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See index p. 20 7/6/30 AA

Bandini	from Columbia to Linwood	1-6
Courts	" " " "	7-10
X sec. Colton	31 st to 30 th	12-17
Curb levels on Cypress Court		18
X sec. Branison Place	33 rd to Boundary	19-33
Sewer Levels	Florida + Robinson St.	34
X Sec. Felton	Juniper to Hawthorn	35
" "	Hawthorn Gregory to 33 rd	46

X-section Bandini fr. S.L. Columbia to N.L. Lynwood.
 50' wide, 10' s.w. 7.5' quarters

JAEGER }
 Bailey }
 Clavert }
 Parrocks }
 + } Aug. 29th 1928

STA	+	H.I.	-	Elev.	STA	H.I.	-	Elev.
B.P. NE. Orizaba & Arden				260.53	W.L.			13.8
	0.86	261.39 ✓			+10'			14.7
T.P.			8.16	253.23	0+10 S. Curb Columbia			14.3
	1.62	254.85 ✓			+10'			14.3
T.P.			12.52	242.33	W.L.			12.8
	0.22	242.55 ✓			W. Curb			12.4
T.P.			13.23	229.32	W 1/4			11.7
	0.54	229.86 ✓			¢			10.5
T.P.			13.25	216.61	E 1/4			9.3
	0.15	216.76 ✓			E. Curb			7.5
T.P.			12.80	203.96	E.L.			7.0
	0.25	204.21 ✓			+10'			5.7
T.P.			12.83	191.38	0+17 ⁵⁰ S 1/4 Columbia			5.8
	0.25	191.63 ✓			+10'			5.8
T.P.			11.89	179.74	E.L.			6.6
	5.27	185.01 ✓			E. Curb			7.7
0+00 S.L. Columbia					E 1/4			9.0
+10'			6.2		¢			10.3
E.L.			7.7		W 1/4			11.4
E. Curb			7.8		W. Curb			12.2
+3'			7.8		W.L.			12.9
E 1/4			9.7		+10'			13.8
¢			11.8		0+25 ¢ Columbia			13.2
W 1/4			12.2		+10'			13.2
W. Curb			13.2		W.L.			11.9

Note: Bandini closed
 Nov. 1927 from Weller to Linwood

STA	+	H.I.	-	Elev.	STA	+	H.I.	-	Elev.
			10.9		E. Curb			7.1	
			10.5		E. L.			5.4	
			10.04	174.97 ✓	+10'			4.0	
			8.8		0+50 N.W. Columbia				
			7.4		+10'			4.0	
			6.2		E. L.			5.0	
			4.6		E. Curb			5.9	
0+32 ⁵⁰					E 1/4			7.1	
			4.7		☉			8.0	
			5.9		W 1/4			9.0	
			7.5		W. Curb			10.0	
			8.5		W. L.			10.5	
			9.4		+10'			11.1	
			10.4		0+75				
			11.1		+10'			8.1	
			12.1		W. L.			7.8	
			13.1		W. Curb			7.6	
0+40					W 1/4			7.2	
			12.9		☉			6.4	
			12.1		E 1/4			6.4	
			12.1		E. Curb			5.2	
			10.4		E. L.			3.6	
			10.1		+10'			2.9	
			9.1						
			8.1						

STA	+	H.I.	-	Elev.	STA	+	H.I.	-	Elev.
1+00					¢			9.6	
+10'			1.8		W ¹ / ₄ T.P.			12.3	172.71
E.L.			2.9		Hand Level 0.2	172.91			
E. Curb			3.7		W. Curb			3.4	
E ¹ / ₄			4.4		W.L.			7.1	
¢			4.8		+10'			10.3	
W ¹ / ₄			5.2		1+70				
W. Curb			5.8		+10'			10.9	
W.L.			5.9		W.L.			13.9	
+10'			6.3		W. Curb			8.4	
1+25					W ¹ / ₄			6.5	
+10'			12.0		¢			1.8	
W.L.			9.7		Instr. 185.01 ✓				
W. Curb			6.3		E ¹ / ₄			10.8	
W ¹ / ₄			4.8		E. Curb			8.1	
¢			4.3		E.L.			3.7	
E ¹ / ₄			3.6		+5'			0.0	
E. Curb			2.2		1+73				
E.L.			0.8		+7'			0.0	
+10'			0.0		E.L.			3.6	
1+50					E. Curb			8.9	
+2'			0.0		E ¹ / ₄ T.P.			12.6	172.41
E.L.			0.6		Hand Level 1.00	173.41			
E. Curb			4.1		¢			3.8	
E ¹ / ₄			6.8		W ¹ / ₄			8.2	

STA	+	H.I.	-	Elev.
W. Curb			10.3	
+2'			12.9	
+8'			13.3	
W.L.			13.5	
+4'			9.9	
+7'			10.0	
+10'			11.3	
2+00	Instr.	185.01	✓	
+10'			10.3	
W.L.			11.0	
W. Curb T.P.			13.1	171.91
Hand Level	1.00	172.91		
W 1/4			3.2	
+5'			5.0	
¢			9.0	
+5'			9.2	
E 1/4			7.1	
E. Curb			3.0	
	Instr.	185.01	✓	
E.L.			6.1	
+10'			1.8	
T.P.			1.92	183.09
	9.03	192.12	✓	
2+21				
10'			5.2	

STA	+	H.I.	-	Elev.
E.L. T.P.			11.2	180.92
Hand Level	0.0	180.92		
E. Curb			3.7	
E 1/4			7.2	
¢			9.3	
+2'			10.1	
+3'			12.2	
W 1/4			13.0	
+1'			14.6	
+6.5'			7.3	
W. Curb			6.9	
W.L.			2.3	
+10'			0.3	
2+50	S.L. Lignwood Instr.	192.12	✓	
+10'			6.6	
W.L.			9.9	
W. Curb T.P.			13.2	178.92
	2.20	181.12		
W 1/4			6.0	
+2'			7.0	
+3'			8.5	
¢			10.8	
+1'			11.6	
+4'			6.8	
E 1/4			6.0	

STA	+	H.I.	-	Elev.
+3'			5.0	
E. Curb			2.0	
	Instr.	192.12 ✓		
E.L.			9.6	
+10'			2.2	
2+69				
+10'			5.8	
E.L. T.P.			10.9	181.22
	Hand Level	1.80	183.02	
+5'			4.6	
+6'			6.9	
E. Curb			9.0	
+3'			10.5	
+5'			8.3	
E 1/4			5.9	
⊕			2.8	
W 1/4			0.6	
	Instr.	192.12 ✓		
W. Curb			7.7	
W.L.			5.7	
+10'			2.4	
2+75	⊕	Lynwood		
+10'			0.0	
W.L.			3.1	
W. Curb			5.2	

STA	+	H.I.	-	Elev.
W 1/4			7.7	
⊕			10.6	
+6' T.P.			12.7	179.42
	Hand Level	3.1	182.52	
E 1/4			4.7	
+5'			9.6	
E. Curb			9.0	
+1'			7.9	
E.L.			4.0	
+10'	Instr.	192.12 ✓	6.8	
3+00				
+10'			0.3	
E.L.			3.7	
E. Curb			6.9	
+4'			9.7	
+5' T.P.			12.1	180.02
	Hand Level	2.20	182.22	
+6'			2.5	
E 1/4			5.8	
+3'			6.6	
⊕			5.4	
W 1/4	Instr.	192.12 ✓	8.4	
W. Curb			4.6	
W.L.			0.4	

Couts Str. from S.L. Columbia to N.W. Lynwood
50' , 10' S.W. 7.5 Quarters

STA	+	H.I.	-	Elev.
Top of M.H.		See opp. Page 3		174.97
	0.76	175.73		
T.P.			12.69	163.04
	0.29	163.33		
T.P.			12.92	150.41
	1.18	151.59		
0+00	S.L. Columbia			
+10			10.9	140.7
E.L.			12.8	138.8
E. Curb			14.8	
E 1/4			15.2	
¢			15.0	136.6
W 1/4			14.7	
W Curb			13.7	
W.L.			14.3	137.3
+10'			15.9	
0+10	S. Curb Columbia			
+10'			13.2	
W.L.			12.2	139.4
W Curb			12.4	
W 1/4			12.8	
¢			13.5	138.1
E 1/4			13.6	
E Curb			13.0	
E.L.			10.7	140.9

Plotted 9-21-28 - C.B.H.

JAEGER
Bailey
Clarey
Brooks

Aug. 31st 1928 151.59

7

STA	+	H.I.	-	Elev.	
	+10'			8.5	
0+17.50	S. 1/4 Columbia				
	+10'			7.7	
	E.L.			9.6	142.0
	E. Curb			11.0	
	E 1/4			10.9	
	¢			11.0	140.6
	W 1/4			11.8	
	W. Curb			11.4	
	W.L.			11.8	139.8
	+10'			12.1	
0+25	¢ Columbia				
	+10'			10.7	
	W.L.			10.0	141.6
	W. Curb			10.6	
	W 1/4			10.6	
	¢ Top of M.H.			9.02	142.57
	E 1/4			8.6	
	E. Curb			8.4	
	E.L.			7.3	144.3
	+10'			7.4	
0+32.50	N 1/4 Columbia				
	+10'			7.4	
	E.L.			7.7	143.9
	E. Curb			8.2	

151.59

STA	+	H.I.	-	Elev.
E/4			8.2	
☐			8.0	143.6
W/4			9.0	
W. Curb			9.5	
W.L.			10.0	141.6
+10'			10.5	
0+40		N. Curb Columbia		
+10'			10.4	
W.L.			9.1	142.5
W. Curb			8.4	
W/4			8.5	
☐			8.7	142.9
E/4			8.3	
E. Curb			8.2	
E.L.			7.5	144.1
+10'			7.0	
0+50		N.L. Columbia		
+10'			5.3	
E.L.			6.6	145.0
E. Curb			6.7	
E/4			5.7	
☐			6.5	145.1
W/4			6.4	
W. Curb			6.8	
W.L.			7.5	144.1

151.59

8

STA	+	H.I.	-	Elev.
			8.2	
+10				
0+62				
+10				
W.L.			6.3	145.3
W. Curb			5.5	
W/4			5.1	
☐			4.6	147.0
E/4			3.7	
E. Curb			4.6	
E.L.			4.2	147.4
+10'			2.6	
0+68				
+10'				
E.L.			0.3	
E. Curb			1.5	150.1
E/4			2.5	
☐			3.0	
W/4			4.0	147.6
W. Curb			4.5	
W.L.			4.8	
+10'			5.6	146.0
			6.3	
T.P.			0.47	151.12
			13.09	164.21 ✓
1+00				
+10'				
			13.4	

164.21

STA	+	H.I.	-	Elev.
W.L.			13.0	151.2
+7.5'			12.4	
W. Curb			14.6	
+2'			12.1	
W 1/4			12.0	
¢			11.5	152.7
E 1/4			11.4	
E. Curb			10.8	
E.L.			10.3	153.9
+10'			9.8	
1+25				
+10'			7.2	
E.L.			7.0	157.2
E. Curb			7.4	
E 1/4			8.5	
¢			9.1	155.1
W 1/4			9.2	
+4.5'			8.8	
W. Curb			11.5	
+1'			9.0	
W.L.			9.4	154.8
+10'			10.5	
1+50				
+10'			6.4	
W.L.			6.2	158.0

