

1146

DIETZGEN
TRADE MARK

ENGINEERS'
LEVEL BOOK

No. 410

EUGENE DIETZGEN CO.

DRAWING MATERIALS, MATHEMATICAL and
SURVEYING INSTRUMENTS

Chicago New York San Francisco New Orleans Pittsburg Toronto

Distances from Center of Roadway for Cross-Sectioning
Roadway 16 feet wide. Side Slopes 1 on 1.
For Single Track Embankment.

II	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	II
0	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	0
1	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	1
2	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	2
3	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	3
4	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	4
5	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	5
6	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	6
7	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	7
8	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	8
9	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	9
10	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	10
11	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	11
12	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	12
13	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	13
14	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	14
15	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	15
16	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	16
17	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	17
18	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	18
19	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	19
20	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	20
21	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	21
22	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	22
23	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	23
24	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	24
25	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	25
26	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	26
27	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	27
28	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	28
29	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	29
30	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	30
31	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	31
32	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	32
33	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	33
34	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	34
35	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	35
36	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	36
37	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	37
38	46.0	46.1	46.2	46.3	46.4	46.5	46.6	46.7	46.8	46.9	38
39	47.0	47.1	47.2	47.3	47.4	47.5	47.6	47.7	47.8	47.9	39
40	48.0	48.1	48.2	48.3	48.4	48.5	48.6	48.7	48.8	48.9	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 30.6. For same slopes but other widths of roadbed, correct above figures by one-half difference in width of roadbed; thus in example above, for 20 ft. roadbed distance will be $30.6 + (20 - 16) \div 2$ or 2 ft. added to $30.6 = 32.6$. For slopes of 1 on $1\frac{1}{2}$ see inside of back cover.

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50' width
10' cbs

Sutter St X Sec.
from E. line Pringle 150' S

12/29/25

S.W. Pringle
& Washington

BM 2.72 262.79 265.07

00 = E line Pringle

S 2.6

cl 2.7

1/4 2.6

C 2.2

1/4 2.2

cl 1.6

N 1.5

5' E

1/1 1.5

cl 1.8

1/4 2.0

C 2.4

1/4 2.5

cl 2.1

S 1.5

267.79
30' E

S 2.8

cl 2.7

1/4 3.1

C 3.3

1/4 4.0

cl 4.2

N 4.0

50' E

N 6.7

cl 6.9

1/4 5.8

C 5.1

1/4 3.9

cl 3.7

S 3.5

57' E

S 4.0

cl 4.2

1/4 5.6

C 6.0

	267.79	
N		7.0
cl		7.5
N		7.7
	65' E	
N		8.7
cl		8.4
N		7.3
C		7.0
N		8.4
cl		5.7
N		4.8
S		4.5
	75' E	
S		5.3
cl		6.2
N		7.0
C		7.4
N		8.4
cl		9.1
N		10.0

	267.79			547.64
	95' E			
N				13.4
cl				12.0
N				11.0
C				9.2
N				9.0
N				8.9
cl				7.6
S				6.7
T.P.	1.16	256.34	12.61	255.18
		125' E		
S				4.0
cl				4.5
N				4.9
C				5.3
N				5.7
cl				6.4
N				8.0

256.34

150.8

Sutter 3

N			15.0	
el			12.9	
114			11.9	
e			11.0	
114			11.7	
el			9.1	
S			7.7	
T.P.	11.10	2 61.00	4.44	249.90

no trees

50' wide
12' chs

Neale St 75' E
Pringle St 150' E.

261.00 (Page 3)

00: Stone Pringle

N 6.7 254.3 ✓

ch 7.0 254.0 ✓

1/4 7.7 253.3 ✓

e 8.1 252.9 ✓

1/4 8.7 252.3 ✓

ch 9.2 251.8 ✓

S 8.8 252.2 ✓

3' E

S 8.8 252.2 ✓

ch 8.2 252.8 ✓

1/4 8.4 252.6 ✓

e 7.8 253.2 ✓

1/4 7.4 253.6 ✓

ch 6.6 254.4 ✓

N 5.6 255.4 ✓

261.00
50' E

4

N 7.6 253.4 ✓

ch 9.7 251.3 ✓

1/4 10.3 250.7 ✓

e 11.0 250.0 ✓

1/4 11.6 249.4 ✓

ch 12.3 248.7 ✓

S 13.0 248.0 ✓

60' E

S 13.5 247.5 ✓

ch 12.6 248.4 ✓

1/4 12.1 248.9 ✓

e 11.3 249.7 ✓

1/4 10.8 250.2 ✓

ch 10.2 250.8 ✓

N 9.2 251.8 ✓

74' E

N 10.4 250.6 ✓

ch 11.5 249.5 ✓

1/4 13.1 247.9 ✓

T.P. 0.69 250.59 ✓ 11.10 249.90 ✓

250.59 ✓

74' E (Ech)

es	2.9	247.7	✓
3.9	3.1	247.5	✓
cl	3.3	247.3	✓
S	4.3	246.3	✓

80' E

S	5.0	245.6	✓
cl	3.7	246.9	✓
1/4	3.3	247.3	✓
C	3.1	247.5	✓
1/4	2.7	247.9	✓
cl	2.1	248.5	✓
N	0.4	250.2	✓

90' E

N	0.9	249.7	✓
cl	2.4	248.2	✓
1/4	2.9	247.7	✓
C	3.6	247.0	✓
1/4	4.3	246.3	✓
cl	4.6	246.0	✓
S	6.0	244.6	✓

250.59

100' E

Wcale 5

S	7.4	243.2	✓
cl	6.0	244.6	✓
1/4	5.6	245.0	✓
C	7.9	242.7	✓
1/4	4.3	246.3	✓
cl	3.7	246.9	✓
N	1.4	249.2	✓

126' E

N	3.5	247.1	✓
cl	5.6	245.0	✓
1/4	6.8	243.8	✓
C	7.3	243.3	✓
1/4	7.7	242.9	✓
cl	8.7	241.9	✓
S	9.9	240.7	✓

135' E

S	12.1	238.5	✓
cl	10.3	240.3	✓
1/4	9.1	241.5	✓
C	8.2	242.4	✓

250.59

135' E (cont)

14

7.4 243.2

cl

6.4 244.2

N

4.2 246.4

143' E

N

5.0 245.6

cl

7.4 243.2

14

8.4 242.2

E

9.3 241.3

14

10.3 240.3

cl

11.4 239.2

S

14.3 236.3

150' E

S

15.0 235.6

+9

15.0 235.6

cl

14.0 236.6

14

12.6 238.0

E

12.0 238.6

14

10.9 239.7

cl

9.7 240.9

N

7.6 243.0

Noale 6

Cross Section Alley 208 Univ Heights
 3rd Floor Hamilton Road Oregon
 From N.L. Univ. Bldg to S.H. 1000

20' wide

329.40

88' N

16.8' x 25'
 5' x 5' on
 3' x 3' on
 Northern

BM	10.66	317.06	306.40	3E.30 On top of Hamilton	N	6.0	323.4 ✓
TP	12.42	329.42	0.06	319.00	2	5.7	323.7 ✓
		0.10	N.L. University		E Garage Dirt Floor	4.9	324.5 ✓
N	Top Carb	6.58	322.84 ✓			110' N	
2	Top Paving	6.59	322.83 ✓		F	4.9	324.5 ✓
E	Top Carb	5.97	323.45 ✓		2	5.3	324.1 ✓
		2.5' N			N	5.6	323.8 ✓
E		4.8	324.6 ✓		+ 3/4 Center-Dr Garage Conc Floor	5.57	323.90 ✓
+6		5.1	324.0 ✓			144' N	
2		6.0	323.4 ✓		N	4.9	324.5 ✓
N		6.5	322.9 ✓		2	4.5	324.9 ✓
		50' N			E Garage Conc Floor	3.75	325.67 ✓
N		6.1	323.3 ✓			160' N	
2		5.7	323.7 ✓		- 4 Center-Dr Garage Dirt Floor	3.1	326.3 ✓
+2		5.2	324.2 ✓		F	3.2	326.2 ✓
E		4.9	324.5 ✓		2	3.9	325.7 ✓
		70' N			N	4.2	325.2 ✓
E		4.6	324.8 ✓			180'	
+6		4.8	324.6 ✓	34' N S. End Garage 2.5' x 3' on Dirt Floor	N	3.1	326.3 ✓
2		5.3	324.1 ✓	323.5	2	2.9	326.5 ✓
N		5.9	323.5 ✓				

329.42

325.09

+5 2.3 327.1 ✓

7.1 327.5 ✓

E 2.3 327.1 ✓

189'N
Garage Conc.
Floor
320.82

290'N

TP 8.14 325.09 2.47 326.95 ✓

6.9 328.4 ✓

215'N

6.4 328.7 ✓

E 7.6 327.5 ✓

6.8 328.9 ✓

2 8.1 327.0 ✓

5.6 329.5 ✓

11 8.3 326.8 ✓

305'N

305'N
Man Hole
6.00

213'N

-1 Garage Dirt Floor 5.2 329.9 ✓

329.09

11 7.8 327.3 ✓

5.2 329.9 ✓

+7 7.3 327.4 ✓

6.0 329.1 ✓

2 7.4 327.7 ✓

6.4 328.7 ✓

+5 6.7 328.4 ✓

330'N

E 6.4 328.7 ✓

6.8 328.9 ✓

+3 Garage Dirt Floor 6.4 328.7 ✓

5.6 329.5 ✓

328.9
328.9
Garage Dirt Floor
6.00

263'N

4.7 330.4 ✓

328.9

-2.3 Garage Conc. Floor 5.2 329.8 ✓

4.5 330.9 ✓

E 5.8 329.5 ✓

360'N

+3 5.8 329.3 ✓

-5 Garage Conc Floor 3.7 331.2 ✓

2 6.6 328.5 ✓

E Corridor 4.6 330.9 ✓

+5 7.3 327.8 ✓

2 4.9 330.2 ✓

	335.09			
H		5.3	329.8 ✓	
	400'N			
H		4.9	330.2 ✓	
Z		4.3	330.8 ✓	
F		3.9	331.4 ✓	
	412'N			
F	Garage Dirt Floor	3.5	331.6 ✓	
Z		4.6	330.9 ✓	
H		4.7	330.4 ✓	
	423'N			
H		3.8	331.3 ✓	
Z		3.3	331.8 ✓	
F	Garage Dirt Floor	2.6	332.5 ✓	332.09
	460'N			
F		2.4	332.7 ✓	
Z		3.0	332.1 ✓	
H	Conc Apron	3.07	332.02 ✓	499'N on N.E. End Conc Apron
	496'N			
H	Do Garage	2.55	332.54 ✓	
Z		2.8	332.3 ✓	332.51

	335.09			
Z		2.2	332.9 ✓	
F		1.5	333.6 ✓	
	562'N			
		0.74	334.35 ✓	
		1.18	333.91 ✓	
F		1.3	333.8 ✓	
Z		2.0	333.1 ✓	
H		2.8	332.3 ✓	
TP	923	343.20	333.97 ✓	574'N Garage Conc Floor 196'N on E 10.9
	540'N			
H		10.1	333.1 ✓	332.30
Z		9.2	334.0 ✓	
F		8.1	335.1 ✓	
	557'N			
F		7.7	335.5 ✓	
Z		8.3	334.9 ✓	
Z		8.7	334.5 ✓	
H		8.3	334.9 ✓	
	578'N			
H		7.8	335.4 ✓	
Z		7.6	335.6 ✓	

34320

E		72	336.0 ✓
72		70	336.2 ✓
F		68	336.4 ✓

592 N

E		65	336.7 ✓
E		72	336.0 ✓
79		74	335.8 ✓
N		72	336.0 ✓

600 N - S. Lincoln

N Top curb		622	336.98 ✓
N Gutter		68	336.4 ✓
E		63	336.9 ✓
E Gutter		54	337.8 ✓
E Top curb		461	338.59 ✓

TP	1233	35461	092	34228	SE Lincoln + 0.000 35293
BN			871	35090	

Cross Section Alley Block 300 University
Between Texas And Arizona
From University to Lincoln

Station	Distance	Reading	Height	Notes	Station	Distance	Reading	Notes	
3N	260	315.53	312.93	Hgt University + Texas	+5	315.0 67	3083	✓	
TP	781	314.99	307.18		2	68	308	✓	
	010	N.L. University			+8	68	308	✓	
F	Top Curb	10.71 315.0	304.48		F	7.5	3075	✓	
2	Gutter	10.9	302.1			75' N		✓	
H	Top Curb	10.08 9.99	306.91 306.55		F	6.3	3087	✓	
	Top Conc Wall 10' 10" Alley	7.45	307.54		2	6.2	3088	✓	
	10' N				+7	6.3	3067	✓	
H		6.4	3086		+9	5.7	3093	✓	
+1		8.0	3070		H	5.8	3094	✓	
L		8.3	3067	18' North Top of 10' 10" Alley End Wall 5.60 3095		25' N			
E		7.9	3071		H	5.1	3099	✓	
	25' N				H	Garage Conc Floor	9.82	31017	✓
E		7.7	3073		+6	5.8	3094	✓	
+1		7.4	3076		2	6.0	3090	✓	
2		7.3	3077		F	6.55	3084	✓	
+6		7.1	3079		+7.5	Garage Conc Floor	6.71	30828	✓
H		5.4	3096			11.5' N			
	50' N				-7.5	Garage Conc Floor	6.80	3084	✓
H	Fence to Alley	5.3	3097		E	6.50	3085	✓	

31499

315.0

+5 57 309.3 ✓
 2 57 309.3 ✓
 W 5.3 309.7 ✓

150'N

- 11 Con. De Garqgn Conc Floor 431 310.68 ✓
 W 48 310 ✓ ✓
 2 5.0 310.0 ✓
 F 5.2 309.8 ✓

