15.78<sup>2</sup>

Compd. T.M.M. A.C.L. Chd. A.C.L.

Chd. A.C.L.



End Areas  
Sq. Ft.

316 301.0 306.2

5.2

25.12

26.57 24.60

+25 303.0 308.8

5.8

28.01

31.30 20.87

+43 304.4 311.5

7.1

34.59

31.06 31.06

+70 306.6 312.3

5.7

27.53

27.53 30.59

317 309.0 314.7

5.7

27.53

28.99 53.69

+50 316.5 322.8

6.3

30.45

31.73 11.75

Comptd. T.M.M. A.C.L. Chd. A.C.L.

Chd.

End Areas  
Sq. Ft.

+60	318.0	324.8	6.8	33.00 <sup>✓</sup>	31.73 <sup>°</sup>	47.01 <sup>°</sup>
318	324.0	330.3	6.3	30.45 <sup>✓</sup>	30.45 <sup>°</sup>	56.39 <sup>°</sup>
+50	329.0	335.3	6.3	30.45 <sup>✓</sup>	29.72 <sup>°</sup>	55.04 <sup>°</sup>
319	334.0	340.0	6.0	28.98 <sup>✓</sup>	29.72 <sup>°</sup>	55.04 <sup>°</sup>
+50	342.0	348.3	6.3	30.45 <sup>✓</sup>	30.45 <sup>°</sup>	28.19 <sup>°</sup>
+75	346.0	352.3	6.3	30.45 <sup>✓</sup>	30.70 <sup>°</sup>	28.43 <sup>°</sup>

Comptd. T.M.M. A.L.L. Chd. A.L.L.  
Chd.  
Comptd. A.L.L.  
sub. 14,086.91

14,155.53 A.L.L.  
14,086.91

320. 350.0 356.4

6.4

End Areas  
Sq. Ft.30.95<sup>1/2</sup>28  
931.98<sup>2</sup> 17.77.

+15 352.4 359.2

6.8

33.00<sup>1/2</sup>31.23<sup>2</sup> 11.57.

+25 354.0 360.1

6.1

29.46<sup>1/2</sup>29.70<sup>2</sup> 27.50.

+50 358.0 364.2

6.2

29.95<sup>1/2</sup>28  
9030.45<sup>2</sup> 16.92.

+65 360.4 366.8

6.4

30.95<sup>1/2</sup>28.52  
13.04 18.80.

.6593

+82.8 363.2 368.6

5.4

26.08<sup>1/2</sup>26.82<sup>2</sup> 17.08.  
Comptd. A.C.L.

.6370

Comptd. T.M.M. A.C.L. Chd. A.C.L.

Chd.

End Areas  
Sq. Ft.

321 365.4 371.1 5.7

27.53

.4667

26.08<sup>2</sup> 12.17

+12.6 366.9 372.0 5.1

24.63

.3481

28.04<sup>2</sup> 20.15

+32 367.7 374.2 6.5

31.45

.3926

29.98<sup>2</sup> 11.77

+42.6 368.3 374.2 5.9

28.50

28.98<sup>2</sup> 18.67

+60 368.6 374.7 6.1

29.46

28.26<sup>2</sup> 41.87

322 369.0 374.6 5.6

27.05

26.09<sup>2</sup> 48.32

Compta T.M.M. A.L.L. Chd. A.L.L.

Chd.

End Areas

+50 369.6 374.8

5.2

25.12 ✓

28.29<sup>o</sup> 26.19

+75 369.9 376.4

6.5

31.45 ✓

30.46<sup>o</sup> 28.20

323 370.2 376.3

6.1

29.46 ✓

29.72<sup>o</sup> 44.03

+40 370.2 376.4

6.2

29.95 ✓

29.72<sup>o</sup> 38.53

+75 370.2 376.3

6.1

29.46 ✓

30.20  
30.42<sup>o</sup> 27.96

324 370.2 376.6

6.4

30.95 ✓

31.98<sup>o</sup> 29.61Compta T.M.M A.L.L. Chd A.L.L.  
Chd.

+25 370.2 377.0

6.8

End Areas  
Sq. Ft.33.00<sup>1/2</sup>33.79<sup>1/2</sup> 31.29<sup>1/2</sup>

+50 370.2 377.3

7.1  
 $\frac{2.3}{90}$ 34.59<sup>1/2</sup>31.78<sup>1/2</sup> 29.43<sup>1/2</sup>

+75 370.2 376.2

6.0

28.98<sup>1/2</sup>28.02<sup>1/2</sup>  
28.04 25.94<sup>1/2</sup>

325 370.3 375.9

5.6  
 $\frac{1.2}{78}$ 27.05<sup>1/2</sup>27.05<sup>1/2</sup> 50.09<sup>1/2</sup>

+50 370.3 375.9

5.6  
 $\frac{1.9}{78}$ 27.05<sup>1/2</sup>27.78<sup>1/2</sup> 56.39<sup>1/2</sup>

2.0298

326+04.8 370.3 376.2

5.9  
 $\frac{3.7}{78}$ 28.50<sup>1/2</sup>28.98<sup>1/2</sup> 14.17<sup>1/2</sup>

.4889

Compta. T.M.M. A.C.C. Chd. A.C.C.  
Comptd. A.C.C.