164.21

9

STA	+	H.I.	-	Elev.
+8.5'			5.4	
W. Curb			8.5	
+2'			5.4	
W 1/4			5.1	
¢			5.1	159.1
E 1/4			4.8	
E. Curb			4.1	
E.L.			3.3	160.9
+10'			2.7	
T.P.			0.11	164.10
	13.11	177.21 ✓		
1+75				
10'			11.0	
E.L.			11.9	165.3
E. Curb			12.5	
E 1/4			13.2	
¢			13.7	163.5
W 1/4			13.8	
+6'			14.6	
W. Curb			18.7	
+3'			14.3	
W.L.			15.8	161.4
+10'			14.7	

177.21

STA	+	H.I.	-	Elev.
2+00				
+10'			8.4	
W.L.			9.9	1673
+8'			10.0	
W. Curb			15.0	
+1'			9.9	
W 1/4			9.3	
☼			8.9	1683
E 1/4			8.3	
E. Curb			7.8	
E.L.			7.1	1701
+10'			6.3	
2+25				
+10'			1.6	
E.L.			1.9	1753
E. Curb			2.7	
E 1/4			2.7	
☼			2.9	1743
W 1/4			3.2	
W. Curb			3.7	
+4'			8.4	
+6'			3.9	
W.L.			4.2	1730
+10'			4.2	

10

STA	+	H.I.	-	Elev.
2+50				
S.L.				
Lignwood				
T.P.			0.70	176.51
			12.06	188.57 ✓
+10'			4.8	
E.L.			6.4	1822
E. Curb			7.6	
E 1/4			8.0	
☼			8.8	1798
W 1/4			8.9	
+5.5'			9.0	
W. Curb			12.7	
W.L.			10.3	1783
+10'			9.6	

Lignwood under Sewer Construction.
Trench not backfilled.

10

STA

+

H.I.

-

Elev.

STA

+

H.I.

-

Elev.

11

STA

+

H.I.

-

Elev.

Yorks
Rup...
Sh...
9-24-28

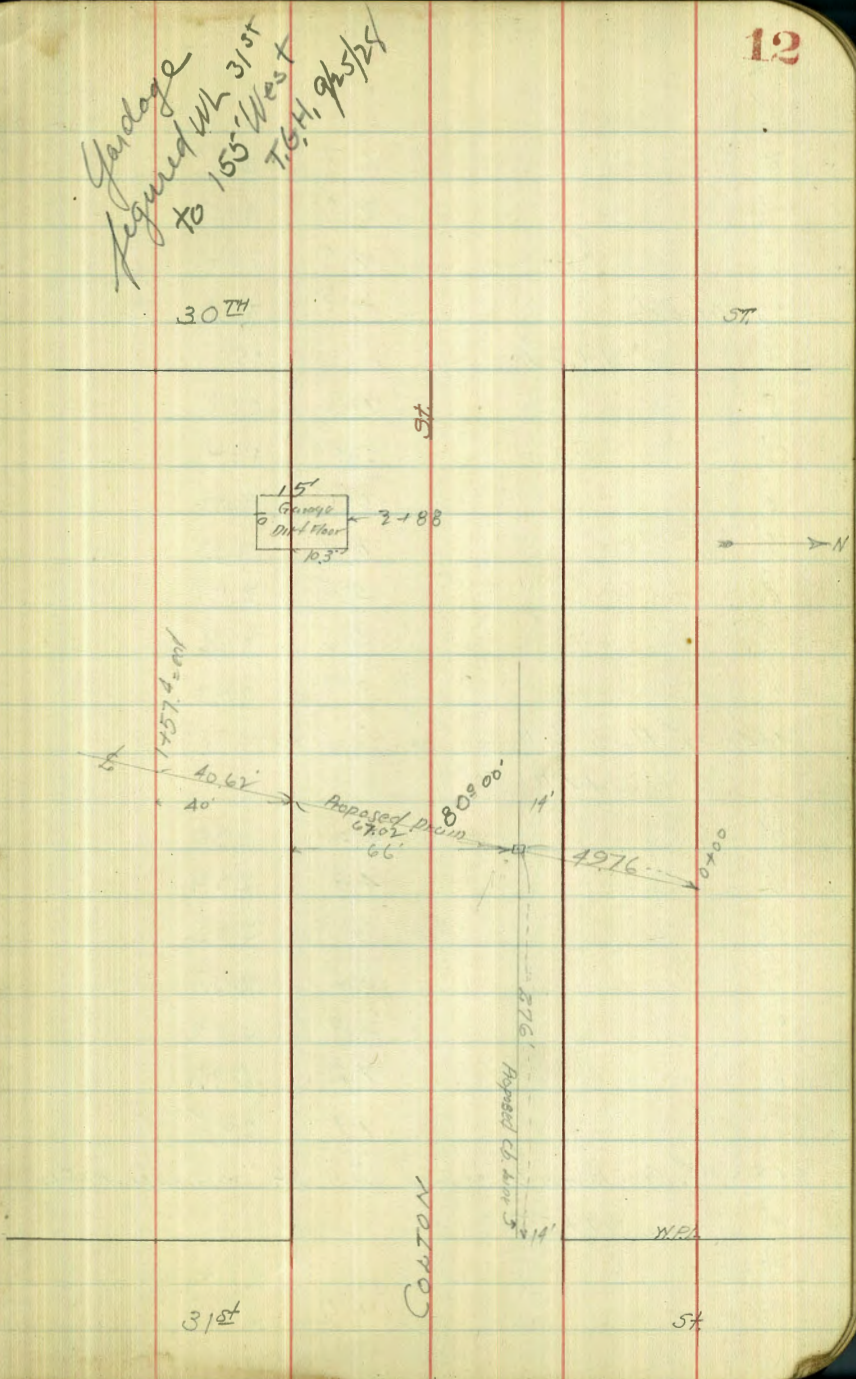
Cross Section COLTON ST.
from W.L. 31st to E.L. 30th

80' wide
H. Cbs
13' 48"
N.Y.R.P.

Main + 31st
on Top P11
App. st. N.Y. for
Colton + 31st

	0.93	45.98	450.5	
T.P.	1.36	37.21	19.13	35.85
	W.L. 31st = 0+00			
N		1.3		35.9
cb		2.0		35.2
7		2.2		35.4
2		2.8		34.4
7		3.3		33.9
cb		3.6		33.6
S		4.4		32.9
		P = 4.6		
	0+15 = East Porch to House on South 2' Back			
	0+50			
S		5.4		31.8
cb		5.2		32.0
2	P10 Head P-2.5-28 T.G.H.	4.5		32.7
2		4.3		32.9
7		4.0		33.2
cb		3.6		33.6
N		3.2		34.0
	0+72 = East Con. Walk on N 15' Back			
		3.33		33.9
	0+80 = East edge Bld. on South			
		7.1		30.1
	1+00 = West edge Bld. on South 2' Back. Con Floor			
N		4.1		30.1
cb		5.0		32.3
7		5.3		31.9

Yardage
figured W.L. 31st
to 155' West
T.G.H. 9/25/29



L	6.0	312
z	6.7	305
cb	7.1	301
S	7.1	301
1/2 of Bld.	7.1	301

1+25

S	7.6	296
cb	6.8	304
z	6.5	307
L	5.9	313
z	5.5	317
cb	4.6	326
N	3.9	333

1+40 = L Porch to House on South 10' East.

1+47

N	4.2	330
cb	4.8	324
z	6.0	312
L	6.5	307
z	6.8	304
cb	7.5	297
S	7.7	295

1+53 = L Con. Ribbon Dr. on South 1' 10" St. East Ribbon = 7.95 West Ribbon = 0.25 lower

1+55

S	8.0	292
cb	7.7	295

+6	8.1	291
z	9.0	282
L	9.7	275
z	8.5	287
cb	6.9	303
N	5.8	31.4
+10	6.4	30.8

1+63 = L Pepper tree on South on line 10' dia.

1+65

-10	9.9	27.3
N	9.1	28.1
cb	10.1	27.1
z	11.7	25.5
L	14.3	22.9
z	13.2	24.0
cb	12.7	24.5
S	12.0	25.2
+10	12.0	25.2
TP	0.34	24.66
	12.89	24.32

1+77

-10	36	210
S	36	210
cb	36	210
z	54	19.2
L	58	18.9
z	36	21.0

Note: Bld 1+55 43' x 00' North fence on South 2' 10" St.

cb.	10	23.7
N	0.2	24.5
+10	2.0	22.7
1+92		
-20	8.5	16.2
N	7.7	17.0
cb.	9.0	15.7
$\frac{1}{4}$	10.0	14.7
$\frac{1}{2}$	11.1	13.6
$\frac{3}{4}$	12.2	12.5
$\frac{1}{4}$	12.0	12.7
cb.	11.0	13.7
S	11.3	13.4
+20	12.0	12.7

2+14

-20	19.8	4.9
S	18.3	6.4
cb.	17.6	7.1
$\frac{1}{4}$	17.0	9.7
$\frac{1}{2}$	16.5	8.2
$\frac{3}{4}$	16.2	8.5
cb.	16.4	8.3
N	15.5	9.2
+30	14.0	10.7

Levels for Drain See sketch page 12

0+00	14.00	10.7
------	-------	------

+20	14.4	10.3
+35	15.9	8.8
+49.76 on hub (dub)	17.12	7.5
+16	21.1	3.6
+51.4-ent	23.3	1.4

2+26

-35	14.00	10.7
N	15.9	8.8
cb.	17.0	7.7
$\frac{1}{4}$	17.8	6.9
$\frac{1}{2}$	18.4	6.3
$\frac{3}{4}$	19.4	5.3
cb.	20.1	4.6
S	21.0	3.7
+40	23.0	

2+41

-40	23.0	1.7
S	20.0	4.7
cb.	19.3	5.4
$\frac{1}{4}$	18.6	6.1
$\frac{1}{2}$	17.8	6.9
$\frac{3}{4}$	16.9	7.8
cb.	16.8	7.9
N	15.7	9.0
+5	14.3	10.4
+35	12.8	11.9

2+55

-30	10.3	14.4
N	12.2	12.5
cb.	14.5	10.2
$\frac{1}{2}$	14.7	10.0
$\frac{1}{4}$	15.6	9.1
$\frac{1}{4}$	14.0	10.7
cb.	14.6	10.1
S	15.4	9.3
+25	21.0	3.7

2+65

-25	16.8	7.9
S	14.4	10.3
cb.	13.7	11.0
$\frac{1}{2}$	13.7	11.0
$\frac{1}{4}$	11.6	12.1
$\frac{1}{4}$	11.1	13.6
cb.	11.1	13.6
N	8.9	15.8
+10	6.8	17.9
+20	5.3	19.4