160'N

F 7.0 308.0 ✓
 +3 5.3 309.7 ✓
 2 5.3 309.7 ✓
 W 4.9 310.2 ✓

200'N

W Foncekain Alley 4.6 310.4 ✓
 2 5.2 309.8 ✓
 +5 5.4 309.6 ✓
 F 6.3 308.7 ✓

225'N

F 6.1 308.9 ✓

31499

315.0

+2 5.3 309.2 ✓
 +6 4.6 310.4 ✓
 2 4.6 310.4 ✓
 +6 4.6 310.4 ✓
 +2 4.2 310.8 ✓

W Mire Foncekain Alley

250'N

W 3.0 311.0 ✓
 +5 4.1 310.9 ✓
 2 4.4 310.6 ✓
 +5 4.6 310.4 ✓
 F 5.3 309.2 ✓

300'N

F 4.0 311.0 ✓
 +5 4.3 310.7 ✓
 2 4.80 310.8 ✓
 +3 4.1 310.9 ✓
 +7 3.5 311.5 ✓
 W 2.6 310.4 ✓

2 Top M.H.

330'N

W 3.2 311.8 ✓

312'N
 ✓
 Garqgn Conc Floor
 309.3 ✓

31499

3150

Z		3.5	3115 ✓
E		41	3109 ✓
+20	Do Garage Conc Floor	390	3111 ✓
	351'N		
E	Face of Sid Alley	3.0	3110 ✓
+5		3.4	3116 ✓
Z		3.2	3118 ✓
+7		2.8	3112 ✓
N		3.1	3119 ✓
+4.7	Garage Dirt Floor	2.7	3113 ✓
	400'N		
N		1.5	3135 ✓
+4		2.1	3119 ✓
Z		1.9	3131 ✓
+8		2.8	3112 ✓
E		2.8	3112 ✓
TP	9.00	322.06	193
	425'N		
E	Garage Dirt Floor	91	3130 ✓
Z		9.0	3131 ✓

32206

3221

N	Garage Dirt Floor	88	3132 ✓
	454'N		
N	Garage Conc Floor	820	3139 ✓
Z		8.4	3137 ✓
E		8.6	3135 ✓
	497'N		
-5	Do Garage Conc Floor	776	31430 ✓
-1	Conc. Apron	790	3144 ✓
E		8.0	3141 ✓
Z		7.9	3142 ✓
+5		8.0	3141 ✓
N		7.6	3145 ✓
	522'N		
N	Garage Dirt Floor	68	3153 ✓
Z		6.7	3154 ✓
E		7.1	3150 ✓
	545'		
E		6.5	3156 ✓
Z		6.2	3159 ✓
		6.08	31518 ✓
N	Top Conc Apron	6.05	31601 ✓
+2	Do Garage Conc Floor		

532'N
Garage Dirt Floor
455'FL
1.9

32206

575'N

522!

N		53	3168	✓
E		54	3167	✓
78		54	3167	✓
E		59	3162	✓

600'N = 5 1/2 Lincoln

E	Top Cb	48	317.58	✓
	Ground	48	3172	✓
S		50	3171	✓
N	Ground	49	3172	✓
	Top Carb	454	31754	✓

BM

513

316.93

SE BP
Lincoln
Top
31671

Cross Section Alley Black Walnut
 3/4" Redwood and Spruce
 From H.L. Dale to E.L. Grando

8' Wide

319.84

15
 12 31.75
 5.25
 31.50
 North

BM	802	319.84	311.82	SE Redwood & Dale	10.5' W		
			0+0 = H.L. Dale			S	Garage Conc Floor 3.40 316.4
S	Top Curb	5.65	314.19			+1	Conc Floor 3.20 316.1
	Gutter Top Paving	5.75	314.09				
E	Top Paving	5.85	313.99			E	4.0 315.8
N	Gutter Top Paving	5.53	314.31			N	Garage Dirt Floor 3.9 315.9
	Top Curb	5.45	314.39				
			10' W				150' W
N		4.5	315.3			N	Conc Floor 1.9 317.9
							Garage East Entrance
+1		5.0	314.8			+5	2.3 317.5
E		5.8	314.6			E	2.4 317.4
S		4.9	314.9			S	2.2 317.6
			50' W			TP	9.83 327.33 1.74 319.0
S		4.5	315.3				175' W
E		4.6	315.2			S	8.2 319.1
N		4.4	315.4			E	8.4 318.9
			90' W			+7	8.17 319.16
							180' W
-1.5	Garage Conc Floor	3.60	316.24			N	8.1 319.2
							200' W
N	Conc Floor	4.0	315.8				
E		4.2	315.6			N	6.9 320.4
S		4.2	315.6			+7	7.0 320.3
+3	Garage Dirt Floor	3.9	315.9			E	6.8 320.5

150' W
 5.53
 Garage Conc Floor
 1.8 318.6
 Conc Approach
 1.6 318.2

180' W
 Conc Floor
 2.5 H 2
 7.38 319.9
 Garage Conc Floor
 2.05 320.0

327.33

S	69	320.4
S	62	321.1
+7	64	320.9
S	60	321.3
+7	61	321.2
N	57	321.6

250'N

N	50	322.3
S	53	322.0
S	53	322.0

275'N

S	46	322.7
S	49	322.4
N	46	322.7

300'N

N	46	322.7
S	47	322.6
S	48	322.5

327.33

320'N

S	46	322.7
S	45	322.8
N	45	322.8
+05	Garage Conc Floor	438

355'N

N	45	322.8
S	47	322.6
S	Conc Floor	470
+8	Garage Conc Floor	440

383'N

S	48	322.5
S	51	322.2
+2		53
		53
+8	Conc Floor	496
N	49	322.4
+76	Garage Conc Floor	488

407'N

-8	Garage Dirt Floor	57
N		57
S		58

	327.33		
S		58	321.5
	425'N		
S		59	321.4
+3		60	321.3
S		60	321.3
N		58	321.5
	450'N		
N		62	321.1
S		61	320.9
S		62	321.1
	465'N		
S		64	320.9
S		65	320.8
+5		65	320.8
N		60	321.3
+2.5	Conc. Apron	588	321.51
+7.0	Garage Conc. Floor	580	321.53
	500'N		
N		68	320.5
S		67	320.6

	327.33		
		69	320.4
		66	320.7
	525'N	66	320.7
	500'N		
		70	320.3
		73	320.0
		69	320.4
		69	320.4
		68	320.5
	543'N		
		70	320.3
		71	320.2
	Garage Conc. Floor	690	320.43
	575'N		
		73	320.0
		75	319.7
		75	319.8
		73	320.0
		69	320.4

32733

600 M - E line Granada

N	Top Curb	756	319.77
	Gutter	770	319.63
S	Top Paving	80	319.3
	Gutter	79	319.4
S	Top Curb	764	319.69

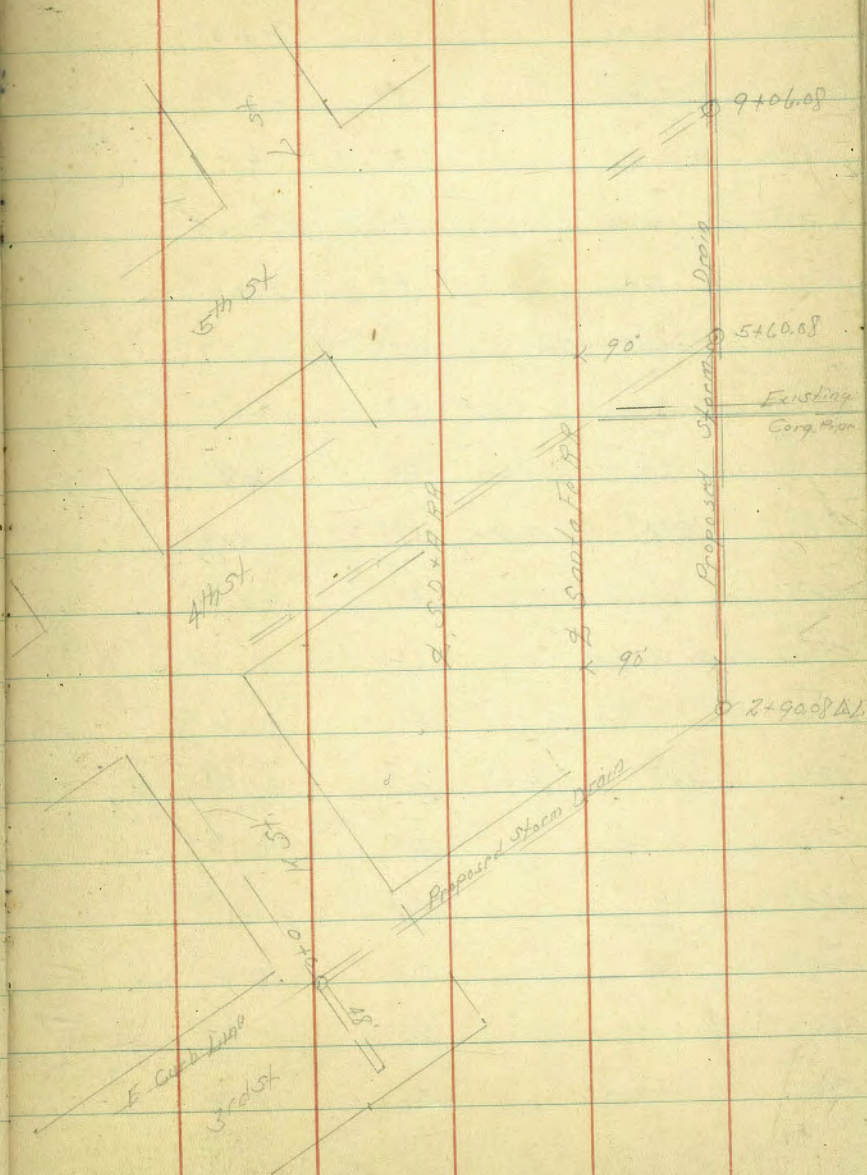
TP 339 322.95 ✓ 780 319.53 ✓

BM 604 316.88 ✓

511
Redwood 4
Granada
316.96

Levels on Proposed Storm Drain
3rd and K St. across S.D. & Santa Fe Tracks

BM	427	566 ✓	1.39	BP SW K+41654
0+0	-Intersecting NE Corbett and K St.	471	0.95 ✓	45" SW 3rd St
+05.5	Top N Rail Spur	486	0.80 ✓	
+33	Top N Rail Spur	462	1.04 ✓	
+48		51	0.6 ✓	
+50	Top Head Grade Corbett St	55	0.2 ✓	
+53		43	1.45 ✓	
+60	Top N Rail	373	1.93 ✓	
+75.5	Top N Rail S.D. & Mainline	371	1.92 ✓	
1+00		46	1.1 ✓	
+09.3	Top N Rail	389	1.77 ✓	
✓ +30	" " "	407	1.59 ✓	
+50		47	0.6 ✓	
+79.4	Top N Rail Santa Fe Mainline	408	1.64 ✓	
+98		47	1.0 ✓	
+97		63	-0.6 ✓	
2+00		64	-0.7 ✓	
+50		68	-1.1 ✓	
+90.8 A.L. 5177		695	-1.29 ✓	00 St



1-4-21
5:55 PM
Bill
Northrup

		566			
TP	348	219 ✓	695	-1.22 ✓	
3+00			3.5	-1.3 ✓	
+50			3.9	-1.7 ✓	
4+00			4.2	-2.0 ✓	
+50			4.3	-2.1 ✓	
5+00			4.4	-2.2 ✓	
+10.8	Top 30" Corp Pipe		3.96	-1.77 ✓	
+60.08			4.7	-2.5 ✓	80'N 4.2
+75	N Edge House				
6+00			5.0	-2.8 ✓	

TP	248 ✓	579	388	-1.69 ✓	
+30			8.9	-3.1 ✓	
+35	S. Edge Pier		4.6	1.2 ✓	
+50			4.6	1.2 ✓	

TP	348	159 ✓	408	1.1 ✓	
7+00			3.9	0.7 ✓	
+30			3.6	1.0 ✓	
+50			4.2	0.4 ✓	
+85			4.7	-0.1 ✓	
8+00			4.4	-0.2 ✓	

		159			
8+25			650	-0.4 ✓	
+50			4.7	-0.1 ✓	
9+00			4.8	-0.2 ✓	
+0.88			4.1	0.5 ✓	50'N 4.1
+1.5			3.6	1.0 ✓	80'N 2.9
+50			4.2	0.4 ✓	
+75			4.3	0.3 ✓	
10+00			4.9	-0.3 ✓	
+14			5.4	-0.8 ✓	
+23	Edge Tide Water		8.5	-3.9 ✓	

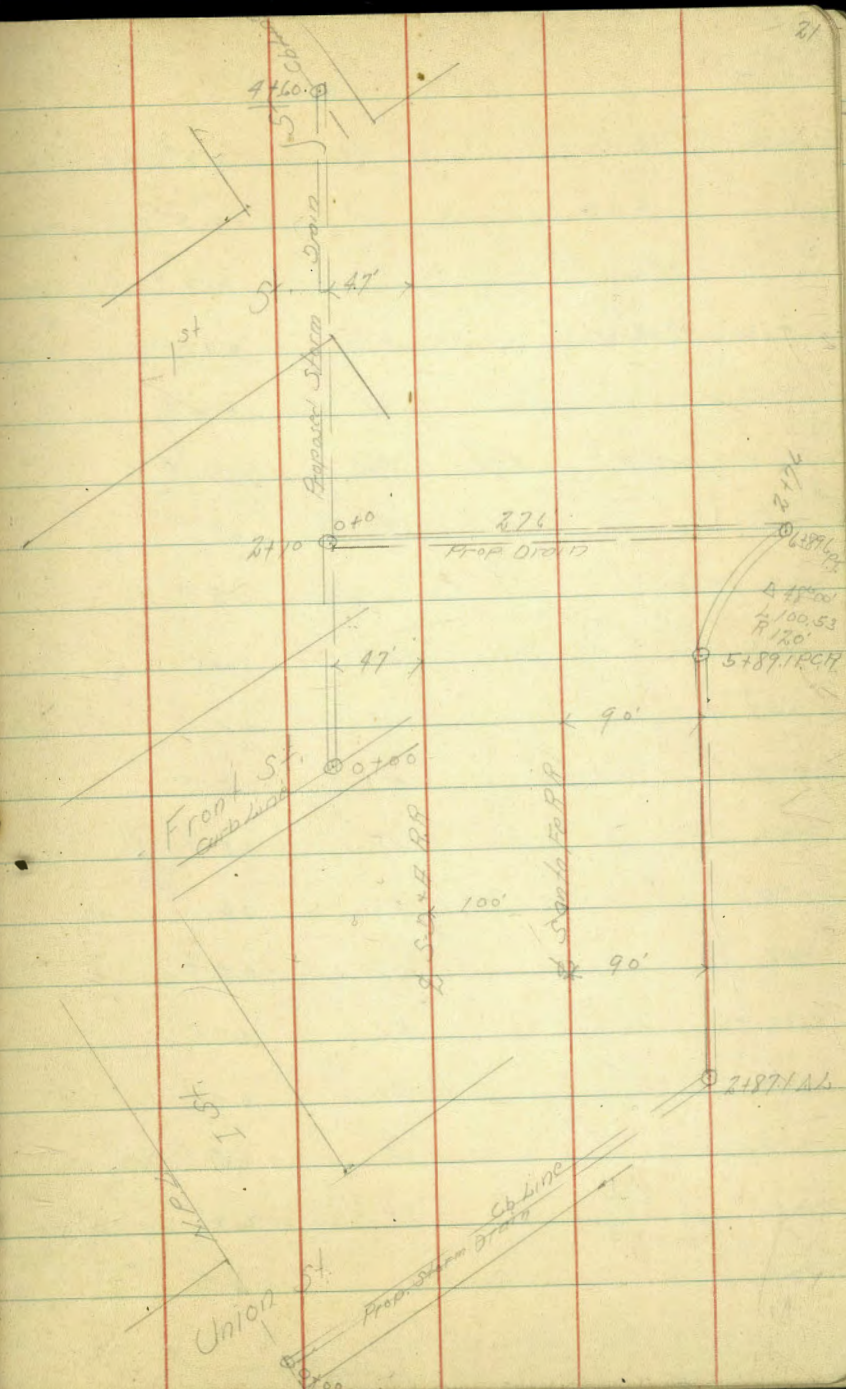
TP	757	961 ✓	255	2.04 ✓	80'N
3M			4.4	2.7 ✓	K Edge House 5.0