Chd.

+18 369.8 375.9

6.1

29.46<sup>o</sup>

6223

27.77<sup>o</sup> 17.28.

+34.8 369.2 374.6

5.4

26.08<sup>o</sup>

.7482

27.05<sup>o</sup> 20.29.

+55 367.1 372.9

5.8

28.01<sup>o</sup>

.3593

27.77<sup>o</sup> 9.98.

+64.7 366.1 371.8

5.7

27.53<sup>o</sup>

1.0926

27.53<sup>o</sup> 30.08.

+94.2 361.1 366.8

5.7

27.53<sup>o</sup>

9001

27.53<sup>o</sup> 11.01.

327+05 358.9 364.6

5.7

27.53<sup>o</sup>

1.1223.

26.08<sup>o</sup> 29.27.

Comptd. T.M.M. A.L.L. Chd. A.L.L.

Chd.

End Areas  
Sq. Ft.

+35.3 352.6 357.7

5.1

24.63<sup>✓</sup>

.5444

26.32<sup>9</sup> 14.33.

+50 349.6 355.4

5.8

28.01<sup>✓</sup>

.5259

26.81<sup>✓</sup> 14.10.

+64.2 344.6 349.9

5.3

25.60<sup>✓</sup>

.8000

28.03<sup>9</sup> 22.42.

+85.8 337.0 343.5

6.5

31.45<sup>✓</sup>

.5259

31.20<sup>9</sup> 16.41.

328 332.7 339.1

6.4

30.95

30.95<sup>✓</sup> 16.62.

+14.5 328.2 334.6

6.4

30.95<sup>✓</sup>29.00<sup>✓</sup> 38.13.Comptd. T.M.M. A.L.L. Chd. A.L.L.  
Chd.



End Areas  
Sq. Ft.

+50 319.0 324.6 5.6

27.05<sup>9/</sup>25.12<sup>9/</sup> 35.35

+88 309.1 313.9 4.8

23.18<sup>9/</sup>27.07<sup>0/</sup> 12.03

329 306.0 312.4 6.4

30.95<sup>11/</sup>29.48<sup>9/</sup> 16.38

+15 306.0 311.8 5.8

28.01<sup>9/</sup>29.48<sup>9/</sup> 16.38

+30 306.0 312.4 6.4

30.95<sup>9/</sup>26.35<sup>9/</sup> 34.16

+65 311.6 316.1 4.5

21.74<sup>9/</sup>22.22<sup>0/</sup> 28.80

Computed. M.M. A.C.L. Chd. A.C.L.

Chd. A.C.L.

330 317.3 322.0

4.7

End Areas  
Sq. Ft.22.70<sup>o</sup>24.64<sup>o</sup> 13.69<sup>o</sup>

+15 319.7 325.2

5.5

26.57<sup>o</sup>26.33<sup>o</sup> 34.13<sup>o</sup>

+50 328.8 334.2

5.4

26.08<sup>o</sup>28.77<sup>o</sup> 53.28<sup>o</sup>

331 341.7 348.2

6.5

31.45<sup>o</sup>

A.L.L. Chd. A.L.L.

Compta. T.M.M.

Chd. A.L.L.

This Book Total  
\$15304.02  
M.M.S. 9/26/1930A.L.L.  
10/10/30

Contd. in Book # 288. Page 2.

DIRECTIONS FOR USE OF TABLES

TABLE No. 1.

Distance of slope stake from side or shoulder  
stake for any width roadway, slope 1 1/2 to 1.  
If ground is nearly level, the cut or fill at side  
stake is located by the double entry method in  
left column and top row. The number in both

IMPROVED TABLES  
AND  
INFORMATION

To find Tangent and External for curve in  
any other degree, divide by degree of curve and  
add constant found in column of corresponding  
Degree of curve with a given I may be found  
by dividing tangent (or external), opposite I by  
given tangent (or external).

The distance from a point on the tangent to  
the curve is very nearly the square of the tangent  
length divided by twice the radius.

Grade 309+30 to 309+87.22 Wrong.  
Does not include equasion at P.T.

319+00 - 87

263839