2+70

-20	1.7	53.0
N	4.8	19.9
cb.	6.0	18.7
$\frac{1}{2}$	5.1	19.1

$\frac{1}{2}$	6.2	18.5
$\frac{1}{4}$	7.8	16.9
cb.	10.1	14.6
S	10.3	14.4
+25	12.2	12.5

2+90

-20	8.1	16.6
-13	6.3	18.4
S	4.3	20.4
cb.	3.0	21.7
+7	2.5	22.2
$\frac{1}{2}$	2.1	22.6
$\frac{1}{4}$	1.5	23.2
$\frac{1}{4}$	0.3	24.4

T.P	12.52	36.92	0.26	24.40
cb.			11.6	25.3
N			10.3	26.6
+10			9.3	27.6

3+05

-10	5.4	31.5
N	5.4	31.5
cb.	6.6	30.3
$\frac{1}{2}$	7.3	29.6
$\frac{1}{4}$	7.7	29.2
$\frac{1}{4}$	7.5	29.4
cb.	8.1	28.8

S	101	26.8
+16	125	244
	3+23	
-15	103	26.6
S	64	30.5
cb	41	32.8
$\frac{1}{2}$	32	33.7
$\frac{1}{2}$	26	34.3
$\frac{1}{2}$	27	34.2
cb	20	34.3
N	26	34.3
+10	25	34.4

3+50

N	19	35.0
cb	25	34.4
$\frac{1}{2}$	29	34.0
$\frac{1}{2}$	32	33.7
$\frac{1}{2}$	32	33.7
cb	27	34.2
S	53	31.6
+8	70	29.9
+15	85	28.4

Low ground at base P = 263
 3+38 = east edge House on South 30' Sect. South front
 1 = 48
 3+88 = " " " " " = Garage end dirt floor inside

4+00

TP 381 36.37 4.36 31.56

-10	86	27.8
S	69	29.5
cb	47	31.7
+7	32	33.2
$\frac{1}{2}$	30	33.4
$\frac{1}{2}$	26	33.9
$\frac{1}{2}$	20	34.4
cb	17	34.7
N	12	35.2

4+50

N	24	34.0
cb	28	33.6
$\frac{1}{2}$	32	33.2
$\frac{1}{2}$	37	32.7
$\frac{1}{2}$	46	31.8
cb	73	29.1
+9	93	27.1
S	102	26.2
+15	144	22.0

5+00

-16	138	22.6
S	92	27.2
+10	66	29.8
cb	60	30.4
$\frac{1}{2}$	51	31.3
$\frac{1}{2}$	47	31.7

$\frac{1}{4}$	43	32.1
cb	37	32.9
N	32	33.2
5+33		
N	38	32.6
cb	50	31.4
$\frac{1}{2}$	55	30.9
S	57	30.7
$\frac{1}{2}$	53	31.1
cb	79	28.5
S	101	26.3
+15	12.6	23.8

5+70

-15	117	24.7
S	104	26.0
cb	99	26.5
$\frac{1}{4}$	97	26.7
$\frac{1}{2}$	140	26.4
$\frac{1}{4}$	98	26.2
cb	9.0	27.4
N	81	28.3

6+00 = F.L. 30th

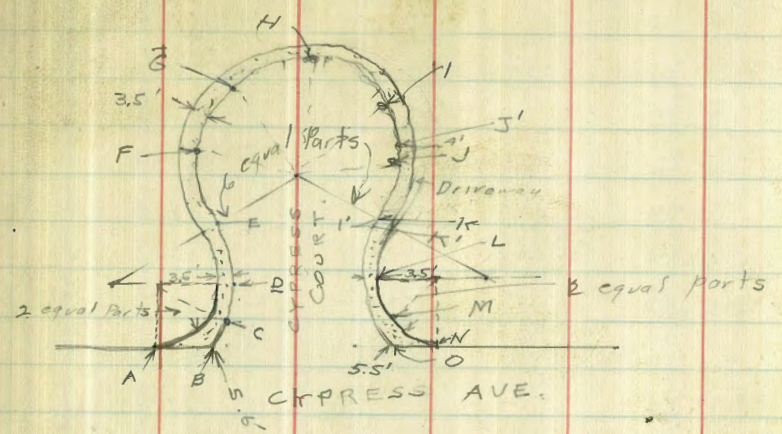
N	10.6	25.8
cb	12.0	24.4
$\frac{1}{4}$	13.6	22.9
$\frac{1}{2}$	14.7	21.7

$\frac{1}{2}$			15.3	21.1
cb			15.0	21.4
+3			15.0	21.4
+11			13.0	23.4
S			12.5	23.9
+15			11.5	24.9
T.P	12.17	43.27	5.27	31.10
T.P	5.15	47.57	0.85	42.42
chk. N.Y. 24. Main + 30 th			2.55	45.02
				45.05 = 814.
				0.03 = Error

Gorb Levels on Cypress
Court Oct 23-28

B.M	5.49	291.46		285.97	BP SW Robinson & Vermont.
T.P	2.67	286.31	7.84	283.62	
T.P	6.06	290.53	1.84	284.47	
A			6.33	284.20	
B			6.44	284.09	
C			6.44		
D			6.61		
E			6.42		
F			6.17		
G			5.95		
H			5.96		
I			6.02		
J'			6.15		
K'			6.50		
L			6.76		
M			7.08		
O			7.16	283.37	
N			7.18	283.35	
T.P	7.66	289.27	8.90	281.63	
B.M Basin			3.28	286.01	

London
Isbell
Morgan



X Sec. Bramson Plce from 33rd to
Boundary: 60' st. 12' obs 96' roadway.

Oct 23-28
London
Shell
Moran.

Bramson Pl

375.46

19

B.M.	1.21	375.46	374.25	BP SW 33rd 2 E/O JON.
0+00	=			
N.L.		4.7	371.3	
+6		4.5	371.0	
+11		4.7	370.8	
cb top cb		4.45	371.01	
gut Pav		5.01	370.45	
'A	✓	4.94	370.54	
⊕	✓	5.03	370.43	
'A	✓	5.39	370.07	
gut	✓	5.73	369.73	
cb top cb		5.19	370.27	
+4		5.4	370.1	
+7		5.3	370.2	
SL	✓	5.1	370.4	
0+00				
S.L.		4.4	371.1	
+6		4.6	370.9	
+10		5.3	370.2	
cb		5.3	370.2	
+6		5.5	370.0	
'A		5.1	370.4	
⊕		5.1	370.4	
'A		5.1	370.4	
+2		5.2	370.3	

Plotted 11-1-1928 - C.B.H.

0+04

+5	5.1	370.4
+6	4.9	370.6
cb	4.7	370.8
+7	4.3	371.2
N.L.	4.2	371.3
0+13		
N.L.	4.1	371.4
+6	4.4	371.1
cb	4.5	371.0
+4	4.6	370.9
'A	4.8	370.7
+5	4.4	371.1
⊕	4.4	371.1
+3	4.4	371.1
+7	4.9	370.7
'A	4.8	370.7
+6	4.9	370.6
cb	4.7	370.8
+7	4.4	371.1
SL	4.9	370.6

0+25

S.L.	3.9	371.6
cb	4.3	371.2
1/4	4.4	371.1
±	4.4	371.1
1/4	4.3	371.2
cb	4.4	371.1
+6	4.2	371.3
N.L.	4.2	371.3

0+50

N.L.	4.8	370.7
cb	4.9	370.6
1/4	4.9	370.6
+6	4.9	370.6
±	4.6	370.9
+7	4.3	371.2
1/4	4.0	370.9
cb	4.2	370.9
+10	4.3	371.2
S.L.	4.5	371.0

0+75

S.L.	4.8	370.7
cb	4.7	370.8
1/4	4.9	370.6
+4	5.1	370.4
±	5.0	370.5
+6	5.3	370.2
1/4	5.2	370.3
+4	5.1	370.4
+8	5.4	370.1
cb	5.3	370.2
+5	5.2	370.3
N.L.	5.2	370.3
1+00		
N.L.	5.6	369.9
+4	5.4	370.1
cb	5.6	369.9
1/4	5.7	369.8
+6	5.3	370.2
±	5.6	369.9
+3	5.8	369.7
1/4	5.6	369.9
+7	4.9	370.6
cb	5.0	370.5
+4	4.9	370.6
S.L.	4.8	370.7

375.46

1+25		
S.L.	5.1	370.4
cb	5.2	370.3
+5	5.5	370.0
1/4	5.6	369.9
+8	5.7	369.8
+	5.5	370.0
+2	5.5	370.0
1/4	5.7	369.8
cb.	5.8	369.7
+2	5.6	369.9
N.L.	5.6	369.9
1+50		
N.L.	5.8	369.7
cb	6.1	369.4
+4	6.0	369.5
1/4	6.1	369.4
+6	6.0	369.5
+	6.2	369.3
+5	6.0	369.5
1/4	6.2	369.3
+3	6.1	369.4
+6	5.6	369.9
cb	5.6	369.9
+6	5.3	370.2
S.L.	5.7	369.8

375.46

21

1+75		
S.L.	6.2	369.3
cb	6.4	369.1
1/4	6.3	369.2
+	6.3	369.2
+5	6.1	369.4
+7	6.3	369.2
1/4	6.4	369.1
+3	6.4	369.1
cb	6.4	369.1
+3	6.2	369.3
N.L.	6.3	369.2
2+00		
N.L.	6.5	369.0
cb	6.7	368.8
1/4	6.5	369.0
+4	6.2	369.3
+	6.6	368.9
+5	6.3	369.2
1/4	6.2	369.3
cb	6.5	369.0
S.L.	6.6	368.9

2+25	375.46		
S.L.		7.0	368.5
+6		6.9	
cb		6.9	
1/4		6.8	
⊕		6.8	368.7
+2		6.6	
+5		6.7	
+7		6.9	
1/4		6.6	368.9
+2		7.2	
+3		6.9	
cb		6.9	
NL		6.9	368.6
2+50			
NL		7.3	368.2
+10		7.4	
cb		7.5	
1/4		7.4	368.1
+5		7.0	
⊕		7.0	368.5
1/4		7.0	
cb		7.2	
S.L.		7.3	368.2
T.P.	3.00	370.81	7.65 367.81

2+71			
S.L.		2.7	368.1
cb		2.9	
+5		2.5	
1/4		2.6	
⊕		2.8	368.0
+3		2.6	
+7		3.2	
1/4		3.2	367.6
+1		3.0	
cb		3.0	
NL		3.0	367.8
2+75			
NL		0.5	370.3
+2		0.4	
+6		3.1	
cb		3.0	
1/4		3.1	367.7
+3		3.3	
+4		3.0	
+5		2.8	
⊕		2.8	368.0
+7		2.8	
1/4		2.7	
cb		2.9	
S.L.		2.6	368.2

370.81

22

370.81

2+80

S.L.	3.2	367.6
cb	2.7	
1/4	2.8	
+	2.9	367.9
+6	3.1	
+7	3.3	
1/4	3.2	367.8
cb	3.2	
N.L.	3.2	367.6
2+94		
N.L.	3.3	367.5
cb	3.3	
+9	3.3	
1/4	3.4	367.4
+7	2.9	
+	2.8	368.0
+6	3.3	
1/4	3.2	
cb	3.2	
S.L.	3.4	367.4

370.81

23

3+00

S.L.	3.6	367.2
+5	3.2	
+10	3.4	
cb	3.6	
1/4	3.5	
+7	3.3	
+	3.1	367.7
+4	3.2	
+7	3.6	
1/4	3.4	367.4
cb	3.5	
+5	3.3	
+7	2.3	
N.L.	3.4	367.4
3+25		
N.L.	3.8	367.0
+4	2.8	
+6	3.8	
cb	3.9	
1/4	3.9	366.9
+3	4.1	
+4	3.8	
+	3.9	366.9
+8	4.0	
1/4	3.7	

370.81

3+25

cb 3.9

+9 3.6

S.L. 3.7 367.1

3+50

S.L. 4.1 366.7

+6 4.0

cb 4.4

1/4 4.2

⊕ 4.1 366.7

+6 4.4

1/4 4.3 366.5

+1 4.5

+6 4.3

cb 3.8

+5 4.2

N.L. 3.5 367.3

3+75

N.L. 4.1 366.7

cb 3.9

+3 3.9

1/4 3.6 367.2

+3 4.7

⊕ 4.5 366.3

+2 4.4

1/4 4.7

Bramson Pl.