Levels On Proposed Storm Drain
West Corb Line Union St And I Across SDR And Santa Fe Tracks

BM	247	1793	1551	3P SH Car G And Union
TP	112	1030	925	8.15
0+0 = N. 1st WCBL Union			54	4.9
1123 Top Rail			510	5.2
+276 Top Rail			517	5.13
+50			58	4.5
+65			64	3.9
+68			59	4.4
+714 Top Rail 180' WCBL Union			536	4.94
+77			58	4.5
+80			58	4.5
+90			79	2.4
1400			77	2.6
+49			99	0.4
+50			86	1.7
+522 Top Rail			823	1.97
TP	415	605	870	160
+755 Top Rail Santa Fe Union			48	1.87
+85			47	1.3

Top Rail 180' E

502
6.9 = 40



	605			
2400		57	0.3 ✓	
701		63	-0.3 ✓	
+72		68	-0.2 ✓	
+264	TOPN Rail	532	0.73 ✓	
+50		54	0.6 ✓	
TP	377	586 ✓	496	1.09 ✓
+871	1.1	50	0.9 ✓	
3100		51	0.8 ✓	
+05		52	0.5 ✓	
+45		49	1.0 ✓	
+25		53	0.6 ✓	
+50		48	1.1 ✓	
+95		55	0.4 ✓	
+98		69	-0.9 ✓	
4100		58	0.7 ✓	
+50		59	0.0 ✓	
+75		64	-0.5 ✓	
5700		83	-2.4 ✓	Under the Pier
+50		72	-1.3 ✓	

	586			
51991	PCR	72	-1.3 ✓	
6400		73	-1.4 ✓	
+50		74	-1.5 ✓	
+892	PT	71	-1.2 ✓	
-1176				

Levels On Proposal Storm Drain
 Parallel S.D. & A Tracks From Front J to 14+J

586 See Page 21

TP	603	768 ✓	481	165 ✓	
0+0	- HGB Line on Front St		480	2.88 ✓	on stub
+70	Catch Basin		46	3.1 ✓	
+100			48	2.9 ✓	
+145			57	2.0 ✓	
+150			50	2.7 ✓	
+200			53	2.4 ✓	
+10	AP = 0.0		548	2.19 ✓	
+85			56	2.1 ✓	
+150			49	2.8 ✓	
+75			50	2.7 ✓	
+300			53	2.4 ✓	
+40			55	2.2 ✓	90' N Top Pav. 520
+65			48	2.9 ✓	
+100			45	3.2 ✓	
+41.6	Top 14 Rail		513	2.05 ✓	
+60			58	1.9 ✓	

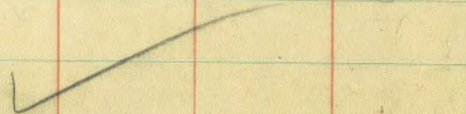
Levels on Proposed Storm Drain
Across S.D. & P.R.R. + Santa Fe between Front + Main

Levels Top Rails
When Storm Drain Crosses Tracks
5th 6th and 7th St

1-11-26

	7.68	See Sketch Page 21		
6+0 = 7+10	5.49	2.19	on stake	BM
+ 446 Top Rail S.D. & P. Main Line	4.58	3.10		TP
+ 50	4.6	3.1		
+ 711 Top Rail	5.21	2.44		Top Rail S.D. & P. Main Line 5th St
+ 949 Top Rail	5.63	2.05		
1+00	5.8	1.9		Top Rail Santa Fe Main Line 6th St
+ 731.5 Top Rail Santa Fe Main Line	5.87	1.81		TP
+ 50	6.0	1.7		
+ 52	6.7	1.0		Top Rail Santa Fe M. Line 6th St
2+00	8.4	-0.7		" " S.D. & P. " " "
+ 50	8.9	-1.2		
+ 76 = 1+996	8.9	-1.2		Top Rail Santa Fe M. Line 7th St
TP	4.67	6.15	6.80	1.48
TP	5.04	6.35	4.84	1.31
TP	5.35	6.89	4.88	1.53
TP	7.53	10.35	4.06	2.86
BM	5.38	5.00	5.00	5.00

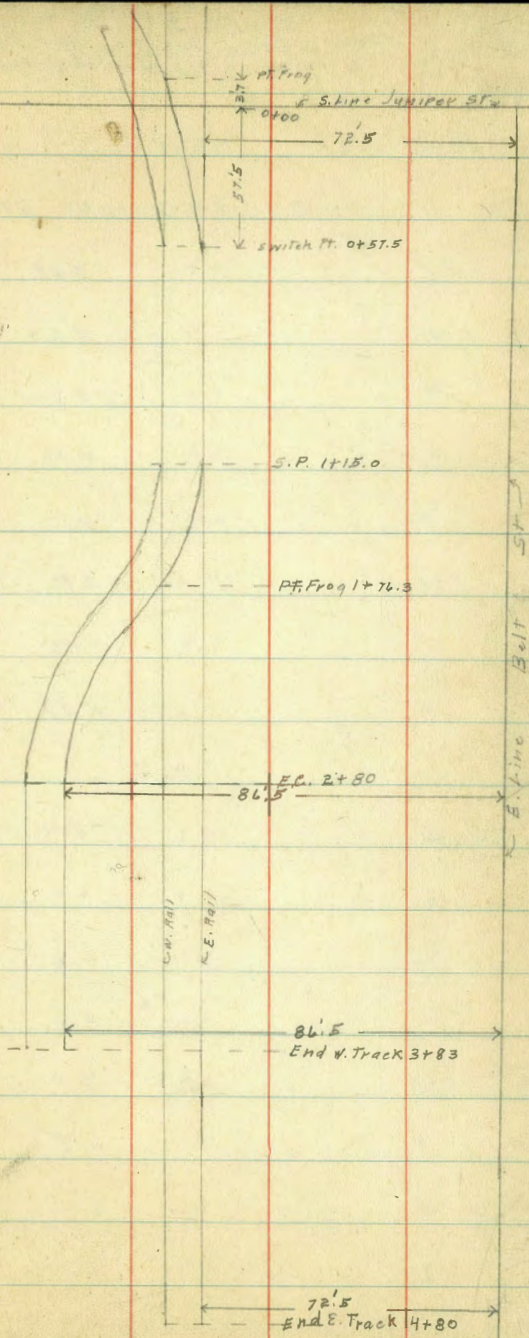
	5th St	6th St	7th St	
BM	5.09	10.09	5.00	5th St BP K+5+356
TP	3.49	7.46	6.42	3.67
		5th St		
	Top Rail S.D. & P. Main Line	5th St	5.27	1.99
	Top Rail Santa Fe Main Line	6th St	5.31	1.85
TP	4.75	6.14	5.77	1.39
		6th St		
	Top Rail Santa Fe M. Line	6th St	4.52	1.62
" "	S.D. & P. " "	" "	3.93	2.21
		7th St		
	Top Rail Santa Fe M. Line	7th St	4.34	1.78
" "	S.D. & P. " "	" "	3.30	2.84



Location of Tracks
in Belt St Bet. Hawthorne & Juniper

1/2 + 1/26
miles

25



100' wide
20' cl
15' 1/4

Belt St X sec
from S. Line of Juniper St. to a Pt.
100' S. of S. Line of Hawthorne St.

1/28/26

12.15

26

25' S

				E	3.8	
B.M.	2.11	12.15	10.04	BR N E Jump + Atlantic	cl	3.9
					1/4	3.6
					+5	4.4
					C	5.1
E		5.39		on paving	1/4	5.9
cl		5.63		" "	cl	6.1
1/4		5.82		" "	W	5.2
C		5.96		" "		
1/4		5.97		See sketch Page 25 on rail		
+7.5		5.97				57.5' S = switch PT.
cl		5.93		paving	W	5.4
W		5.84		" "	+14	6.1
		3' 5			cl	6.1
W		5.4			+7.5	6.00
cl		6.1			1/4	6.0
1/4		5.6			+10	5.1
C		5.0			C	5.1
+13		4.4			+7	5.2
1/4		3.5			1/4	4.0
cl		4.2			cl	4.9
E		4.7			E	4.4

on E. Rail

12.15
115. S. = switch PT see Page 25

E	5.0	
cl	5.0	
"4	4.0	
+5	5.2	
E	5.1	
"4	6.0	
+7.5	6.33	on E. Rail
cl	6.4	
W	5.3	
	150.5	
W	5.6	
cl	6.4	
"4	6.2	
E	5.4	
+10	5.0	
"4	4.1	
cl	5.1	
E	5.0	

12.15
176.30 S = RT. Frog

Belt 27

E	4.8	
cl	5.1	
+10	5.1	
"4	4.4	
+5	5.5	
E	5.1	
"4	6.0	
+7.5	6.30	on E. rail
cl	6.3	
W	5.7	
	212.5	
W	5.7	
cl	6.3	
"4	6.0	
E	4.8	
+8	5.1	
"4	4.3	
+5	5.2	
cl	5.0	
E	4.5	

12.15
216' S

E	4.5
+10	5.0
cl	3.6
"4	4.6
+10	5.1
"C	5.0
"4	5.9
cl	6.3
W	5.8

250' S

W	5.9
cl	6.0
"4	5.9
"C	5.2
+5	5.2
"4	3.9
cl	5.0
E	5.0

12.15
280' S - E.C. Page 25

Belt 24

E	4.9
cl	5.0
+5	4.8
+10	4.1
"4	4.6
"C	5.2
"4	5.7
+7.5	6.06
cl	5.9

on E. Rail & Track

+6.5

W	6.0
---	-----

on E. Rail & Track

330' S

W	6.2
cl	5.9
"4	5.5
"C	5.2
+5	4.5
"4	4.9
cl	5.0
E	4.8

12.15
383. S. = S. end W. Track

E	4.6
cl	5.0
r8	4.6
14	3.8
r6	5.0
C	5.1
14	5.5
+7.5	5.77
cl	5.7
+4.5	5.76
N	5.7
	400' S
W	6.0
cl	5.8
14	5.6
C	5.4
14	5.1
cl	4.8
E	4.7

E. Rail E. Track
E. Rail W. Track

12.15
450' S

Belt 29

E	4.4
cl	4.8
14	4.8
+10	4.1
C	5.2
14	5.6
cl	5.9
W	6.4
	480' S = S. end E. Track
W	4.6
cl	5.6
+7.5	5.55
14	5.7
+5	5.1
C	5.3
+7	4.2
14	4.4
E	4.8
T.P.	5.45
12.25	5.55
	6.60

E. Rail

12.25
500' S.