24

370.81

3+25

cb 4.6

+4 4.5

S.L. 5.1 365.7

4+00

S.L. 5.3 365.5

+6 4.9

cb 5.1

+5 5.3

1/4 5.1

+5 4.9

+6 5.2

⊕ 5.1 365.7

+1 4.7

+4 5.1

+5 4.7

1/4 5.0 365.8

+2 4.8

cb 3.5

N.L. 4.7 366.1

370.81

H+12		
NL	5.1	365.7
+3	4.8	
+8	5.0	
cb	4.0	
1A	5.1	365.7
+3	5.4	
⊕	5.3	365.5
+6	6.0	
1A	5.9	
+3	6.0	
cb	5.7	
+5	5.5	
S.L.	6.0	364.8
H+25		
S.L.	6.1	364.7
+10	6.3	
cb	6.1	
+4	5.9	
77	5.4	
1A	5.7	
+4	5.7	
⊕	5.4	365.4
1A	5.7	365.1
+6	4.7	
cb	4.6	

Bramson Pl.

25

370.81

4+25		
+2	4.4	
+7	5.1	
NL	4.7	366.1
H+42		
NL	7.0	363.8
+5	7.0	363.8
cb	5.0	365.8
1A	5.4	365.4
+5	6.2	364.6
⊕	6.1	364.7
1A	6.4	364.4
+5	6.3	364.5
cb	6.7	364.1
+2	6.5	364.3
+6	6.9	363.9
S.L.	6.9	363.9
H+50		
S.L.	6.8	364.0
+3	6.7	364.1
cb	7.2	363.6
+4	6.7	364.1
1A	6.9	363.9
+5	7.0	363.8
⊕	7.1	363.7
+5	7.2	363.6

370.81

4+50		
1/4	6.7	364.1
cb	7.8	363.0
+9	9.3	361.5
N.L.	10.4	360.4
4+59		
N.C.	8.7	362.1
+10	9.7	361.1
cb	10.7	360.1
+4	10.6	360.2
+6	9.9	360.9
1/4	8.5	362.3
+3	7.9	362.9
¢	7.5	363.3
+6	8.0	362.8
1/4	7.8	363.0
+4	8.1	362.7
cb	7.9	362.9
+7	7.5	363.3
SL	7.6	363.2

Bramson PI

26

370.81

4+67		
SL	8.1	362.7
+8	8.7	362.1
+10	8.2	362.6
cb	8.5	362.3
1/4	9.6	361.2
+5	9.0	361.8
¢	9.2	361.6
+4	9.6	361.2
+5	10.9	359.9
+7	10.9	359.9
1/4	9.9	360.9
+4	9.2	361.6
cb	8.9	361.9
+2	8.7	362.1
+4	8.3	362.5
+8	7.2	363.6
N.L.	6.4	364.4
4+75		
N.L.	6.1	364.7
cb	6.5	364.3
+3	7.0	363.8
+8	9.0	361.8
1/4	9.1	361.7
+6	9.5	361.3
+7	10.6	360.2
¢	10.7	360.1

370.81

4+75		
4+8	10.5	360 3
+4	9.7	361 1
1/4	9.5	361 3
+1	9.8	361 0
cb	9.6	361 2
+4	8.2	362 6
+10	9.8	361 0
5.6	9.5	361.3
4+84		
5.2	9.9	360.9
+2	9.9	360 9
+4	11.1	359 7
+10	10.9	359 9
cb	9.7	361 1
+3	10.1	360 7
1/4	9.7	360 9
+3	9.7	361 1
+7	8.7	362 1
4	9.0	361.8
+3	9.1	361 7
+7	8.1	362 7
1/4	7.0	363 8
+1	6.4	364 4
cb	6.0	364 8
N.L.	5.7	365 1

Branison Pl

370.81

27

4+87		
N.L.	5.5	365 3
+2	5.8	365 0
cb	6.0	364 8
1/4	6.5	364 3
+1	6.9	363 9
+7	9.4	361 4
4	9.2	361.6
+5	9.1	361 7
+6	9.0	361 8
1/4	9.2	361 6
+3	9.0	361 8
cb	9.1	361 7
+7	9.8	361 0
+10	11.1	359 7
5.2	11.2	359 6
4 +91		
5.2	8.6	362.2
+6	9.1	361 7
cb	8.4	362 4
+5	9.2	361 6
1/4	8.7	362 1
+2	8.4	362 4
+5	9.1	361 7
+6	8.7	362 1
+8	9.2	361 6

Gramson Pl.

370.81

4+91

E	9.2	361.6
+8	6.5	364.3
1/4	6.1	364.7
cb	6.0	364.8
+11	5.7	365.1
N.L.	5.4	365.4

4+97

N.L.	5.5	365.3
cb	5.9	364.9
1/4	6.1	364.7
+5	6.8	364.0
+8	8.4	362.4
E	8.2	362.6
+8	8.6	362.2
1/4	8.5	362.3
+5	9.4	361.4
cb	9.6	361.2
+6	9.8	361.0
+10	9.7	361.1
S.L.	8.8	362.0

Gramson Pl.

370.81

28

5+10

S.L.	6.2	364.6
cb	6.3	364.5
1/4	6.5	364.3
+7	6.9	363.9
E	6.7	364.1
+4	6.6	364.2
+7	5.9	364.9
1/4	5.9	364.9
cb	5.6	365.2
N.L.	5.1	365.7
5+25		
N.L.	5.1	365.7
cb	5.6	
1/4	5.9	364.9
+8	6.0	
E	5.6	365.2
+2	5.4	
+5	5.7	
1/4	5.4	
+7	5.4	
cb	5.2	
+7	4.7	
S.L.	4.8	366.0

Bramson pl.

370.81

5+50

S.L.	4.2	366.6
+2	4.0	
+6	5.1	
+10	4.6	
cb	5.0	
+5	5.0	
1/4	4.3	
+4	5.0	
4	5.2	365.6
1/4	5.5	365.3
cb	5.3	
N.L.	4.8	366.0
5+75		
N.L.	3.9	366.9
+2	4.3	
cb	4.7	
1/4	4.9	365.8
4	4.6	366.2
+4	4.5	
1/4	4.5	
+6	4.3	
cb	4.7	
+2	4.9	
S.L.	4.7	366.1

Bramson pl

370.81

29

6+00

S.L.	4.0	366.8
cb	4.4	
1/4	4.4	
4	4.5	366.3
+4	4.2	
1/4	4.4	366.4
cb	4.0	
+10	3.7	
N.L.	3.3	367.5
6+25		
N.L.	3.0	367.8
cb	3.4	
1/4	3.7	367.1
+5	3.5	
4	3.9	366.9
+3	3.7	
1/4	3.8	
+3	3.7	
cb	3.8	
+5	3.8	
S.L.	4.1	366.7

370.81

6+50

S.L.	3.8	367.0
cb	3.6	
+5	3.6	
1/4	3.5	
+	3.1	367.7
+5	3.3	
1/4	3.2	367.0
+7	3.1	
cb	3.2	
N.L.	2.9	367.9
6+7.5		
N.L.	2.2	368.6
cb	2.7	
1/4	2.9	367.9
+	3.2	367.6
+5	3.4	
1/4	3.2	
+3	3.2	
cb	3.4	
S.L.	3.7	367.1

370.81

7+00

S.L.	3.5	367.3
+4	3.1	
cb	3.4	
+4	3.6	
1/4	3.3	
+	2.9	367.9
+2	2.7	
1/4	2.7	368.1
cb	2.4	
+7	2.1	
N.L.	2.2	368.6
7+2.5		
N.L.	1.6	369.2
+2	1.9	
cb	2.3	
1/4	2.5	369.3
+	2.7	368.1
1/4	2.8	
cb	2.8	
+9	3.1	
S.L.	3.4	367.4

370.81

7450

S.L. 3.4 367.4

cb 3.2

1A 3.1

~~4~~ 2.8 368.0

1A. 2.6 368.4

+6 2.2

cb 2.2

43 1.9

+10 1.9

N.L. 1.3 369.5

7475

N.L. 1.0 369.8

+4 1.9

cb 1.9

1A 2.4

~~4~~ 2.7 367.1

1A 2.8

+2 2.5

cb 2.5

+4 2.6

+5 2.7

S.L. 3.1 367.7

370.81

7484

S.L. 2.1 368.7

+4 1.9

+7 2.5

+10 2.2

cb 2.6

1A 2.8

+6 2.7

~~4~~ 2.5 368.3

1A 2.6

cb 1.9

+11 1.4

N.L. 1.0 369.8

8400

N.L. 1.2 369.6

+2 1.4

cb 1.7

1A 2.1

~~4~~ 2.4 368.4

+6 2.1

1A 2.4

cb 2.1

S.L. 2.4 368.4

Bramson Pl.

370.81

8+25		
S.L.	2.0	368.8
+7	1.7	
cb	1.7	
+6	2.0	
1/4	2.3	
±	2.1	368.7
1/4	1.7	
cb	1.4	
N.L.	0.5	370.3
8+50		
N.L.	0.2	370.6
+3	0.4	
cb	1.2	
1/4	1.6	
±	1.7	369.1
1/4	1.8	
+6	2.0	
cb	2.0	
S.L.	2.0	368.8

Bramson Pl

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370.81

8+16 ³²	= EL Boundary on South	
S.L.	1.8	369.0
cb	1.6	
+3	1.8	
1/4	1.7	
±	1.4	369.4
+4	1.4	
1/4	1.4	
cb	1.1	
+6	0.8	
N.L.	0.2	370.6
T.P.	3.23	373.87
	0.17	370.84
Sec on EL Boundary 8+79 ⁶⁹ on north.		
N.L.	3.0	370.8
+10	3.8	
+10 top cb and ret.	3.23	370.64
+10 gut.	3.85	370.02
cb Pav	3.88	370.00
1/4 ✓	3.97	
± ✓	4.12	369.75
1/4 ✓	4.60	
cb ✓	5.21	368.66
+3 ✓	5.38	368.49
+3 top cb and ret.	4.83	369.04
+3 grd.	4.8	
S.L.	4.7	369.0

Bramson Pl.

373.87

T.P. 10:30 376.60 7.57 366.30

B.M. Beginning 2.32 374.28

33

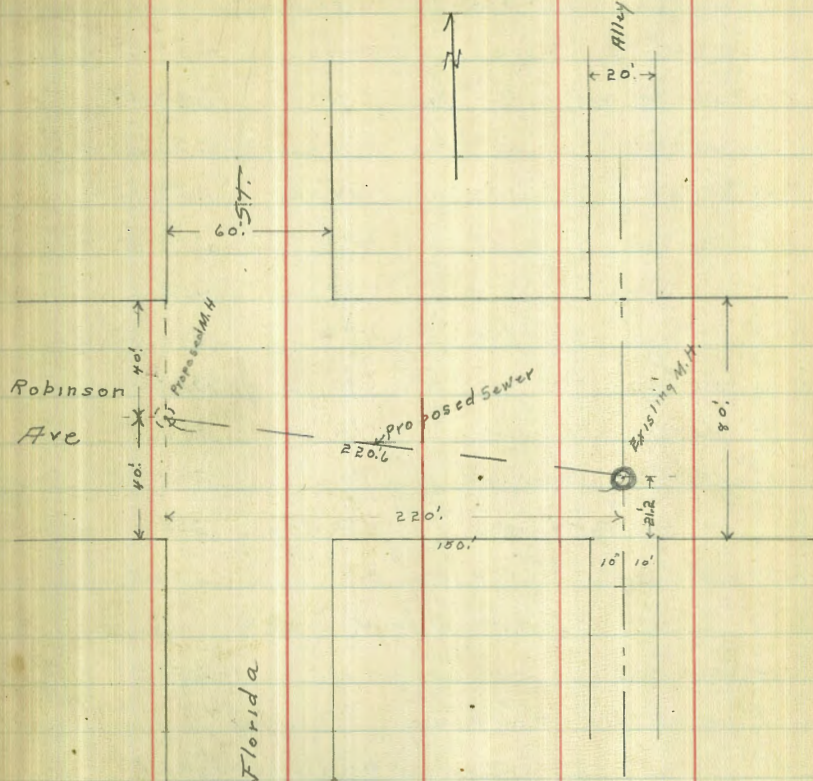
Florida & Robinson
Sewer Notes

11-21-28
Miller

220.5

34

B.M. B.P.	1.05	H.I. 288.13	I.S. 5.00	287.08	3rd Univ Ave & Florida
T.P.	0.27	283.90	5.00	283.13	2nd N.W. Florida & Robinson
T.P.	0.39	276.35	7.47	275.96	on pavement
00 = Proposed M.H.		Robinson W. Line Florida	1.50	274.75	
0+30			2.1	274.3	
0+50			3.3	273.1	
0+65			2.5	273.9	
0+90			4.3	272.1	
1+46			11.3	265.1	
T.P.	0.10	263.34	13.11	263.24	
1+66			4.4	258.9	
1+74			3.4	259.9	
1+84			5.4	257.9	
1+96			10.4	252.9	
T.P.	0.18	250.62	12.90	250.44	
2+03			5.9	244.7	
2+13			12.8	237.8	
2+20.5 = Existing M.H.			14.00	236.6	Top M.H.
" " " "			15.3	235.3	ground
" " " "			18.85	231.77	Flow Line



Levels on W. Line of Florida at Robinson
X. 276.35

Mentel	0.40	275.95	
gutter	1.04	275.57	on pavement
" "	1.23	275.12	"
" "	1.50	274.85	"
" "	2.20	274.15	"
gutter	3.03	273.32	"
S. mt. cl.	2.40	273.75	

80 wide
20' els
10' 11/2

Felton ST X Sec
Juniper to 200.5 of Hawthorn

12-24-28

B.M. B.P. Top Wall	1.13	256.61	255.48	se. Felton & Juniper
2' W. of E. line - draft wall				
= E. Edge ent. walk = E+20				
E+7 = W. edge ent. walk				
+20 = S. End ent. elv.				
E. gutter				
114				
c				
114				
W. gutter				
W. cl				
+13 = E. edge ent. walk				
+18 = W " " "				
W. Line				
W. ent. cl				
W				
+20 = W. edge ent. walk				
+7 = E " " "				
+15				
cl.				
114				
c				
114				
cl				

Plotted
1-21-29
CBH

N.E. A = 88-02

256.61

E. cl + 5	6.2	250.4
+12.5 = W. edge ent. walk O.K.	6.37	250.24
+17.5 = E " " " = ent. wall	6.32	249.29
		250.79
		100'5
E+2.6 = E. edge ent. walk = ent. wall	7.40	247.01
E+7.6 = W " " " O.K.	9.71	246.90
+16	9.6	247.0
cl	10.0	246.6
+5	10.7	245.9
114	10.4	246.2
c	10.0	246.6
114	10.0	246.6
cl	9.9	246.7
+5	9.4	247.2
+13 = E. edge walk N.C.	8.8	247.8
+18 = W " " "	8.6	248.0
W	8.3	248.3
		137.5'5 on E = S. End. ent. wall
		140.'5
W	11.6	245.0
+20 = W. edge walk N.C.	12.1	244.5
+7 = E " " " N.C.	12.1	244.5
+14	12.3	244.3
cl	13.0	243.6
+5	13.3	243.3
114	13.3	243.3

256.61
140' S. (con)

c	13.1	243.5
E. 1/4	13.3	243.3
ch	13.2	243.4
+12.5 = W. edge cmt. walk Q.K.	12.65	243.96
+17.5 = E. " " " O.K.	12.52	244.09
c	12.4	244.2

165' S.

E	13.6	243.0
Walk covered with dirt		
ch	13.7	242.9
1/4	14.0	242.6
c	14.1	242.5
1/4	13.4	243.2
ch	13.3	243.3

Walk all Busted to Hell

w	12.8	243.8
---	------	-------

169.5 S = S. End cmt. walk on E.

w	13.0	243.6
ch	14.6	242.0
1/4	15.5	241.1
c	16.5	240.1
1/4	15.5	241.1
ch	13.5	243.1
+17.5 = E. Edge cmt. walk	14.7	241.9
E	13.3	243.3
T.P. 0.29	12.88	243.73

covered with dirt No yardage

Felton

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244.02
182' S

E	1.1	242.9
+10	1.7	242.3
ch	3.8	240.2
+5	6.3	237.7
1/4	6.5	237.5
+5	7.5	236.5
+7	11.3	232.7
c	11.3	232.7
+5	10.9	233.1
+7	5.0	239.0
1/4	5.0	239.0
ch	5.1	238.9
+10	9.9	234.1
+15	7.7	236.3
w	5.9	238.1
+5	3.4	240.6

200' S

-12	4.2	239.8
-8	6.7	237.3
w.	11.6	232.4
+10	15.7	228.3
ch	12.5	231.5
+6	6.7	236.3
1/4	6.3	234.7
+6	6.0	238.0
E	9.6	234.4

244.02

200'S. (EON)

E 1/4	17.0	227 0
cb.	13.6	230 4
E	10.5	233.5
+10	8.9	235 1

212'S.

E-10	12.1	231 9
E	12.7	231.9
+10	14.9	229 1
cb	19.0	225 0
1/4	20.3	223 7
E	9.5	234.5
+4	6.1	237 9
+7	9.5	234 5
1/4	11.5	232 5
cb	18.2	225 8
+9	16.0	228 0
N	9.3	234.7
+8	4.1	239 9

228'S.

N	4.0	240 0
+12	11.4	232 6
T.P.	10.72	243.10
cb.	15.4	227 9
+6	21.0	222 1
1/4	21.4	221 7
E	19.0	224.1

243.10

Felton

37

1/4	18.5	224 6
+7	24.5	218 6
cb	22.5	220 6
E	17.0	226.1
+17	13.5	229 6

240'S.

-25	17.0	226 1
E	20.8	222.3
cb.	24.4	214 3
1/4	25.4	217 3
E	24.0	219 1
1/4	19.0	224 1
+6	14.0	229 1
cb	5.7	237 4
N	2.8	240.3

250'S.

N	3.0	240 1
cb	14.0	229.1
1/4	17.0	226 1
E	18.0	223 1
1/4	21.0	222 0
cb	24.4	218 3
+7	31.3	211 8
E	25.8	217.3

243.10

256.5 S. = N. End walk on W.

- 20		22.0	2211
E		30.3	2128
+4		33.0	2101
cl		23.5	2196
"4		18.0	2251
E		11.2	231.9
"4		10.8	2331
+5		12.0	2310
cl		8.4	2347
+12.5 = E. edge cent. walk	WALK OK.	3.33	239.97
+17.5 = W. " " "	" " " "	3.27	239.83
W		3.0	2401
T.P.	4.89	247.48 ✓	240.59 ✓
		265.5	
W		7.3	2402
+7 = edge cent. walk.		7.5	2400
cl		9.3	2382
+9		9.4	2381
"4		10.4	2371
+3		12.0	2355
+7		10.3	2372
E		11.9	2356
"4		10.3	2272
cl.		28.0	2195
E		40.0	207.5
+20		36.5	211.0

247.48

294.5

Fulton

38

E		42.6	2049
cl		26.2	2313
"4		18.5	2290
E		10.0	237.5
+3		8.6	2389
"4		8.4	2391
cl		8.0	2395
+13 = E. edge cent. cl		6.8	240.6
W		6.5	241.0
			80' wide
			20' cl
			10' 1/2
			3005 = N. line 1/4
W		6.3	241.2
+7 = E. edge walk		6.7	240.8
cl		7.8	2397
+7		8.2	2393
"4		10.3	2372
E		18.8	228.7
"4		19.0	228.5
cl		26.0	221.5
E		42.6	204.9
			5' S. of N. line
E		38.7	208.8
cl		35.0	212.5
"4		25.0	222.5
E		20.0	227.5
"4		10.6	236.9
+3		8.0	239.5

247.44

5' S. of N. line 1v4 (cont)

W. dr	7.6	239	9
+13 = C. edge emb. walk	6.7	240	8
W	6.3	241	2

12' S. of N. line 1v4

N	6.4	241	1
+7 = E. edge emb. walk	6.8	240	7
dr	8.2	239	3
1/4	12.8	234	7
+7	8.2	239	3
C	10.5	237	0
1/4	18.0	229	5
dr	24.6	222	9
E	34.4	213	1

20' S. of N. line = N. dr

E	33.5	214	0
dr	24.0	223	5
1/4	17.5	230	0
C	8.4	239	1
+5	8.1	239	1
+8	11.0	236	5
1/4	9.1	238	4
+2	8.0	239	5
dr	8.2	239	3
+13	7.5	240	0
W	7.0	240	5

247.48

N. 1/4

Felton

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W	6.0	241	5
+7	6.6	240	9
dr	7.0	240	5
1/4	8.4	239	1
+3	11.0	236	5
+5	8.0	239	5
C	8.1	239	4
1/4	18.0	229	5
dr	23.2	224	3
E	32.4	215	1

E 1v4

C	31.0	216	5
dr	22.3	225	2
1/4	15.8	231	7
C	7.6	239	9
1/4	7.6	239	9
dr	6.7	240	8
W	5.5	242	0
S. 1/4	5.3	242	2
dr	6.3	241	2
1/4	7.4	240	1
C	7.5	240	0
1/4	15.0	232	5
dr	21.0	226	5
E	29.5	218	0

247.48

S. ch. of Ivy

E			29.8	212.7
ch			20.3	227.2
1/4			14.6	232.9
e			7.5	240.0
+1			7.0	240.5
1/4			6.8	240.7
ch			6.0	241.5
+13			5.5	242.0
W			5.0	242.5
T.P.	8.20	248.79	6.89	240.59
		00 = S. line	Ivy St	
W			5.6	243.2
+1.8 = N. line			5.9	242.9
+7.4 = E. " "			5.9	242.9
+15			6.5	242.3
ch			7.6	241.2
1/4			7.6	241.2
+4			7.7	241.1
e			12.6	236.2
1/4			17.9	230.9
ch.			26.0	222.8
+10			34.0	214.8
+14			33.0	215.8
E			35.7	213.1

248.79

5'S.