E	4.6
cl	4.8
1/4	4.6
+13	4.8
e	5.7
1/4	5.5
cl	6.0
w	6.6
550' S	
w	6.6
cl	6.1
1/4	6.0
e	5.3
+5	4.4
+10	5.0
1/4	5.0
cl	4.7
e	4.2

12.25
600' S

Bell 30

e	4.6
cl	4.6
1/4	4.9
+10	5.1
e	4.4
+10	4.7
1/4	6.0
cl	6.3
w	7.2
+5	7.7
645' S	
w+5	7.5
w	7.2
cl	6.5
1/4	6.9
+7	4.5
e	5.0
1/4	4.8
cl	4.2
e	4.1

12.25

665' S

E	3.0
cl	3.3
114	3.0
E	3.6
15	4.7
110	4.3
114	6.9
cl	6.7
W	7.1
15	7.5

674' S

W	6.9
cl	4.7
114	6.9
15	4.3
E	4.8
114	4.6
cl	4.4
E	3.9

12.25

680' S - N. line Hawthorne

80' wide Belt 31
14' cl
13' 11.4'

E	4.2
cl	4.7
114	4.9
E	4.8
112	5.0
114	6.4
cl	6.6
W	7.2
	N. cl

W	6.9
cl	6.5
114	6.0
E	4.9
114	4.7
cl	4.7
E	4.5

10' S. of cl

E	4.8
cl	5.0
114	5.1

12.25
10's. of cl (con)

e	5.5
1/4	5.8
cl	6.4
w	7.0
N 1/4	
w	7.0
cl	6.4
1/4	5.9
e	5.4
1/4	5.0
cl	4.6
e	4.3
1/4	
e	4.0
cl	4.6
1/4	4.9
e	5.6
1/4	6.0
cl	6.4
w	7.2

12.25
S. 1/4

Belt 32

w	7.0
cl	6.2
1/4	6.0
e	5.7
1/4	5.0
cl	4.6
e	4.2
E.S. of 1/4	
e	5.1
cl	5.5
1/4	5.6
e	5.7
1/4	6.0
cl	6.2
w	7.0
10's. of 1/4	
w	7.0
cl	6.2
1/4	6.2
e	5.9

12.25
10' S. of 14 (cont)

1/4 5.6
cl 5.4
E 5.1

S. cl

E 4.5
cl 5.0
1/4 5.5
c 5.9
1/4 6.1
cl 6.2
W 7.0

00 = S. Line Hawthorne

W 7.0
cl 6.3
+10 4.4
1/4 4.6
c 4.9
1/4 4.6
cl 4.6
E 3.8

12.25
E.S

Belt 33

E 3.6
cl 4.2
1/4 4.5
c 4.7
1/4 4.6
+5 6.4
cl 6.4
W 7.0
+5 7.4

12.5

W 7.0
cl 6.4
+10 6.2
1/4 7.5
c 4.1
1/4 4.0
cl 3.2
E 2.0

12.25

30' S

E	3.8
el	4.6
1/4	5.5
+5	5.7
E	4.5
1/4	5.1
+5	5.9
el	6.2
W	7.0

45' S

W-5	7.5
W	6.9
el	5.8
1/4	5.6
+5	4.5
E	4.6
+6	4.4
+10	5.6
1/4	5.9
el	4.6
E	4.4

12.25

55' S

13e17 34

E	4.7
el	5.1
+5	4.6
1/4	5.9
+5	4.6
E	4.7
+10	3.7
1/4	5.1
el	5.7
W	6.3
+5	8.5

70' S

W-5	7.2
W	4.2
el	5.8
+10	5.7
1/4	4.1
+10	4.7
E	4.6
1/4	4.5

12.25

70' S (cont)

5.1

cl

cl

5.0

100' S

E

4.1

cl

4.3

ly

4.6

E

4.5

ly

4.6

110

6.4

cl

6.5

w

6.0

Belt 35

80' wide
14' chgs
18' 1/4"

Hawthorne St X Sec
from E. Line Atlantic To
Temporary Bulkhead

11/21/6

12.25

36

12.25 Page 25

00 = E. Line Atlantic St ^{100' wide}
_{20' chgs}
_{18' 1/4"}

N	1.6	
cl	2.18	ent cl
tl	2.9	
1/4	2.5	
c	2.5	
1/4	2.7	
tlz	3.2	
cl	2.7	
S	2.4	
	E. cl	
S	2.2	
cl	3.0	
1/4	2.7	
c	2.4	
1/4	2.7	
cl	3.0	
N	2.5	

N	E. 1/4	2.7
cl		3.0
1/4		2.9
c		2.5
1/4		2.8
cl		2.7
S		2.8
	£	
S		1.8
cl		2.9
1/4		2.9
c		2.5
1/4		2.8
cl		2.8
N		2.9
	W. 1/4	
N		2.4
cl		2.4
1/4		2.6
c		2.5

12.25

W. 1/4 (20M)

1/4	3.0
cl	2.9
S	2.5
8' W of 1/4	
S	2.2
cl	3.0
1/4	2.9
C	2.4
1/4	2.7
cl	2.2
N	1.9
W. cl	
N	2.2
cl	2.4
1/4	2.6
C	2.4
1/4	3.0
cl	2.9
S	2.4

12.25

00 White Atlantic

Hawthorne 3

S	2.3
cl	3.2
1/4	2.8
C	2.5
1/4	2.8
cl	2.5
N	2.4
R 2' W	
N	3.0
cl	2.5
1/4	3.5
cl	2.6
C	2.6
1/4	3.0
cl	3.0
S	2.7
55' W	
S	3.2
cl	3.4
cl	4.3

12.25

55' W (con)

14	3.6
C	3.3
+10	3.4
14	4.2
cl	4.2
N	4.2

98' W = E. Line Belt.

N	4.2
cl	4.5
+10	4.8
14	4.3
C	4.1
14	4.2
+2	5.1
+10	5.1
cl	4.5
S	3.8

00 = W. Line Belt

S	7.0
cl	7.0

12.25

Hawthorne 38

14	7.0
C	7.2
14	7.0
cl	6.9
N	7.2

30' W

N-5	8.3
N	7.6
cl	6.9
14	7.0
C	7.7
14	8.1
cl	8.0
S	8.1
+5	8.2

44' W

-5	8.5
S	8.3
cl	8.3
14	8.5

	12.25	44' W (cont)		
c			8.6	
14			8.0	
cl			7.4	
N			8.3	
+5			8.2	
T.P.	4.25	6.05	10.45	1.80
		51' W		
-5			2.7	
-4			5.6	
N			5.8	
+5			6.3	
+11			7.6	
cl			1.3	
14			1.8	
c			2.6	
14			2.4	
cl			2.3	
S			2.2	
+5			2.2	

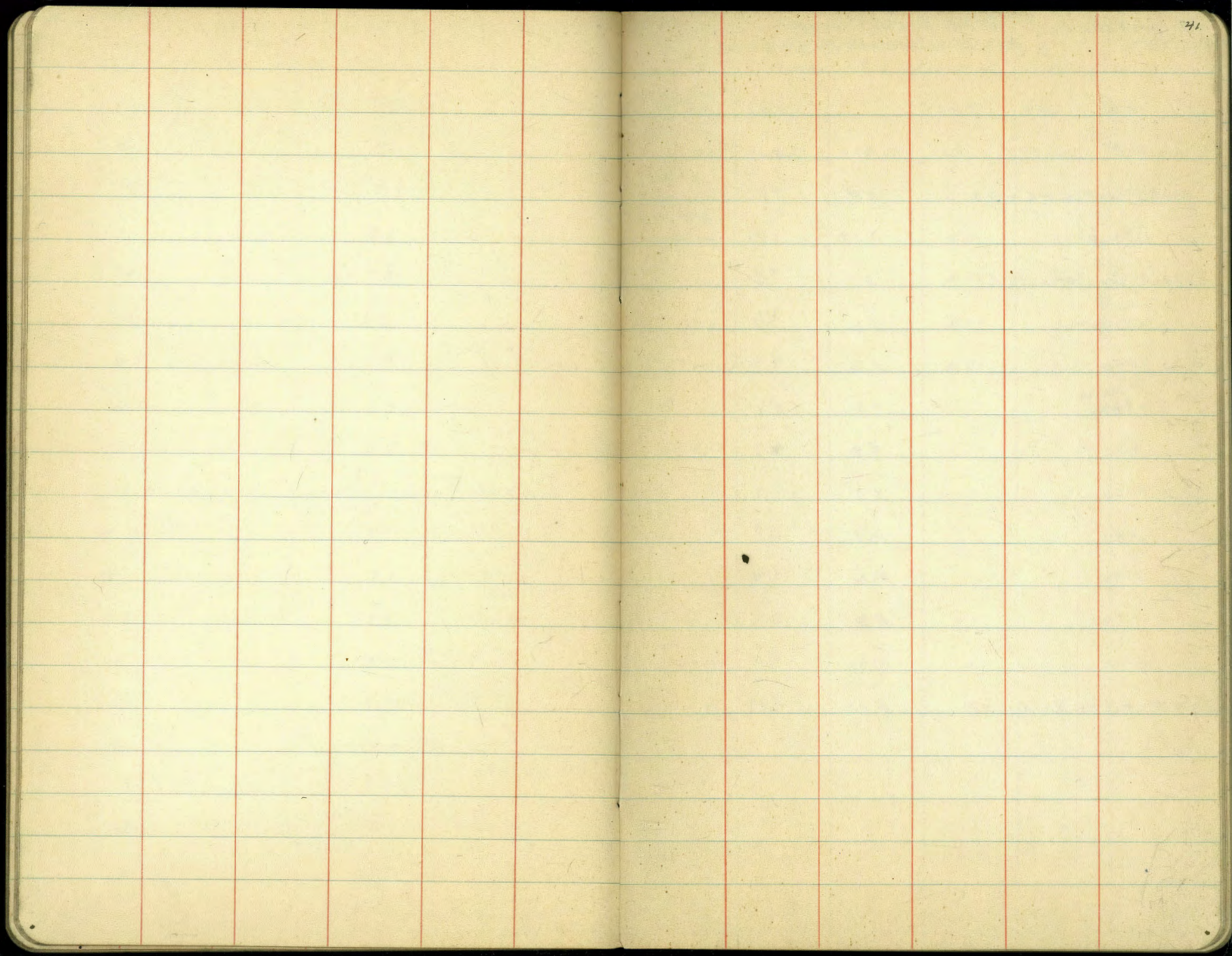
	6.05	55' W	
-12			7.0
S			2.5
cl			2.6
14			2.4
c			2.2
14			1.6
cl			2.1
+10			6.3
N			6.4
+10			2.7
		60' W	
-10			3.8
N			4.9
+8			6.8
cl			4.2
14			1.5
c			3.9
14			3.5
cl			4.1
+6			7.2
S			7.7
+10			7.8

6.05
70' W

S-10	9.4
9	9.2
cl	9.1
14	8.4
2	9.0
14	7.9
cl	7.7
+9	7.5
N	9.3
F10	7.9

74' W on N & 81' W on S - Temporary Bulkhead
This section of Diagonal

N-10	8.7
N	9.6
+5	7.8
cl	8.0
14	8.4
2	10.0
14	9.4
cl	10.1
S	10.4
F10	10.6



F. ST 75' wide F. ST & Levels from
 & Atlantic to Harbor ST

1/2/26

Sewer Construction & F. ST
 from M.H. & Atlantic ST 200' W.
 stubs set 6' offset N.

2/16/26 42
 Miller

B.M.	2.54	7.99'	5.45	s.e. Kettner & F. ST	B.M.	3.97	9.94	4.01	s.e. F & Harbor
T.P.	5.97	9.60'	4.36	3.63'	BM	3.97	9.94	4.01	Flow line -6.17 = -5.99
00 = & Atlantic 100' wide			5.8	3.80	00 = M.H. in Atlantic ST			16.15	-6.17
0+20.4			5.79	3.81	W. Rail of W. Track	0+50		6.15	3.83 in (-5.92) +9.75
0+50 = W. Line & Atlantic			5.7	3.9	1+00			5.96	4.02 (-5.67) +9.69
1+00			5.6	4.0	1+50			5.78	4.20 (-5.42) +9.62
+50			5.3	4.3	2+00 D.E.			5.41	4.57 (-5.17) +9.74
2+00			4.8	4.8					raised to -3.69
+50			4.9	4.7					
3+00			4.8	4.8					
+50			4.8	4.8					
4+00			5.2	4.4					
+50			5.3	4.3					
5+00			5.2	4.4					
5+50.50 = E. Line Harbor ST			5.41	4.19	on paving				

Cross Section Alley Block 3 1/2 City Blocks
 Between Chamounie and 45th St. 20' Wide
 From N.L. University to S.B. Polk Ave

356.99

55' N

43
 1-26-26
 5-5-50
 8-1-55
 Northern

BM 5.75 353.08 347.93

BPMX
 Klobner +
 Chamounie

HEDD
 Top Conc Walk

1.86 355.19 ✓

TP 3.94 356.99 0.03 353.05

Ground

2.1 354.9 ✓

0.0 = N.L. University

2

2.0 355.0 ✓

E Top Pavmg 5.27 351.72 ✓

E Ground

1.7 355.3 ✓

2 " " 5.55 351.44 ✓

Top Conc Walk

1.46 355.53 ✓

H " " 5.42 351.57 ✓

20' N

15' N

-2 3 Garages Conc Floor

0.96 356.03 ✓

H Top Conc W 3.14 353.85 ✓

E Conc Apron

1.21 355.78 ✓

Ground 3.6 353.4 ✓

+6

1.0 356.0 ✓

2 4.0 353.0 ✓

2

1.3 355.7 ✓

+7 4.0 353.0 ✓

H

1.4 355.6 ✓

E Gravel 3.1 352.9 ✓

100' N

Top Conc Walk 2.62 354.27 ✓

H Fence 0.5 in Alley

1.0 356.0 ✓

40' N

2

0.9 356.1 ✓

E Top Conc Walk 1.82 355.17 ✓

E

1.0 356.0 ✓

Ground 2.0 355.0 ✓

131' N

+5 2.5 354.5 ✓

-8 20 Garages Conc Floor

0.18 356.81 ✓

2 2.5 354.5 ✓

E

0.6 356.4 ✓

H 2.5 354.5 ✓

2

0.5 356.5 ✓

Top Conc Walk 2.23 354.76 ✓

+5

1.0 356.0 ✓

		356.99		
H		0.9	356.1	✓
	155'N			
H		0.8	356.2	✓
+4		0.8	356.2	✓
Z		0.5	356.5	✓
E	Conc Apron	0.30	356.69	✓
+13	Garage Conc. Floor	0.15	356.84	✓
	200'N			
E		0.1	356.9	✓
Z		0.5	356.5	✓
H		0.7	356.3	✓
TP	5.13	361.57	356.44	✓
	220'N			
H		5.3	356.3	✓
Z		1.8	356.8	✓
E		4.9	356.7	✓
	250'N			
E		5.0	356.6	✓
Z		5.1	356.5	✓
H	Fence in Alley	5%	356.4	✓
	275'N			

		361.57		
H		5.2	356.4	✓
		5.2	356.4	✓
		5.2	356.4	✓
	300'N			
E	Fence in Alley	5.0	356.6	✓
Z		5.0	356.6	✓
H	Fence 0.5 in Alley	5.3	356.3	✓
	325'N			
H		5.3	356.3	✓
Z		5.1	356.5	✓
	+8.5 Garage S. End Dirt Floor	5.0	356.6	✓
E		5.0	356.6	✓
	350'N			
E		4.5	357.1	✓
	+1.5 Base	4.5	357.1	✓
	+1	5.0	356.6	✓
Z		4.7	356.9	✓
	+4	4.7	356.9	✓
H		5.3	356.3	✓
	375'N			
H		4.9	356.7	✓
Z		5.1	356.5	✓