E			39.0	209.8
+10			35.0	213.8
ch			26.0	222.8
1/4			17.7	231.1
e			8.1	240.7
1/4			7.5	241.3
ch			7.5	241.3
+3			6.4	242.4
+12.6 = E. edge			5.7	243.1
W.			5.3	243.5
			15'S.	
W			4.9	243.9
+7.4 = E. edge			5.1	243.7
+17			5.7	243.1
ch			7.1	241.7
1/4			7.3	241.5
e			7.4	241.4
1/4			15.6	233.2
ch.			23.2	225.6
E			33.6	215.2
+22			33.2	215.6
+35			36.0	212.8
			40'S.	
-30			25.6	223.2
E			17.2	231.6
ch			12.8	236.0

Fulton

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248.79

40'S. of N4 (con)

E. 1/4	11.0	237.8
+ 2	10.2	238.6
c	5.8	243.0
1/4	6.2	242.6
cb	6.0	242.8
+ 2	4.5	244.3
+ 12.6 = E. Edge ext. walk	3.7	245.1
N	3.4	245.4
70'S		
N	1.3	247.5
+ 7.4 = E. Edge ext. walk	1.7	247.1
+ 18	2.5	246.3
cb	3.7	245.1
4.5	4.5	244.3
1/4	4.3	244.5
c	4.0	244.8
+ 6	6.3	242.5
1/4	6.6	242.2
cb	8.5	240.3
E	11.2	237.6
+ 20	15.0	233.8
100'S.		
- 20	10.6	238.2
E	7.1	241.7
cb	4.9	243.9
1/4	3.0	245.8

248.79

Fulton

41

c	2.1	246.7
1/4	2.3	246.5
+ 8	2.5	246.3
cb	1.6	247.2
+ 3	0.2	248.6
T.P. 12.75 261.31	0.23	248.56
+ 12.3 = E. Edge ext. walk	12.3	249.0
N	12.0	249.3
125'S.		
N	9.5	251.8
+ 2	10.4	250.9
+ 7.3 = E. Edge walk	10.6	250.7
+ 17	11.1	250.2
cb	12.5	248.8
+ 3	13.2	248.1
1/4	13.0	248.3
+ 8	13.1	248.2
c	12.2	249.1
+ 3	12.0	249.3
1/4	13.5	247.8
cb	15.0	246.3
E	17.4	243.9
+ 20	20.5	240.8

261.31
150'S

E-10	15.6	2457
E	14.2	2471
dr	12.0	2493
1/4	10.7	2506
+7	9.0	2523
C	9.9	2514
+2	11.0	2503
1/4	10.8	2505
+7	11.5	2498
dr	10.4	2509
+3	9.0	2523
+12.8 = E. edge cont walk	8.8	2525
+17	8.7	2526
W	7.0	2543
	175'S	
W	5.0	2563
+3	7.0	2543
+7.2 = E. edge cont walk	7.1	2572
+17	7.6	259.7
dr	8.4	252.5
+5	8.6	2527
1/4	8.9	2524
+4	8.8	252.5
C	7.3	254.0
+2	6.6	254.9
1/4	8.2	253.1

261.31

Felton

42

dr	9.1	252.2
E	11.0	250.3
+10	12.2	2491
	200'S	
-10	9.7	251.6
E	8.6	252.7
dr	6.2	255.1
1/4	5.6	255.7
+7	4.7	256.6
C	6.0	255.3
+4	7.1	254.2
1/4	7.3	254.0
+8	7.5	253.8
dr	7.0	254.3
+2	6.3	255.0
+12.8 = E. edge cont walk	5.9	255.4
+17	6.8	255.5
W	4.2	257.1
	225'S	
W	3.3	258.0
+2	4.9	256.4
+7.2 = S. edge cont dr.	5.1	256.2
+15	5.1	256.2
dr	6.1	255.2
+2	6.4	254.9
1/4	6.1	255.2

261.31
225'S. (con)

e	4.9	256.4
+2	3.0	258.3
E. 4	4.4	256.9
cl	4.8	256.5
E	4.1	255.2
250'S.		
E	4.4	256.9
cl	3.0	258.3
"4	2.5	258.8
+8	2.1	259.2
e	3.3	258.0
+3	4.7	256.2
"4	5.4	255.9
cl	5.8	255.5
+2	4.9	256.4
+12.9 = E. Edge ext. walk	4.5	256.8
+18	4.4	256.9
w	3.5	257.8
275'S.		
w	4.5	256.8
+7.1 = E. edge ext. walk	4.7	256.6
+18	5.0	256.3
cl	5.5	255.8
"4	5.3	256.0
+7	4.7	256.6
e	3.4	257.9

261.31

Felton

43

+2	2.5	258.8
"4	2.4	258.9
cl	2.4	258.9
E	2.9	258.4
300'S. = N. Line Hawthorne St. ^{90' wide} 10' 1/2'S.		
E.	3.09	258.22 on N.E. BK cor
cl	3.4	257.9
"4	3.6	257.7
+7	3.9	257.4
e	4.7	256.6
+4	5.5	255.8
"4	5.8	255.5
cl	6.0	255.3
+12.9 = E. Edge walk	5.8	255.5
w ₂	5.8	255.5
chk. on BM.	5.86	255.45 ^{N. W. Felton} ^{+ Hawthorne} ^{255.35}
N. cl		
w	8.5	252.8
cl	6.8	254.5
"4	6.6	254.7
e	5.7	255.0
"4	5.1	256.2
cl	4.6	256.7
E	4.0	257.3

261.31

N. 1/4 of Hawthorne

E	4.9	256.4
cl	5.6	255.7
1/4	6.0	255.3
c	6.8	254.5
1/4	7.4	253.9
cl	8.2	253.1
W	10.1	251.2
	±	
W	11.6	249.7
cl	9.5	261.8
1/4	8.9	252.4
c	8.1	259.2
1/4	7.1	254.2
cl	6.7	254.6
E	5.9	255.4
	5. 1/4	
E	7.0	254.3
cl	8.2	253.1
1/4	8.6	252.7
c	9.6	251.7
1/4	10.4	250.9
cl	11.0	250.3
W	13.0	248.3
	5. cl	
W	14.2	247.1
cl	12.2	249.1

261.31

Felton

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1/4	11.3	250.0
2	11.2	250.1
1/4	10.0	251.3
cl	9.5	251.8
E	8.6	252.7
	00 = S. Line Hawthorne	
E	10.6	250.7
cl	11.4	249.9
1/4	12.2	249.1
c	13.4	247.9
T.P.	0.61	248.96
1/4	12.96	248.35
1/4	1.8	246.2
cl	3.0	246.0
W	5.2	243.8
	35' S.	
W	13.4	235.6
cl	9.6	239.4
1/4	8.2	240.8
c	6.7	242.3
1/4	6.0	243.0
cl	5.0	244.0
E	3.5	245.5
	70' S.	
E	9.0	240.0
cl	11.0	238.0
1/4	12.5	236.5

248.96
70'.5 (con)

e			13.1	235.9	
T.P.	0.02	236.05	12.93	236.03	
W. 1/4			1.6	234.5	
ch			3.3	232.8	
+10			5.3	230.8	
W.			9.4	226.6	
		100'.5.			
W			18.3	217.7	
ch			8.6	227.5	
1/4			5.8	230.3	
C			4.7	231.3	
1/4			3.4	232.7	
ch			3.2	232.9	
E			0.8	235.2	
		125'.5,			
E			6.4	229.6	
ch			7.9	226.2	
1/4			10.5	225.6	
C			11.2	224.8	
1/4			12.8	223.3	
ch			16.0	220.1	
T.P.	3.13	226.56	12.62	223.43	
W.			14.5	212.1	

226.56

150'.5.

10'. E. of W. Line			19.5	207.1	
W. ch			16.0	210.6	
1/4			14.5	212.1	
E			12.1	214.5	
1/4			11.7	214.9	
ch			9.9	216.7	
E			3.1	223.5	
		185'.5			
E. Line			14.5	212.1	
T.P.	12.61	236.04	3.13	223.43	
T.P.	12.59	248.62	0.01	236.03	
T.P.	10.71	258.71	0.62	248.00	
ch on RM.			3.26	255.45	W. of Felton + Hawthorne

Felton

45

80' width
20' ebs
10' ups

Hawthorne St X Sec

1-4-29
mills

Gregory to 33rd St

T 258.71 Page 46

T.P. 0.22 245.99 12.94 245.77

Gregory St

S 14.4 230.6

cb 16.2

T.P. 2.25 237.09 11.15 234.84

1/4 8.5

C 9.7 227.4

1/4 10.8

cb 11.9

N. 15.6 221.5

N. 1/4

N 12.7 224.4

cb 9.4

1/4 8.0

C 7.1 230.0

1/4 5.8

cb 4.6

T.P. 12.05 246.89 2.25 234.84

S 12.6 234.3

W. cb

S 10.6 236.3

cb 11.8

1/4 13.0

C 14.4 232.5

1/4 15.3

Plotted 1-21-29
C.B.H.

246.89

cb 16.4

N 19.2 227.1

00 = W. Line Gregory St

N 15.2 231.7

cb 12.2 234.7

1/4 11.0 235.9

C 10.2 236.7

1/4 9.4 237.5

cb 8.4 238.5

S. 6.5 240.4

15' W.

S. 1.5 245.4

+10 2.5 244.4

cb 5.0 241.9

1/4 6.3 240.6

C 7.4 239.5

1/4 8.4 238.5

cb 9.4 237.5

N 12.1 234.8

30' W

N 9.5 237.4

cb 7.3 239.6

1/4 5.7 241.2

C 4.5 242.4

1/4 1.6 245.3

cb 0.7 246.2

		246.89		
T.P.	12.85	259.45	0.29	246.60
		30' W. (DOM)		
S.			11.6	247.9
		50' W		
S.			8.4	251.1
cb.			9.9	249.6
1/4			11.0	248.5
e			12.3	247.1
1/4			13.2	246.3
cb.			15.3	244.2
N.			18.9	240.6
		75' W		
N			13.5	246.0
cb.			11.2	248.3
1/4			10.1	249.4
e			8.5	251.0
1/4			6.8	252.7
cb.			5.8	253.7
S.			4.2	255.3
		100' W.		
S			2.2	257.3
cb.			3.2	256.3
1/4			4.0	255.5
e			5.2	254.3
1/4			6.4	253.1
cb.			7.8	251.7
N			10.3	249.2

				Hawthorne St	47
		259.45			
		125' W.			
S			6.9	252.6	
cb.			5.2	254.3	
1/4			4.8	254.7	
e			4.1	255.4	
1/4			3.6	255.9	
cb.			3.4	256.1	
S.			4.0	255.5	
		150' W.			
S.			5.9	253.5	
cb.			4.3	255.2	
1/4			3.8	255.7	
e			3.6	255.9	
1/4			3.5	256.0	
cb.			3.7	255.8	
N.			4.2	255.3	
		200' W. = E. Line Felton			
N			1.3	254.2	
cb.			2.1	257.3	
1/4			3.0	256.4	
e			4.0	255.4	
1/4			5.1	254.3	
cb.			6.7	252.7	
S.			8.7	250.7	
T.P. or BM.	0.50	255.95	4.00	255.45	NW. Felton Hawthorne

255.95

00=W. Line Feltion

S	12.1	243.8
cb	8.8	247.1
"4	7.6	248.3
c	6.2	249.7
"4	4.7	251.2
cb	3.1	252.8
N.	0.4	255.5
10' W.		
N	1.0	255.0
cb	4.1	
"4	5.7	
c	7.1	248.0
"4	8.5	
cb	10.4	
S.	13.7	242.3
35' W.		
S	20.0	236.0
cb	13.8	
"4	11.1	
c	9.3	246.7
"4	7.5	
cb	5.9	
N.	3.4	252.6
45' W.		
N	4.2	251.8
cb	6.8	

Hawthorne St

255.95

48

"4		8.3		
c		10.4	245.6	
"4		13.0		
T.P.	8.06	250.94	13.07	242.88
cb		10.1		
S		17.3	233.6	
62' W.				
S		24.3	226.6	
cb		16.0		
"4		12.5		
c		10.1	240.0	
"4		6.4		
cb		3.6		
N		0.2	250.7	
73' W.				
N		1.7	249.2	
+ 8		3.7		
cb		9.3		
"4		13.4		
c		16.7	234.2	
"4		18.0		
cb		22.4		
S		30.3	220.6	

250.94

85' W.

S	23.0	227.9
cb	21.0	
14	22.0	
c	17.6	233.3
14	16.0	
cb	13.4	
710	9.0	
N	6.1	244.8

100' W.

N	2.5	248.4
cb	6.4	
14	8.2	
c	9.6	240.3
14	9.9	
cb	11.6	
S	14.5	236.4

109' W.

S	10.7	240.2
cb	7.1	
14	6.4	
c	5.0	245.9
14	4.4	
cb	3.3	
N	1.3	249.6

250.94

Hawthorne St

49

135' W.

N.	+2.6	253.5
cb	2.7	
14	1.8	
c	3.0	247.9
14	3.5	
cb	4.7	
S	6.7	244.2

170' W.

S	4.9	246.0
cb	1.9	
14	1.2	
c	0.3	250.6

T.P.	8.62	258.90	0.66	250.28
------	------	--------	------	--------

14	7.5	
cb	6.0	
N	4.0	254.9

193' W.

N	3.0	255.9
cb	5.8	
14	6.7	
c	7.8	251.1
14	9.0	
cb	10.1	
S	13.6	245.3

258.90

20' W. of E. line = 33rd St20' chs
10' 1/4"

258.90

Hawthorne St

50

S 15.5 243.4

+15 10.5

ch 10.2

1/4 8.8

c 7.8 251.1

1/4 6.8

ch 5.5

+10 4.5

N 0.8 250.1

20' W. of E. line = E. ch

N 1.0 257.9

+10 5.8

ch 7.0

1/4 7.6

c 8.8 250.1

1/4 9.8

ch 12.7

S 23.2 235.7

30' W. of E. line = E. 1/4

S 25.6 233.3

ch 16.6

1/4 12.3

c 11.9 247.0

1/4 14.0

+5 9.4

ch 7.5

N.

2.0 256.9

T.P. 8.88 259.61 8.17 250.73

ch Ken B.M. 4.16 255.45

IVY ST X See
Felton To Gregory

219.10

51

B.M.		241.26	240.59	N.W. Felton + Ivy
T.P.	0.49	229.22	13.03	228.73
T.P.	0.25	219.10	10.37	218.85
00 = E. line Felton St				
N.		14.2		204.9
+5		10.3		208.8
+12		6.0		213.1
ch.		5.1		214.0
1/4		4.0		215.1
c		2.6		216.5
1/4		1.1		218.0
ch.		1.4		217.7
S.		6.0		213.1
	8'E			
S.		9.5		209.0
ch		4.6		214.5
1/4		4.8		214.3
c		6.7		213.4
1/4		8.3		210.8
ch		11.5		207.6
+6		11.7		207.4
N		16.5		202.6
	19'E			
N		14.2		204.9
+15		19.3		199.8
ch		18.2		200.9

Plotted Jan 21st 1926

+4	14.3	204.8
"4	14.5	204.6
c	12.0	207.1
1/4	10.1	209.0
S?	10.1	209.0
+10	14.0	205.1
S.	15.4	209.7
	27'E	
S.	12.3	206.8
+8	17.7	201.4
ch.	13.5	205.6
1/4	14.0	205.1
c	17.7	201.4
1/4	18.4	200.7
ch	21.0	198.1
+2	18.0	201.1
N	12.0	207.1
	45'E	
N	4.3	214.8
ch	10.9	208.2
1/4	16.4	202.7
c	19.8	199.3
1/4	21.6	197.5
+5	24.0	195.1
ch.	21.5	197.6
+10	19.0	200.1
S	14.6	204.5

219.10

60'E.

S		22.2	196.9
+15		26.2	192.9
cb		24.0	195.1
'14		19.3	199.8
C		17.0	205.1
'14		7.6	211.5
cb.		4.6	214.5
T.P.	10.31	228.93	0.48
N		10.1	218.8
	73'E		
N		7.9	221.0
cb		11.3	217.6
'14		15.1	213.8
e		19.0	209.9
'14		25.0	203.9
cb.		30.2	198.7
S		37.6	191.3
	95'E		
S		33.4	195.5
cb		22.5	206.4
'14		19.0	209.9
C		14.0	214.9
'14		8.2	220.7
cb		6.7	222.2
N		3.7	225.2

228.93

110'E.

N.		1.6	227.3
+3		3.0	
cb		5.3	
+2		6.1	
'14		6.2	
+4		6.6	
e		10.5	218.4
'14		15.6	
cb.		19.3	
S:		28.0	200.9
	130'E		
S		21.0	207.9
cb		13.3	
'14		9.8	
C		5.0	223.9
'14		5.1	
+7		5.2	
cb		4.1	
+15		3.2	
N.		0.2	228.7
	150'E.		
N		70.3	229.2
+5		2.6	
cb		3.5	
+3		4.3	
'14		4.4	

147.57

52

228.93

150' E. (con)

4	3.8	225.1
14	5.5	
cb	7.8	
S.	15.4	213.5

170' E.

S	10.0	218.9
cb	5.5	
14	3.8	
+5	3.5	
c	4.4	224.5
14	4.5	
+7	4.9	
cb	4.0	
+15	3.7	
N	0.4	228.5

185' E.

N.	2.3	226.6
+5	4.8	
cb	5.2	
+2	6.6	
14	6.2	
c	5.5	223.4
14	4.9	
cb	5.7	
S	8.3	220.6

228.93

200' E = W. Line Gregory

145 ST
53

S	10.0	218.9
cb	8.2	
14	7.3	
c	8.1	220.8
14	8.5	
cb	8.4	
N	8.0	220.9

7.5 E. of W. Line = E. edge ent. walk

extends from N. End of N. of N. Line 14.

N-1.00 + S.E. cor ent. walk	8.37	
10' E. of W. Line		
N	8.6	220.3
cb	9.8	
14	9.8	
c	10.2	218.7
14	10.4	
cb	11.3	
S	11.5	217.4

20' E. = W. cb

S	13.5	215.4
cb	12.6	
14	12.1	
c	11.4	217.1
14	11.1	
cb	10.7	
N	10.4	218.5

Levels

All shots are in Main drainage channel unless otherwise noted

B.M. N.E.B.P. Nile + Thort 303.69

+ 0.09 303.78

T.P. 13.5 290.63

+ 0.00 290.63

+ 0.30 -130.1 277.62

H.I. 277.92

0+00 = Flowline 36" culvert 6.00 271.92

+10 = Lip concrete apron 7.04 270.88

+2.5 7.5 270.4

+50 8.6 269.3

+75 8.5 269.4

+92.70 = L Point 8.7 269.2

+125 9.5 268.4

+50 12.0 265.9

+75 13.2 264.7

+200 13.5 264.4

T.P. -12.75 265.17

+0.00

H.I. 265.17

+225 1.6 263.6

+50 2.3 262.9

+75 1.6 263.6

21' Left - Bottom Main drain 4.3 260.9

+300 1.9 263.3

38' Left - Bottom Main drain 5.1 260.1

Left = East of Line

Right = West

B.M.D. - Signifies Bottom Main Drain

56

Noted H.I. 265.17

3+25 2.1 263.1

37' Left - Bottom Main drain 5.6 259.6

3+50 5.3 259.9

29' Left - Bottom Main drain 2.3 258.9

3+80 " " 6.9 258.3

3+90 6.2 259.0

3+95 = Approximate & Redwood
5' 20' Left = M.M.