361.57

+5		5.1	356.5 ✓
+9.5 Fence		4.9	356.7 ✓
	390'H		
E		5.0	356.6 ✓
S		4.8	356.8 ✓
N		4.7	356.9 ✓
	400'H		
N		5.3	356.3 ✓
+3		5.1	356.5 ✓
S		4.9	356.7 ✓
+5		4.9	356.7 ✓
+9 NEnd Fence		5.2	356.4 ✓
	425'H		
E		5.5	356.1 ✓
+6		5.3	356.3 ✓
S		5.1	356.2 ✓
N		5.5	356.1 ✓
	450'H		
N		6.0	355.6 ✓
S		5.7	355.9 ✓
E Shed/In Alley		5.7	355.9 ✓

45

472'H

		6.5	355.1 ✓	
E		6.5	355.1 ✓	
	+1.2 Garage Dirt Floor	6.3	355.3 ✓	
S		5.8	355.8 ✓	
+5		5.6	356.0 ✓	
N				
	500'H			
N		6.7	354.9 ✓	
S		6.8	354.8 ✓	
E		6.7	354.9 ✓	
TP	336	357.99	6.99	354.58 ✓
			510'H	
	-4 Garage Conc Floor	3.28	354.16 ✓	
E		3.9	354.0 ✓	
+5		3.5	354.4 ✓	
S		3.5	354.4 ✓	
N		3.7	354.2 ✓	
	540'H			
N		3.8	354.1 ✓	
+4		3.7	354.2 ✓	
S		3.4	354.5 ✓	

357.94

+7 3.5 354.4 ✓

F 4.3 353.6 ✓

570' N

E 4.8 353.1 ✓

+4 4.8 353.7 ✓

E 4.8 353.7 ✓

N Garage 4.8 353.7 ✓

Garage Conc. Floor
North Entrance 4.6 353.78 ✓

590' N

N 4.7 353.2 ✓

E 4.8 353.1 ✓

+6 4.8 353.1 ✓

E 5.1 352.8 ✓

601' N = S.L. Polk Ave

E Top S Edge Walk Combination 6.09 351.85 ✓

E " " " " " 6.29 351.65 ✓

N " " " " " 5.71 352.23 ✓

TP 5.71 355.20 786 350.08 ✓

BM 3.98 351.22 ✓

11/1 8P
0.9994 Chemostat
351.20

46

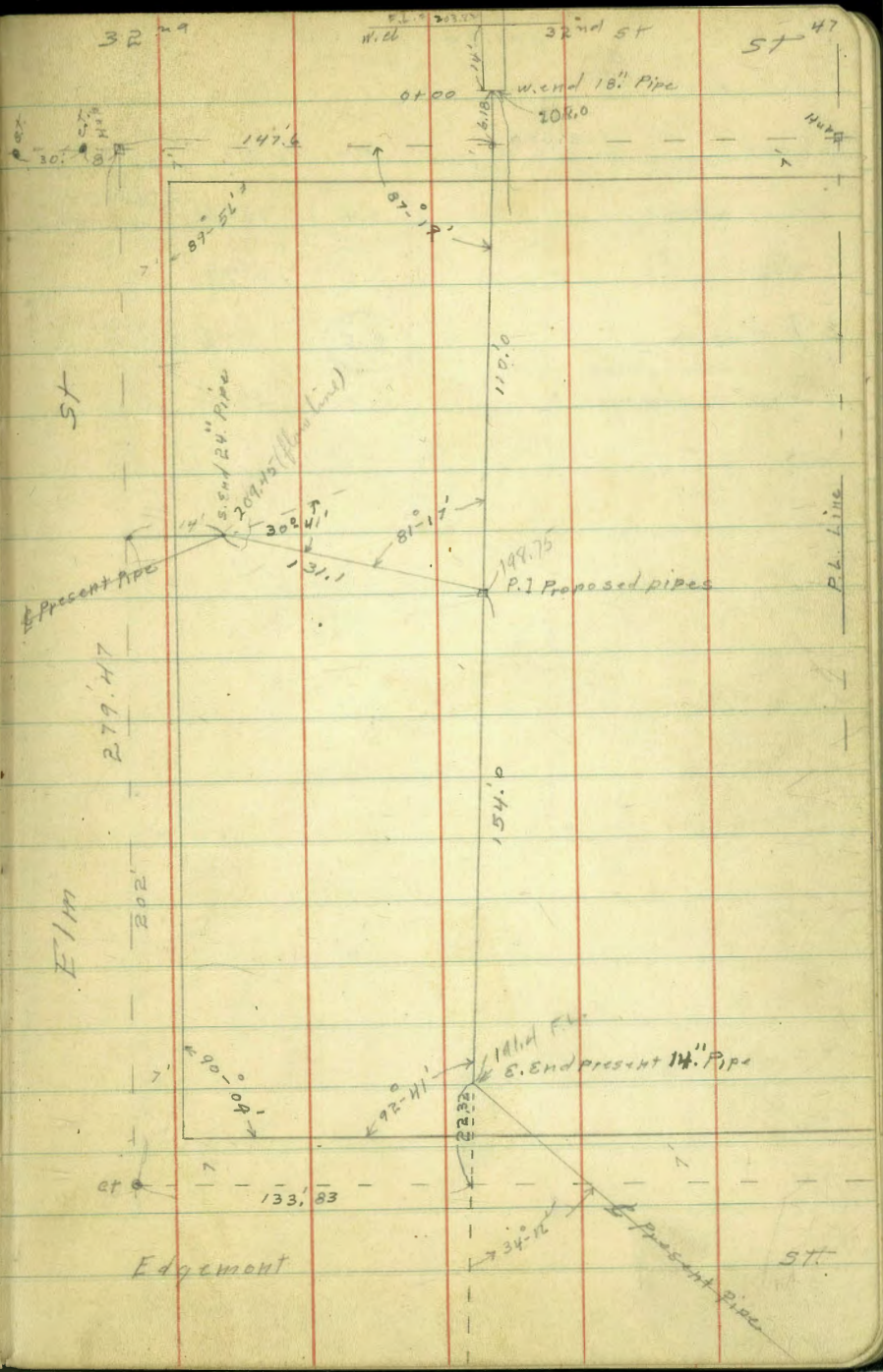
Drain from E Line Edgemont to $\frac{1}{4}$ mile
 W Line 32nd South of Elm St
 B.M. 0.61 220.79 ✓ 220.18 S.E. 32nd & Elm

Line from P.I. North to pipe in Elm St

Flow Line of				
00= 24" Pipe under Elm St	11.34	209.45		
+25	13.1	207.69		
T.P. 0.67 208.79 ✓	12.67	208.12 ✓		
+55	3.4	205.4		
+81	5.3	203.5		
+83	5.9	202.9		
1+00	8.1	200.7		
1+31.1 P.I. Proposed Pipes	10.0	198.8		
T.P. 11.71 210.44 ✓	10.06	198.73 ✓		

Proposed Pipe 32nd to Edgemont

Flow Line at w.c. of 32 nd St			
14' E of w.c. of 18" Pipe	6.62	203.82	Pipe Covered
0+00 approximate end of pipe	2.4	208.0	ground
+45	6.3	204.1	S. side of House 22 N. of E
+65	9.1	201.3	N. side of Garage 1.8 S. of E
P.I. Proposed 1+10 Pipes	11.7	198.7	
1 T.P. 3.21 201.94 ✓	11.71	198.73 ✓	
1+53	5.0	196.9	
1+58	6.2	195.7	



201.94

5' N of above

7.1

194.8

Present
Waterway

R+00

8.2

193.7

6' N of above

8.5

193.4

Present
Waterway

R+50

9.2

192.7

3' N of above

9.6

192.3

present
waterway

8 and 14" pipe

R+64" in Edgemont St

10.50

191.4

Flow line

BK 18. Shermans Add 3/2/26
 7 Set 15th St West mill
 5.21 30.69 25.48 NW 15th I.

00 = W line 15th ST

S 308 27.61 ent cl
 S 3.21 27.48 paving
 C 3.36 27.33 "
 N 302 27.66 "
 N 269 28.00 ent cl

4' W

N 3.5 27.2
 C 3.4 27.3
 S 2.2 27.5
 13' W
 S 3.6 27.1
 C 4.2 26.5
 N 4.3 26.4

45' W

N 4.8 25.9
 C 4.6 25.1
 S 4.2 26.5

30.69

49

66' W. E. End Bldg ent floor 0.4 in Alley on S

S 4.07 26.62 ent floor
 C 4.6 26.1
 N 4.9 25.8

100' W. SW End Bldg on S ent floor at in Alley
 (E " " " N combination floor (dirt splinters) 0.3 in Alley

N 4.8 25.9
 C 4.6 26.1
 S 4.07 26.62

107' W. Door to Boiler Room, ent. floor 0.2 in Alley on S.

S 4.9 25.8 ent floor
 S 4.7 26.0 dirt
 C 4.6 26.1
 N 4.6 26.1

142' W door on N dirt floor

N 5.0 25.7 dirt floor

148' W = W end of Bldgs on N & S. N. 23 in Alley - S. 0.3 in Alley

N 4.9 25.8
 C 4.8 25.9
 S 4.4 26.3

30.69

175' W

S	4.6	26.1
C	4.8	25.9
N	4.8	25.9

200' W = approximate W End Alley

N	4.2	26.5
C	4.1	26.6
S	4.2	26.5

220' W

S	3.3	27.4
C	3.4	27.3
N	3.4	27.3

22# W = Entrance, Elec Garage ent floor

4	3.05	27.64 on floor
---	------	----------------

B/K/Y Shermans 50

BLK 225 S.D. Land & Town
 Alley X Sec Dewey to Evans

3/2/26

71.26

51

EM.

9.32

71.26

61.94

Mr. Dewey
& Julian

+5

2.7

68.6

000 E Line Dewey

+7

0.8

70.5

S

4.74

66.57

emt cl

N

0.6

70.7

+1

4.0

67.3

30' E

E

4.0

67.3

N

0.8

70.5

+3

4.3

67.0

+3

1.1

70.2

+7

3.4

67.9

+4

2.2

69.1

N

4.23

67.03

emt cl

E

2.1

69.2

2' E

+7

2.4

68.9

N

0.5

70.9

+8

1.8

69.5

+5

3.9

67.4

S

2.0

69.3

E

3.6

67.7

59' E = Double garage on 5 emt floor 0.5 Back

+6

3.8

67.5

S

2.55

68.7

emt floor

+7

2.0

69.3

+5

3.0

68.3

S

2.1

69.2

E

2.6

68.7

12' E

+5

2.5

68.8

S

1.9

70.4

N

2.1

69.2

+3

2.0

69.3

N

77' E = West double garage on N. dirt floor 2.7 Back

+4

2.9

68.4

N

1.0

67.3

floor

E

2.6

68.7

+8

4.0

67.3

71.26

E	3.7	67.6	
S	3.7	67.6	
93' E = E. End above garage			
S	5.0	66.3	
C	5.1	66.4	
+5	4.7	66.6	
N	4.2	67.1	
200' E			
N	5.0	66.3	
C	5.6	65.7	
S	5.7	65.6	
120' E = garage on S wood floor 1.6 Back			
S	6.5	64.8	floor 0.2 lower
E	5.8	65.5	
+5	5.8	65.5	
N	5.5	65.8	
130' E garage on N. dirt floor 2' Back			
N	6.6	64.7	floor
+5	6.0	65.3	
C	5.8	65.5	

71.26

B1K 225 Land & Town 52

S	5.7	65.6	
150' E			
S	5.9	65.4	
E	5.6	65.7	
N	5.6	65.7	
165' E = N. End 3 garages on S. dirt floor 1.3 Back			
N	5.8	65.5	
E	5.7	65.6	
S	6.0	65.3	floor
202' E = S. End above garages			
S	5.9	65.4	floor
E	5.7	65.6	
+5	5.7	65.6	
N	6.3	65.0	
+5	6.9	64.4	
222' E			
-5	6.6	64.7	
N	5.9	65.4	
C	5.5	65.8	
S	5.4	65.9	

71.26
 240' E double garage on S dirt floor 3' Back
 S-3 6.3 65.0
 S 5.8 65.5
 C 5.0 66.3
 N 5.0 66.3

253' E
 N 5.5 65.8
 E 5.1 66.2
 S 5.1 66.2

279' E double garage on S end floor on line
 S 5.1 66.2
 C 5.0 66.3
 N 5.1 66.2

295' E W. end 3 garages on N dirt floors 2' Back
 N 4.5 66.8 floor
 C 4.0 66.7
 S 4.4 66.9

T.P. N.17 77.92 4.51 66.75

323' E E. end of above garages
 double garage on S dirt floor 4' Back
 S-4 10.7 67.2
 S 10.7 67.2

77.92 BIK 225 Landa Tour 53
 C 10.3 67.6
 N 10.5 67.4
 320' E garage on N dirt floor on in alley
 N 9.7 68.7 floor
 C 9.9 68.0
 S 9.8 68.1
 garage on S dirt floor on line.
 350' E " " N " " on in Alley
 S 8.9 69.0 floor
 C 8.9 69.0
 N 9.0 68.9 floor

360' E
 N 8.6 69.3
 TL 8.1 69.8
 C 8.1 69.8
 S 7.5 70.4
 364' E garage on S dirt floor on line
 S 7.4 70.5 floor
 C 7.7 70.2
 N 7.3 70.6

	77.92			
383' E. garage on S. dirt floor 2.5 Back				
N	6.5	71.4		
E	6.7	71.4		
S	6.3	71.6	floor	
395' E double garage on N. dirt floors 8' Back				
S	5.7	74.2		
E	5.9	74.0		
N	6.1	71.8		
	425' E			
N	2.5	75.4		
E	2.7	75.2		
S	2.3	75.6		
445' E. garage on N. dirt floor 6' Back				
S	1.0	76.9		
E	0.7	77.2		
N	0.6	77.3		
T.P.	10.42	88.23	0.11	77.81 ✓
475' E double garage on N dirt floor 0.7 in Alley				
N	9.1	79.1		
E	9.2	79.0		
S	9.3	78.9		

	84.23		BIK 225 Land + Town
505' E. Head garage on N dirt floor 0.6 in Alley			
S	7.5	80.7	
E	7.4	80.8	
N	6.9	81.3	floor
518' E S. end above garage			
N	6.7	81.5	floor
E	6.8	81.4	
S	6.7	81.5	
	545' E		
S	5.0	83.2	
E	4.9	83.3	
N	4.6	83.6	
558' E. garage on S dirt floor 1.5 Back			
N	4.4	83.8	Lawn
			Top 4' ext wall
491'	3.9	84.3	on E line only
E	4.0	84.2	
S	3.8	84.4	floor
	585' E		
S	2.6	85.6	
E	3.2	85.0	

88.23

E	3.2	85.0
N	3.6	84.6

597' E

N	3.5	84.7
E	4.2	84.0
S	2.8	85.4

601' E = W. Line EVANS

S	4.6	83.6
E	5.1	83.1
N	4.3	83.9

603' E = W. Line cmt walk = N, end about 1/2 returns

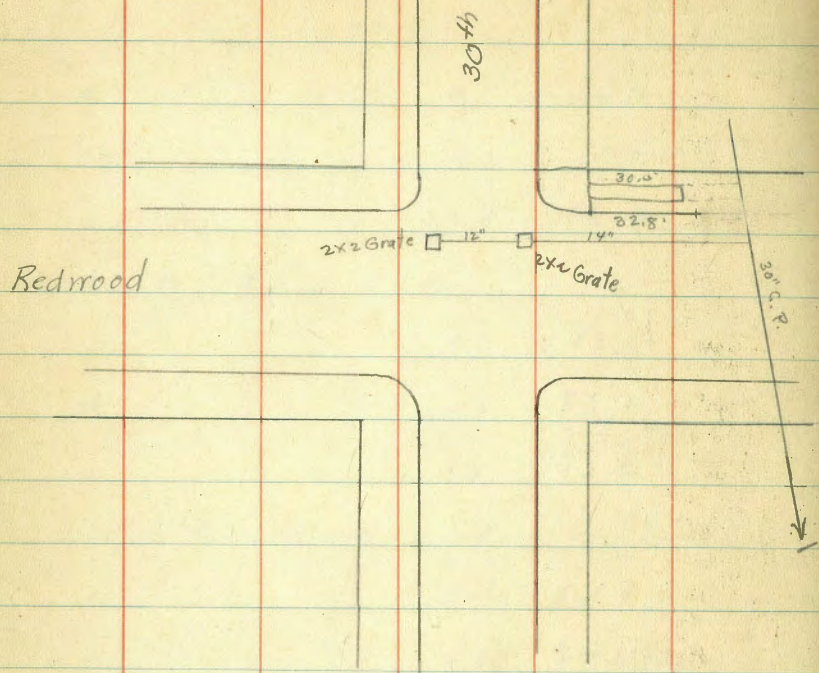
N	5.50	82.7	cmt cl
S	5.55	82.68	
T.P	4.90	87.38	5.75 82.48
		5.35	82.03 = 82.01 N.V.

B.M. EVANS
+ Julian

B1R225 Land + Town 55

Brens
Hayler
Redding

4-7-26



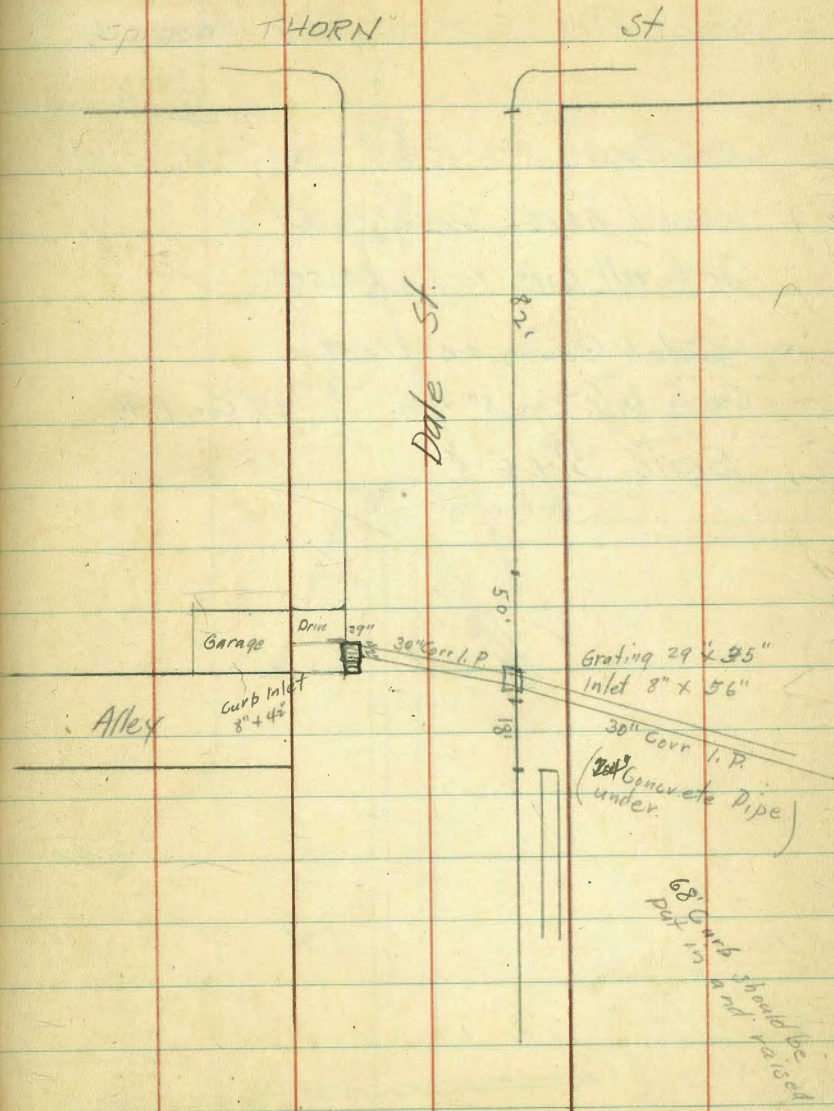
Redwood

Put in Curb Inlets at NE and NW Cor of
30th + Redwood and also on Redwood
over 30" Pipe

Brens
Hayler
Redding

56

4-7-26



Alley

Grating 29' x 35"
Inlet 8" x 56"

30" Corr. l. P.
(~~Set~~ Concrete Pipe
under)

68" Curb should be
put in and raised

Brems
Hayler
Redding

4-7-26

Sunset Blvd South of Sheridan

Catch Basin on East ^{12" Cor. I.P. separate} 23" x 31" Grate

should have Curb Inlet.

Curb will have to be raised.

Catch Basin on West

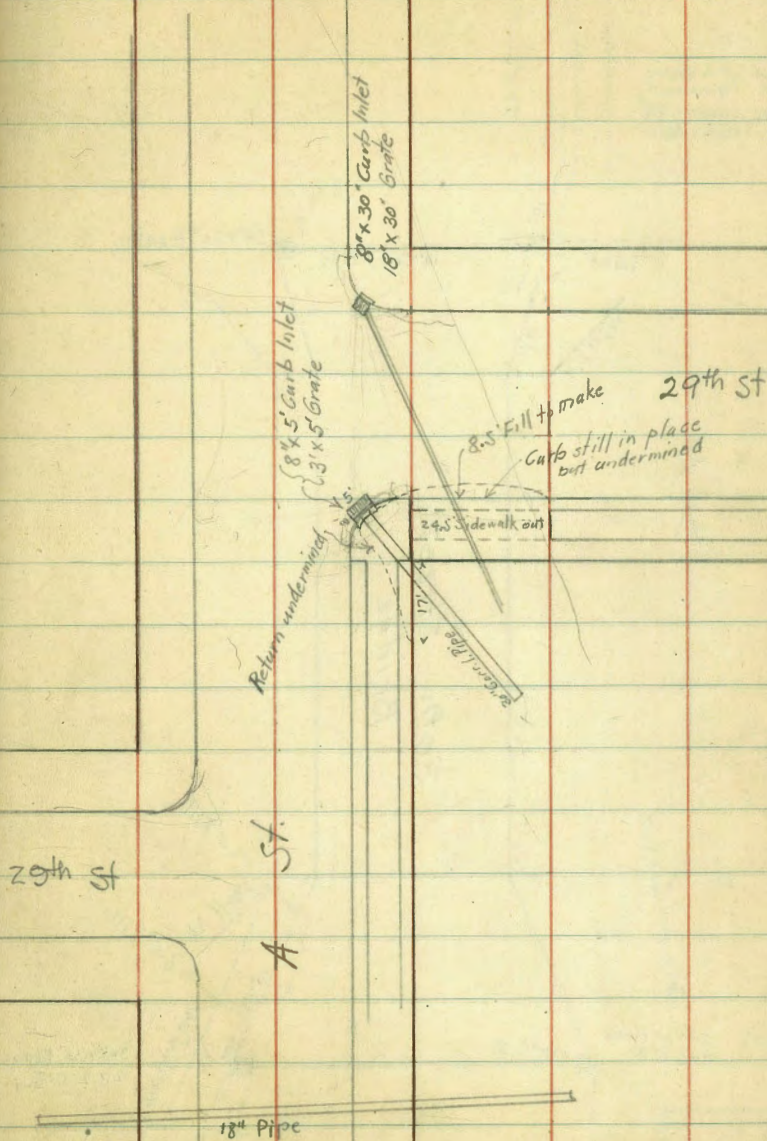
Curb Inlet 8" x 16' 24" Cor. I.P.

Grate 2' x 6'

Brems
Hayler

57

4-7-26



Brens
Hayler

4-7-26

58

Curband Catch Basin
are out. Pavement
is being supported
by 4" W. I. Water Main

29' of Curb out.

Fill 11.0'

Wall 8.1/2'

10'

5'

5'

5'

5'

30th Street
Bridge

30" x 30" Grate

12" Corr. I. Pipe

AX
↑

Part is new Curb to let

New Street
Graded

30" x 30" Frame
2x2 C.B.

12" C. P.

30" x 30" Frame
2x2 C.B.

4.5' Fill

Wall 8.1/2'

6.5' Fill

5.5'

5.5'

5.5'

5.5'

5.5'

4' Fill

8'

Side walk

The ground

Cross Section Alley Block 25' Chis. Height
 From Madison to Adams Between Park Blvd & North 20' wide

356.63

59

522.21
 545.53
 511.44
 511.44

B.M.	523	356.63	357.40	511 Madison North
				20' W. Madison
H	Top Chis. Paving	477	351.86	
S	"	500	351.63	
E	"	486	351.77	
		10' W		
E		46	52.0	
S		48	51.8	
H		50	51.6	
		25' W		
H		51	51.5	
S		50	51.6	
E		48	51.8	
		60' W		
-55	Garage Conc Floor	443	52.2	
E		47	51.9	
S		46	52.0	
H		47	51.9	
		94' W		
-5	Garage Dirt Floor	45	52.1	

PLOTTED

H		45	352.1	
S		44	52.2	
E		42	52.4	
+6	Garage Dirt Floor	42	52.4	110' Garage Dirt Floor
		132' W		
-6	Garage Dirt Floor	39	52.7	116' Garage Dirt Floor
E		44	52.2	
S		44	52.2	
+4		44	52.2	
H		39	52.7	121' Garage Dirt Floor
+3	Conc Floor	370	52.9	126' Garage Dirt Floor
+6	Garage Conc Floor	358	53.05	
		155' W		
H		44	52.2	
S		43	52.3	
E		43	52.3	
		175' W		
E		42	52.4	190' Garage Conc Floor 71' W
S		44	52.2	553.21
H		40	52.6	
TP	434	356.84	413	352.50
		200' W		
H		40	52.4	

35684

2	4.5	52.3
E	4.8	52.0
	233'H	
F	4.6	52.2
2	4.4	52.4
H	4.3	52.5
+ 55' 2" Garage Dir. Floors	4.2	52.6
	220'H	
- 7' Garage Dir. Floor	3.9	52.9
H	4.4	52.4
2	4.0	52.8
F	4.3	52.5
	215'H	
- 25' Garage Conc Floor	2.38	53.46
F	2.5	53.3
14	2.9	52.9
2	2.7	53.1
H	4.2	52.4
	325'H	
H	3.8	53.0
2	3.6	53.2

60

35684

F	2.5	53.3	335'H 35010945 Conc. Floors 2.15 = 53.7
	245'H		
F	3.2	53.5	
2	3.3	53.5	
H	3.4	53.4	
	391'H		
- 4' Garage Conc Floor	2.29	54.55	
H Conc. Apron	2.54	54.3	
2	2.9	53.9	
TP 601	359.99	2.26	553.99
F Conc. Apron	5.70	54.3	405'H Garage Conc Floor 2.55 = 54.1
+ 3' Garage Conc Floor	5.62	54.37	
	425'H		
F	4.8	55.7	450'H 2'H
+ 6	5.4	54.6	486 = 355.13
2	5.6	54.4	
H	5.5	54.5	
	415'H		
H	4.8	55.2	
2	4.8	55.2	
F	4.4	55.6	

July 11 - S.L. Adams

E	Top Ch. & Ground	443	355.56	Allen's Bobsled 10' 2009
Z		46	55.4	
H		45	55.5	
	Top Ch. Return	440	55.6	
B.M.		413	55.86	

Gross Station of Filbert St
Vesta to S100

800 ft
14 Cbs
12' qts

300 ft
Moistened

Vesta
600 ft
10' Cbs
10' qts

1947

5-22-71
5:30
3:15
Harbor

Station	BM	1947	1947	1947	1947	1947
			1667	Cb	8.6	10.9
				"	8.0	11.5
		0+0 = Fd Vesta		16	7.5	12.0
			17.7	78	8.4	11.1
			17.8	8	8.1	11.4
			11.6	77	8.7	10.8
			11.7	74	7.4	12.1
			11.8	Cb	8.2	12.2
			12.4	73	7.6	11.9
			10.6	75	6.6	12.9
			11.4	H	6.5	12.0
			11.7			
			17.0	H	7.5	12.0
			12.0	Cb	7.6	11.9
			11.4	74	7.9	11.6
			11.7	8	8.0	11.5
			10.7	74	8.1	11.4
			11.0			
		10' W = F, Cb		Cb	8.8	10.7
			11.1	5	9.4	10.1
			11.4			
			10.6	5	8.8	10.7

5 74

2 Vesta

cb	86	10.9
1/4	82	11.3
2	81	11.4
1/4	79	11.5
cb	75	12.0
H	72	12.3
	H 1/4	
H	77	11.8
cb	79	11.6
1/4	81	11.4
2	83	11.2
1/4	84	11.1
cb	88	10.7
S	90	10.5
	H cb	
S	85	11.0
cb	82	11.3
1/4	85	11.0
2	83	11.2
1/4	80	11.5
+6	92	10.3

18	82	11.3
1/4	75	12.0
cb	74	12.1
H	77	11.8
	H. Vesta	
H	78	11.7
15	71	12.4
cb	74	12.1
1/4	72	11.9
12	76	11.9
16	91	10.4
17	84	11.1
2	82	11.3
1/4	83	11.2
cb	84	11.1
S	85	11.0
	50 H	
5	88	10.7
cb	89	10.6
10	85	11.0
1/4	88	10.7

Filber	1947		
z		82	11.3
+4		86	10.9
+9		95	10.0
+11		88	10.7
74		83	11.2
+7		89	10.6
cb		89	10.6
H		89	10.6
	100' W		
H		94	10.1
cb		92	10.3
74		94	10.1
+5		87	10.8
z		89	11.1
+8		86	10.9
+11		92	10.3
74		92	10.3
cb		94	10.1
S		95	10.0
	125' W		
S		102	9.3

	1947		64
cb		103	9.2
74		105	9.0
+3		105	9.0
+8		88	10.7
z		84	11.1
+7		91	10.4
110		101	9.4
74		102	9.3
cb		99	9.6
H		93	10.2
	150' W		
H		92	10.3
110		101	9.3
cb		100	9.5
74		100	9.5
+3		97	9.8
z		83	11.2
76		89	10.6
720		105	9.0
74		107	8.8
cb		108	8.7

Filbert	1947		
S		10.0	9.5
	200' N		
S		9.8	9.7
cb		9.8	9.8
1/4		10.1	9.4
+5		9.8	9.7
+9		8.6	10.9
8		8.6	10.9
+5		8.6	10.9
+11		9.9	9.6
1/4		10.0	9.5
cb		9.9	9.6
H		9.2	10.3
	250' N		
H		9.1	10.4
cb		8.8	10.7
+3		9.8	9.7
1/4		9.3	10.2
+8		8.2	11.3
8		8.4	11.1
+4		8.6	10.9

	1947		
+10		9.9	9.6
1/4		10.1	9.4
cb		10.0	9.5
S		10.2	9.3
	300' N		
S		9.1	10.4
+5		9.3	10.2
cb		9.4	10.1
+9		9.4	10.1
1/4		10.3	9.2
1/4		9.8	9.7
+5		9.0	10.5
8		8.1	11.4
+6		8.6	10.9
+10		10.0	9.5
1/4		10.1	9.4
cb		10.2	9.3
H		10.2	9.3
TP	6.79	17.70	8.56
		335' N	10.91
H		9.7	10.0

Marsh
6" water

W End Marsh

Filbert

1770

cb	77	10.0
1/4	78	9.9
+6	76	10.1
+9	68	10.9
2	63	11.4
1/4	71	10.6
cb	69	10.8
+1	70	10.7
S	58	11.9
	370'W	
S	48	12.9
+8	51	12.1
cb	58	11.9
1/4	57	12.0
+5	51	12.1
+6	62	11.5
2	61	11.6
+5	67	11.0
+7	55	12.2
1/4	60	11.7
cb	66	11.1

1770

26

H	71	10.6
	400'W	
H	59	11.8
+6	60	11.7
110	65	11.7
cb	60	11.7
+7	52	12.5
1/4	52	12.5
+5	51	12.6
+8	64	11.3
2	59	11.8
+5	59	11.8
+9	43	13.4
1/4	44	13.3
cb	48	12.9
S	45	13.2
	450'W	
S	42	13.5
cb	46	13.5
+8	40	13.7
+10	36	14.1

385'W
095' Line
Coastwalk
3.67

Fillbert

1776

7/4	37	14.0
+5	40	13.7
+8	60	11.7
Z	60	11.7
+5	56	12.1
+6	47	14.0
7/11	43	13.4
+10	43	13.4
Cb	48	12.9
H	50	12.7
	500 yd	
H	43	13.4
Cb	43	13.4
7/1	40	13.7
+5	38	13.9
+11	62	11.5
Z	58	11.9
+7	60	11.7
+7	39	13.8
7/1	38	13.9
Cb	41	13.6
+4	50	12.7

1770

67

S	46	13.1
	550 yd	
S	49	12.8
Cb	46	13.1
7/1	43	13.4
+4	44	13.3
+6	61	11.6
Z	57	12.0
+5	59	11.8
+8	40	13.7
7/1	43	13.4
Cb	40	13.7
H	36	14.1
	600 yd = E.L. Cnd	
H	48	12.9
+10	49	12.8
Cb	53	12.4
7/1	56	12.1
+8	63	11.4
Z	60	11.7
+7	61	11.6

Cnd
60 yds
10 cbs
10 pts

Filbert

1770

79	58	11.9
1/4	58	11.9
cb	60	11.7
14	55	12.2
S	53	12.4

Ecb

S	64	11.3
cb	64	11.3
1/4	62	11.5
S	60	11.7
1/4	59	11.8
cb	59	11.8
N	58	11.9

E 1/4

N	58	11.9
cb	58	11.9
1/4	58	11.9
S	59	11.8
77	63	11.4
1/4	65	11.2
cb	65	11.2
S	66	11.1

1770

S. C. 100

S	67	11.0
cb	65	11.2
1/4	61	11.6
S	58	11.9
1/4	57	12.0
cb	58	11.9
N	54	12.1

N 1/4

N	60	11.7
cb	60	11.7
1/4	61	11.6
S	63	11.4
1/4	66	11.1
cb	68	10.9
S	70	10.7

Ncb

S	69	10.8
cb	67	10.8
1/4	65	11.2
S	64	11.3

Filbert

1770

1770

69

74	65	11.7
cb	62	11.5
+8	62	11.5
N	56	12.1
19.1.0m		
11	46	13.1
+10	59	11.8
cb	60	11.7
74	61	11.6
+4	57	12.0
+8	67	11.5
8	69	11.3
+6	66	11.1
+8	61	11.6
74	62	11.5
+3	66	11.1
cb	68	10.9
S	62	11.5
20.11		
S	57	12.0
cb	59	11.8

+7	60	11.7
74	51	12.3
+3	55	12.2
+5	64	11.3
8	65	11.7
+5	67	11.0
+7	57	12.0
74	57	12.0
cb	57	12.0
N	44	13.3
50.11		
N	50	12.7
cb	58	11.9
74	56	12.1
+5	55	12.2
+8	68	10.9
8	65	11.2
+8	68	10.9
+10	58	11.9
74	58	11.9
cb	60	11.7

Fence 10.8

Filbert

177°

74 60 117

S 53 124

100'N

S 58 119

cb 62 115

74 61 116

+4 62 115

+8 69 108

S 67 110

+4 72 105

+8 58 119

74 56 121

cb 58 119

H 55 122

Fruit 2' in S.

150'N

H 48 129

+9 49 128

cb 59 118

74 57 120

+7 57 120

+10 73 104

177°

70

S 71 106

+7 71 106

74 66 111

cb 64 113

S 65 112

200'N

S 62 115

10cb 62 115

74 66 111

+6 71 106

7 70 107

+5 72 105

+8 54 123

74 56 121

cb 56 121

+2 56 121

+7 47 130

H 43 134

250'N

H 47 130

+8 47 130

Filbert

1970

cb	56	12.1
71	54	12.3
+5	52	12.5
+9	71	10.6
2	72	10.5
+10	70	10.7
71	66	11.1
+4	59	11.8
cb	62	11.5
S	61	11.6
300 ft		
S	65	11.2
cb	66	11.1
+9	58	11.9
71	64	11.3
+3	65	11.4
+6	79	9.8
2	75	10.7
+4	77	10.0
+8	56	12.1
71	55	12.2

1970

cb		59	11.8	
+5		50	12.7	
N		46	13.1	
TP	1.60	<u>13.43</u>	587	11.83
350 ft				
N		0.6		12.8
+10		11		12.3
cb		20		11.4
71		18		11.6
+7		19		11.5
+10		38		9.6
2		35		9.6
+9		39		9.5
+11		26		10.8
71		26		10.8
cb		25		10.9
+8		28		10.6
S		20		11.4
400 ft				
S		25		10.9
cb		26		10.8
+3		25		10.9

Ft/Bar

1843

71	20	11.4
71	21	10.8
72	21	11.0
+5	22	9.2
2	21	9.3
+1	24	9.0
76	20	10.4
71	24	11.0
cb	27	10.7
+5	28	11.6
N	29	11.5
	450' N	
N	29	11.0
+10	23	11.1
cb	29	10.5
71	20	10.4
+7	22	10.2
2	18	8.6
+9	26	8.9
+12	26	9.9
71	23	10.1

1843

72

cb	21	9.8
5	25	9.9
	500' N	
5	25	8.9
cb	26	8.8
+7	20	9.4
71	25	8.9
+1	25	8.9
+2	25.3	8.1
2	25.3	8.1
+2	25.3	8.1
+5	21	9.3
71	29	9.5
cb	21	9.3
+3	24	10.0
N	23	10.1
	550' N	
N	20	9.4
+10	20	9.4
cb	28	8.6
71	26	8.8

+11	46	8.6
z	56	7.8
1/4	54	8.0
+2	49	8.5
cb	54	8.0
s	56	7.8

1/4	56	7.8
z	56	7.8
1/4	54	8.0
+7	56	7.8
cb	60	7.4
s	59	7.5

602' H = F.L. T bar

T bar
C or H
10 cbs
10 q/s

F 1/4

s	60	7.4
cb	60	7.4
1/4	59	7.5
z	56	7.8
+5	46	8.8
+7	50	8.4
1/4	55	7.9
cb	55	7.9
+3	50	8.4
H	49	8.5

s	61	7.3
cb	61	7.3
1/4	57	7.7
z	57	7.7
1/4	58	7.6
cb	58	7.6
H	57	7.7

z T bar

F Cb

H	54	8.0
+10	53	8.1
+13	57	7.7

H	57	7.7
cb	60	7.4
1/4	59	7.5
z	60	7.4
1/4	58	7.6
cb	60	7.4

S		6.0	7.4
	H 1/4		
S		6.3	7.1
cb		6.2	7.2
1/4		6.0	7.5
2		6.4	7.0
1/4		5.9	7.5
cb		6.1	7.3
H		5.8	7.6
	H cb		
H		5.7	7.7
+11		5.9	7.5
cb		6.3	7.1
1/4		6.0	7.4
2		6.4	7.0
1/4		6.2	7.2
+3		5.7	7.7
cb		6.0	7.4
S		6.5	6.9
	WLT hot		
S		6.6	6.9

+6			
cb			
1/4			
2			
+2			
1/4			
cb			
+4			
H			
BM	1.05	<u>8.62</u>	4.79
		5.01	
H			1.15
+6			6.0
cb			3.3
1/4			3.0
2			3.3
+1			3.8
1/4			3.1
+5			2.6
cb			2.8
S			3.2

Hail Pole
SH.
Filbert & T. bar
5-24-26

Fence 207051

Filbert

9.69

100%

S	3.7	6.0
+7	3.6	6.1
cb	3.1	6.6
+4	5.3	6.4
1/4	3.6	6.1
S	4.1	5.6
1/4	4.3	5.4
110	4.9	4.8
cb	4.7	5.0
+2	4.8	4.9
N	3.5	6.2
150%		
N	5.7	4.0
cb	5.4	4.3
1/4	5.0	4.7
S	4.6	5.1
1/4	4.4	5.3
cb	4.0	5.7
S	3.9	5.8

200%

9.69

7.5

S	4.5	5.2
cb	4.7	5.0
1/4	4.9	4.8
S	5.1	4.6
1/4	5.0	4.7
110	5.8	3.9
cb	5.6	4.1
1/4	4.4	5.3
N	4.6	5.1
250%		
N	5.0	4.7
+8	5.0	4.7
cb	6.0	3.7
+3	6.1	3.6
1/4	5.7	4.0
S	5.8	3.9
1/4	5.3	4.4
cb	5.3	4.2
S	5.1	4.6
300%		
Consult against	5.27	4.42
S	5.7	4.0

215' Wood St
Cone Yolk
4.42

260' Wood St
Cone Yolk
5.25

Filbert		9.69				9.69		76
cb		59	3.8			400 ft		
1/4		56	4.1				82	1.5
+2		56	4.1	330 ft 10 st Coac Drive	+3		88	0.9
+7		67	3.0	605	cb		81	1.3
2		67	3.0	340 ft 10 st Coac Path 598	+2		86	1.5
1/4		65	3.2		+7		68	2.9
cb		69	2.8		1/4		62	3.5
+5		60	3.7		+4		69	2.8
H		59	3.8		+9		84	1.3
	350 ft				2		90	0.7
H		68	2.9		1/4		84	1.3
+9		70	2.7		+11		92	0.5
cb		80	1.7		cb		88	0.9
1/4		73	2.4		+3		81	1.6
2		75	2.2		H		79	1.8
+4		71	2.3			450 ft		
+8		63	3.6		H		92	0.5
1/4		59	3.8		+8		92	0.4
+7		68	2.9		cb		98	-0.1
cb		70	2.7		1/4		95	0.2
S. Fancello st.		70	2.7		2		95	-0.1

Filbert

9.69

+4	9.6	0.1
+9	9.5	2.4
1/4	6.7	3.0
+7	7.2	2.5
+10	8.6	1.1
cb	9.2	0.5
s	9.4	0.3
500'N		
s	9.1	0.6
+3	8.9	-0.2
cb	9.7	0.0
+9	7.1	2.6
1/4	7.0	2.7
+4	8.0	1.7
+8	10.1	-0.4
z	10.1	-0.4
1/4	9.8	-0.1
cb	10.2	-0.5
+6	9.6	0.1
H	9.7	0.0

560'N

9.69

77

H	9.8	-0.1
cb	10.2	-0.5
1/4	10.6	-0.9
z	10.3	-0.6
+7	7.7	2.0
1/4	8.0	1.7
+7	7.8	1.9
+1/2	9.9	-0.2
cb	10.0	-0.3
s	10.2	-0.5
567'N		
s	10.3	-0.6
+6	10.7	-1.0
cb	10.0	-0.3
+6	9.6	0.1
+10	8.7	1.0
1/4	8.6	1.1
+3	8.9	0.8
+6	10.4	-0.7
z	10.5	-0.8
1/4	10.6	-0.9

Filbert

9.69

cb 10.4 -0.7

N 9.9 -0.2

572' Drainage goes through

N 9.8 -0.1

cb 10.3 -0.6

1/4 10.6 -0.9

2 10.2 -0.5

1/4 11.0 -1.3

+10 10.8 -1.1

cb 10.1 -0.4

S 10.9 -0.7

571'

S 10.2 -0.5

+11 10.6 -0.9

cb 11.2 -1.5

1/4 8.0 1.7

+10 9.5 2.2

2 9.2 0.5

+3 11.2 -1.5

1/4 10.6 -1.9

cb 10.4 -1.7

9.69

N 9.7 0.0

TP 684 732 781 0.48

600' = EL SINO

N 7.5 -0.2

+4 7.9 -0.6

cb 8.4 -1.1

1/4 8.4 -1.1

+8 5.3 2.0

2 5.0 2.3

1/4 7.8 2.5

+8 7.8 -0.5

cb 7.8 -0.5

S 8.2 -0.9

E cb

S 8.2 -0.9

cb 8.3 -1.0

+8 8.5 -0.7

1/4 7.7 -0.1

+1 5.8 1.5

+6 7.6 2.7

2 7.7 2.6

78

+11		89	1.4
1/4		87	-1.4
cb		86	-1.3
N		82	-0.9
	E 1/4		
N		80	-0.7
cb		85	-1.2
+8		85	-1.2
1/4		65	0.8
+4		52	2.1
2		41	2.9
25		42	2.7
1/4		76	0.1
+3		88	-1.5
cb		91	-1.8
S		84	-1.1
	2 S 1/4		
S		83	-1.0
cb		90	-1.7
1/4		85	-1.2
+11		46	2.7

MEINER
 One Column
 208.500
 12' x 11' 3/4"

2		45	2.8
+6		44	2.9
1/4		52	2.1
+3		57	1.6
+8		80	-0.7
cb		83	-1.0
N		79	-0.6
	N 1/4		
N		78	-0.5
cb		78	-0.5
15		77	-0.4
+11		45	2.8
1/4		46	2.7
2		43	3.0
+9		81	-0.8
1/4		86	-1.3
cb		84	-1.1
	N 1/4		
S		82	-0.9
cb		85	-1.2

Filbart

7.36

74	86	-1.3
75	87	-1.4
76	73	0.0
77	41	3.2
78	43	3.0
79	53	2.0
cb	72	0.1
71	81	-0.8
72	84	-1.1

7.4.510

74	88	-1.5
75	85	-1.2
cb	71	0.2
76	48	2.5
77	44	2.9
78	47	2.6
79	83	-1.0
71	90	-1.7
cb	88	-1.5
75	85	-1.2
87	50	1.52

3875PH
1.92

TABLE IX.—CALCULATION OF EARTHWORK.

Width	HEIGHT														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	.02	.04	.06	.07	.09	.11	.13	.15	.17	.18	.20	.22	.24	.26	.28
2	.04	.07	.11	.15	.18	.22	.26	.30	.33	.37	.41	.44	.48	.52	.56
3	.06	.11	.17	.22	.28	.33	.39	.44	.50	.56	.61	.67	.72	.78	.83
4	.07	.15	.22	.30	.37	.44	.52	.59	.67	.74	.81	.89	.96	1.04	1.11
5	.09	.19	.28	.37	.46	.56	.65	.74	.83	.93	1.02	1.11	1.20	1.30	1.39
6	.11	.22	.33	.44	.56	.67	.78	.89	1.00	1.11	1.22	1.33	1.44	1.55	1.67
7	.13	.26	.39	.52	.65	.78	.91	1.04	1.16	1.30	1.42	1.55	1.68	1.81	1.94
8	.15	.30	.44	.59	.74	.89	1.04	1.19	1.33	1.48	1.63	1.78	1.92	2.08	2.22
9	.17	.33	.50	.67	.83	1.00	1.17	1.33	1.50	1.67	1.83	2.00	2.17	2.33	2.50
10	.18	.37	.56	.74	.93	1.11	1.30	1.48	1.67	1.85	2.04	2.22	2.41	2.59	2.78
11	.20	.41	.61	.82	1.02	1.22	1.43	1.63	1.83	2.04	2.24	2.44	2.65	2.85	3.06
12	.22	.44	.67	.89	1.11	1.33	1.56	1.78	2.00	2.22	2.44	2.67	2.89	3.11	3.33
13	.24	.48	.72	.96	1.20	1.44	1.68	1.92	2.16	2.41	2.65	2.89	3.13	3.37	3.61
14	.26	.52	.78	1.04	1.30	1.55	1.81	2.08	2.33	2.59	2.85	3.11	3.37	3.63	3.89
15	.28	.56	.83	1.11	1.39	1.67	1.94	2.22	2.50	2.78	3.06	3.33	3.61	3.89	4.17
16	.30	.59	.89	1.18	1.48	1.78	2.07	2.37	2.67	2.96	3.26	3.56	3.85	4.15	4.44
17	.31	.63	.94	1.26	1.57	1.89	2.20	2.52	2.83	3.15	3.46	3.78	4.09	4.41	4.72
18	.33	.67	1.00	1.33	1.67	2.00	2.33	2.67	3.00	3.33	3.67	4.00	4.33	4.67	5.00
19	.35	.70	1.06	1.41	1.76	2.11	2.46	2.82	3.17	3.52	3.87	4.22	4.57	4.92	5.28
20	.37	.74	1.11	1.48	1.85	2.22	2.59	2.96	3.33	3.70	4.07	4.44	4.81	5.18	5.56
21	.39	.78	1.17	1.55	1.94	2.33	2.72	3.11	3.50	3.89	4.28	4.67	5.06	5.44	5.83
22	.41	.81	1.22	1.63	2.04	2.44	2.85	3.26	3.67	4.07	4.48	4.89	5.30	5.70	6.11
23	.43	.85	1.28	1.70	2.13	2.56	2.98	3.41	3.83	4.26	4.68	5.11	5.54	5.96	6.39
24	.44	.89	1.33	1.78	2.22	2.67	3.11	3.56	4.00	4.44	4.88	5.33	5.78	6.22	6.67
25	.46	.92	1.39	1.85	2.31	2.78	3.24	3.70	4.17	4.63	5.09	5.56	6.02	6.48	6.94
26	.48	.96	1.44	1.92	2.41	2.89	3.37	3.85	4.33	4.82	5.30	5.78	6.26	6.74	7.24
27	.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50
28	.52	1.04	1.55	2.07	2.59	3.11	3.63	4.15	4.67	5.18	5.70	6.22	6.74	7.26	7.78
29	.54	1.07	1.61	2.15	2.68	3.22	3.76	4.30	4.83	5.37	5.91	6.44	6.98	7.52	8.06
30	.56	1.11	1.67	2.22	2.78	3.33	3.89	4.44	5.00	5.55	6.11	6.67	7.22	7.78	8.33
31	.57	1.15	1.72	2.30	2.87	3.44	4.02	4.59	5.17	5.74	6.32	6.89	7.46	8.04	8.61
32	.59	1.18	1.78	2.37	2.96	3.56	4.15	4.74	5.33	5.92	6.52	7.11	7.70	8.30	8.89
33	.61	1.22	1.83	2.44	3.05	3.67	4.28	4.89	5.50	6.11	6.72	7.33	7.94	8.55	9.17
34	.63	1.26	1.89	2.52	3.15	3.78	4.40	5.04	5.67	6.29	6.93	7.56	8.18	8.81	9.44
35	.65	1.30	1.94	2.59	3.24	3.89	4.53	5.18	5.83	6.48	7.13	7.78	8.42	9.08	9.72
36	.67	1.33	2.00	2.67	3.33	4.00	4.66	5.33	6.00	6.67	7.33	8.00	8.67	9.33	10.00
37	.68	1.37	2.06	2.74	3.42	4.11	4.79	5.48	6.17	6.85	7.54	8.22	8.91	9.59	10.28
38	.70	1.41	2.11	2.82	3.52	4.22	4.92	5.63	6.33	7.03	7.74	8.44	9.15	9.85	10.56
39	.72	1.44	2.17	2.89	3.61	4.33	5.05	5.78	6.50	7.22	7.95	8.67	9.39	10.11	10.83
40	.74	1.48	2.22	2.96	3.70	4.44	5.18	5.92	6.67	7.41	8.15	8.89	9.63	10.37	11.11

Table gives cu. yds. in 1 ft. of a triangle of given width and height. Corrections for tenths of width are one tenth the values found under each height considering the widths from 1 to 9 as tenths and similarly the corrections for tenths of height are one tenth the figures opposite width considering the heights from 1 to 9 as tenths. Thus if $w = 16.2$ and $h = 5.3$, cu. yds. $= 1.48 + .028 + .089 = 1.597$ cu. yds. or practically 160 cu. yds. per 100 ft. If w exceeds 40 ft., use one half and multiply result by 2, if both w and h are large use one half of each and multiply result by 4. Any cross-section may be divided into triangles by the following rule. To the triangle of the sum of the outside cuts (or fills) $= h$, and $\frac{1}{2}$ the roadbed $= w$, add the triangles formed by taking the distance out to each break in turn ($= w$'s) by the difference between the cuts (or fills) on each side of it ($= h$'s) always subtracting the outer from the inner.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

Roadway 16 feet wide. Side Slopes 1 on 1 $\frac{1}{2}$.
For Single Track Embankment.

H											II
	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	8.0	8.2	8.3	8.5	8.6	8.8	8.9	9.1	9.2	9.4	0
1	9.5	9.7	9.8	10.0	10.1	10.3	10.4	10.6	10.7	10.9	1
2	11.0	11.2	11.3	11.5	11.6	11.8	11.9	12.1	12.2	12.4	2
3	12.5	12.7	12.8	13.0	13.1	13.3	13.4	13.6	13.7	13.9	3
4	14.0	14.2	14.3	14.5	14.6	14.8	14.9	15.1	15.2	15.4	4
5	15.5	15.7	15.8	16.0	16.1	16.3	16.4	16.6	16.7	16.9	5
6	17.0	17.2	17.3	17.5	17.6	17.8	17.9	18.1	18.2	18.4	6
7	18.5	18.7	18.8	19.0	19.1	19.3	19.4	19.6	19.7	19.9	7
8	20.0	20.2	20.3	20.5	20.6	20.8	20.9	21.1	21.2	21.4	8
9	21.5	21.7	21.8	22.0	22.1	22.3	22.4	22.6	22.7	22.9	9
10	23.0	23.2	23.3	23.5	23.6	23.8	23.9	24.1	24.2	24.4	10
11	24.5	24.7	24.8	25.0	25.1	25.3	25.4	25.6	25.7	25.9	11
12	26.0	26.2	26.3	26.5	26.6	26.8	26.9	27.1	27.2	27.4	12
13	27.5	27.7	27.8	28.0	28.1	28.3	28.4	28.6	28.7	28.9	13
14	29.0	29.2	29.3	29.5	29.6	29.8	29.9	30.1	30.2	30.4	14
15	30.5	30.7	30.8	31.0	31.1	31.3	31.4	31.6	31.7	31.9	15
16	32.0	32.2	32.3	32.5	32.6	32.8	32.9	33.1	33.2	33.4	16
17	33.5	33.7	33.8	34.0	34.1	34.3	34.4	34.6	34.7	34.9	17
18	35.0	35.2	35.3	35.5	35.6	35.8	35.9	36.1	36.2	36.4	18
19	36.5	36.7	36.8	37.0	37.1	37.3	37.4	37.6	37.7	37.9	19
20	38.0	38.2	38.3	38.5	38.6	38.8	38.9	39.1	39.2	39.4	20
21	39.5	39.7	39.8	40.0	40.1	40.3	40.4	40.6	40.7	40.9	21
22	41.0	41.2	41.3	41.5	41.6	41.8	41.9	42.1	42.2	42.4	22
23	42.5	42.7	42.8	43.0	43.1	43.3	43.4	43.6	43.7	43.9	23
24	44.0	44.2	44.3	44.5	44.6	44.8	44.9	45.1	45.2	45.4	24
25	45.5	45.7	45.8	46.0	46.1	46.3	46.4	46.6	46.7	46.9	25
26	47.0	47.2	47.3	47.5	47.6	47.8	47.9	48.1	48.2	48.4	26
27	48.5	48.7	48.8	49.0	49.1	49.3	49.4	49.6	49.7	49.9	27
28	50.0	50.2	50.3	50.5	50.6	50.8	50.9	51.1	51.2	51.4	28
29	51.5	51.7	51.8	52.0	52.1	52.3	52.4	52.6	52.7	52.9	29
30	53.0	53.2	53.3	53.5	53.6	53.8	53.9	54.1	54.2	54.4	30
31	54.5	54.7	54.8	55.0	55.1	55.3	55.4	55.6	55.7	55.9	31
32	56.0	56.2	56.3	56.5	56.6	56.8	56.9	57.1	57.2	57.4	32
33	57.5	57.7	57.8	58.0	58.1	58.3	58.4	58.6	58.7	58.9	33
34	59.0	59.2	59.3	59.5	59.6	59.8	59.9	60.1	60.2	60.4	34
35	60.5	60.7	60.8	61.0	61.1	61.3	61.4	61.6	61.7	61.9	35
36	62.0	62.2	62.3	62.5	62.6	62.8	62.9	63.1	63.2	63.4	36
37	63.5	63.7	63.8	64.0	64.1	64.3	64.4	64.6	64.7	64.9	37
38	65.0	65.2	65.3	65.5	65.6	65.8	65.9	66.1	66.2	66.4	38
39	66.5	66.7	66.8	67.0	67.1	67.3	67.4	67.6	67.7	67.9	39
40	68.0	68.2	68.3	68.5	68.6	68.8	68.9	69.1	69.2	69.4	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 41.9. For same slopes but other widths of roadbed correct above figures by one-half difference in width of roadbed; thus in example above for 20 ft. roadbed distance will be $41.9 + (20 - 16) \div 2$ or 2 ft. added to 41.9 = 43.9. For slopes of 1 on 1 see inside of front cover.