4+00 6.3 258.9

20' Right = B.M.D. 7.6 257.6

4+25 7.8 257.4

12' Right = B.M.D. 8.8 256.4

4+38 = B.M.D. 9.2 256.0

4+50 7.4 257.8

13' Left = B.M.D. 8.9 256.3

4+75 7.6 257.6

26' Left = B.M.D. 10.5 254.7

5+00 9.3 255.9

30' Left = B.M.D. 11.4 253.8

5+25 12.5 252.7

21' Left = B.M.D. 12.1 253.1

5+50 12.1 253.1

15' Left = B.M.D. 13.0 252.2

T.P. -12.83 252.34

+0.05

H.I. 252.39

H.I. 252.39

5+75	0.3	252.1
8 Left = B.M.D	0.7	251.7
6+00 = B.M.D.	1.1	251.3
6+25	1.7	251.2
14' Left = B.M.D.	2.6	249.8
6+50	1.9	250.7
26' Left = B.M.D	3.8	248.6
6+75	2.0	250.4
22' Left = B.M.D.	5.2	247.2
7+00	3.8	248.6
20' Left = B.M.D	6.4	246.0
7+25	6.9	245.5
11' Left = B.M.D.	7.6	244.8
7+45 = B.M.D.	8.9	243.5
7+75	5.7	246.7
15' Right = B.M.D	9.7	242.7
8+00	7.2	245.2
30' Right = B.M.D.	10.4	242.0
8+07 = 6' Left = M.H.		
8+20	7.2	245.2
38' Right = B.M.D.	10.9	241.5
8+50 = B.M.D	13.4	239.0
8+75	9.9	242.5
45' Left = B.M.D	15.4	237.0
9+00	9.6	242.8

H.I. 252.39

40' Left = B.M.D	16.2	236.2
9+19	11.2	241.4
9+25 = Bottom Feeder Drain	14.4	238.0
30' Left = B.M.D	17.0	235.4
9+30	12.2	240.2
9+50	11.3	241.1
28' Left = B.M.D	18.5	233.9
T.P.		-1307
		239.3
	+2.56	

H.I. 241.88

9+75	3.7	238.2
23' Left = B.M.D	7.6	234.3
10+00	3.8	238.1
24' Left = B.M.D	8.0	233.9
10+25	4.1	237.8
20' Left = B.M.D	9.4	232.5
10+50	6.7	235.2
10' Left	7.1	232.8
10+70 = B.M.D	9.6	232.3
10+79 = 2 nd ^{APPROX} Pounce = B.M.D	9.7	232.2
10+95 = B.M.D	10.9	231.2
11+00	9.1	232.8
6' Left = B.M.D	11.4	230.5
11+25	8.5	233.4
8' Left = B.M.D	12.4	229.5
11+50	8.4	233.5

57

15' Left = B.M.D	12.5	229.4	
11+75	9.1	232.8	
20' Left = B.M.D	12.9	229.0	
12+00 = L Point	9.9	232.0	
34' Left = Right angle to Back Tangent B.M.D	13.5	228.4	
12+25	10.7	231.2	
26' Left = B.M.D	13.8	228.1	
12+50	12.1	229.8	
25' Left = B.M.D	14.2	227.7	
12+75	12.9	229.0	
13' Left = B.M.D	14.7	227.2	
13+00	13.1	228.8	
13' Left = B.M.D	15.3	226.6	
T.P.		-12.96	228.92
+0.38	H.I. 229.30		
13+25	2.1	227.2	
17' Left = B.M.D	3.6	225.7	
13+50	2.8	226.5	
13' Left = B.M.D	3.8	225.5	
13+75	3.0	226.3	
30' Left = B.M.D	4.0	225.3	
14+00	4.0	225.3	
26' Left = B.M.D	7.2	222.1	
14+25	5.6	223.7	
13' Left = B.M.D	8.8	220.5	

14+32 - 8.5' Right = M.H.			
14+50	7.0	222.3	
7' Left = B.M.D	9.4	219.9	
14+75 = B.M.D	9.6	219.7	
14+87 = B.M.D	11.7	217.6	
15+00	9.3	220.0	
20' Right = B.M.D	12.0	217.3	
15+25	9.1	220.2	
47' Right = B.M.D	13.0	216.3	
15+50	10.6	218.7	
36' Right = B.M.D	15.0	214.3	
15+75	13.3	216.0	
20' Right = B.M.D	15.3	214.0	
15+94 = B.M.D	16.0	213.3	
16+00	14.0	215.3	
10' Left = B.M.D	16.2	213.1	
T.P.		-11.50	217.80
+1.20			
	H.I. 219.00		
16+25	2.1	216.9	
38' Left = B.M.D	6.9	212.1	
16+50	0.5	218.5	
40' Left = B.M.D	7.9	211.1	
16+75	2.6	216.4	
40' Left = B.M.D	8.4	210.6	

H. 1. 2 19.00

17+00	50	214.0	
48' Legt = B.M.D	94	209.6	
17+25	75	211.5	
60' Legt = B.M.D.	10.~	209.8	
17+30 = 8' Right = & M.H.			
17+50	8.8	210.2	
12' Legt = B.M.D	11.5	207.5	
17+60 = B.M.D	12.1	206.9	
17+75	10.3	208.7	
13' Right = B.M.D	12.5	206.5	
18+00	11.3	207.7	
15' Right = B.M.D	13.0	206.0	
18+20 = B.M.D	13.9	205.1	
18+50 = B.M.D	14.6	204.4	
18+75 = B.M.D	16.~	202.8	
19+00 = B.M.D = End Line	16.6	202.4	
T.P		-0.14	218.86
	+12.36	231.22	
T.P		-9.07	231.15
	+11.93	243.08	
T.P		-1.07	242.01
	+15.48	254.49	
T.P		-0.10	254.39
	+12.92	267.31	
T.P		-0.21	267.10

	+13.18	280.28	267.10
T.P			-0.11
	+13.07	293.24	280.17
B.M. S.E 7' Tack Boundary + Quince			-2.42
			290.82
			correct 290.78
			Error .04

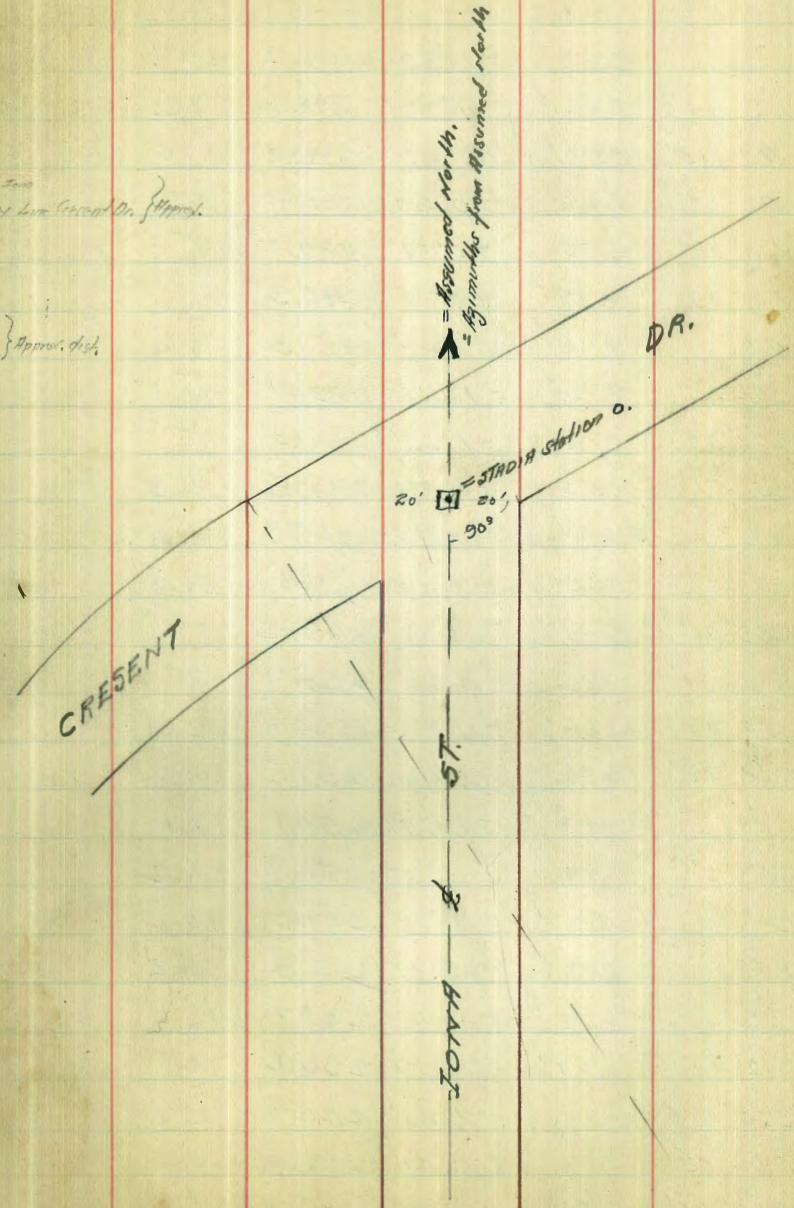
Yok
M. S. 100
No. 100
7-5-10

PROPOSED Road And
STADIA Topog. W LARCH MOUNT Mt.
Bet. N.Y. and Iowa H.R.
And Intersection of 60th and Radio Road.

	0.69	289.97		289.28	BM. in SW. Feb 60th + 60th St. 3 Nails
cht SE top cb. back 160th on back		7.71			
" NE " " " " R. "		8.66			
Left B.M. on Pine Stake Iron Quadrant	10.71	279.26			BM No 1 on 9th Ave at N.Y. Ave. Grand Dr. } Approx.
T.P.	0.75	277.98	12.74	277.23	
T.P.	0.15	265.47	12.66	265.32	BM No 2 25' 30" 60th on Pine Stake 150' 1/2 back } Approx. dist.
T.P.	3.28	257.07	11.68	253.79	
T.P.	0.11	244.70	12.48	244.59	NE. cor. 60th + 3rd and Radio Rd.
Left B.M. in file		0.14	244.56		

Readings from \square O. Eley. 285.13
Elev. 285.13
Azimuths from assumed north

Azimuth	Stadia	Vert. A	Elev.	Vert. Dist.	Horiz. Dist.
172°41'	154	-2°15'	279.13	-	-
185°04'	151	-2°16'	279.17	-	-
193°	30	0°	285.13	-	-
148°15'	35	+2°0'	286.35	-	-
356°30'	40	-3°40'	282.58	-	-
345°	68	-7°16'	276.60	66.9	
341°48'	95	-7°04'	273.50	93.6	
355°20'	106	-7°25'	271.57	104.5	
3°13'	120	-6°34'	271.50	118.8	
19°27'	138	-4°50'	273.54	137.2	
33°08'	217	3°36'	271.53	216.5	
36°10'	248	-2°06'	276.07	247.7	
42°28'	271	-0°40'	282.00	-	



Azimuth	Stadia	vert Δ	vert Dis.	Horiz Dis.
42° 28'	227 ✓	-1° 30'	279.18	227.0
42° 44'	332 ✓	-1°	279.26	332
44° 15'	400 ✓	-0° 45'	279.93	400
52°	265 ✓	-0° 20'	283.60	—
56° 13'	350 ✓	+0° 39'	289.12	—
56° 13'	297 ✓	+1°	290.3	—
49°	176 ✓	-0°	285.13	—
34° 55'	92 ✓	-1° 02'	283.47	—
57° 33'	80 ✓	+1° 35'	287.34	—
13° 51'	152 ✓	-6° 04'	269.15	150.3

Readings from Station #1		Elev. 269.2	check on station #0	
193° 51'	152 ✓	+6° 04'	285.2	150.3
235° 16'	140 ✓	0°	269.2	—
275° 30'	112 ✓	-1° 42'	265.9	—
286° 47'	66 ✓	-13° 35'	254.1	62.4
344° 58'	36 ✓	-20° 22'	257.5	31.6
344° 58'	52 ✓	-17° 49'	254.1	47.1
35° 16'	90 ✓	-8° 02'	256.7	88.2
17° 50'	95 ✓	-13° 19'	247.9	90.0
28° 40'	110 ✓	-13° 03'	245.0	104.4
13° 36'	103 ✓	-14° 13'	244.7	96.8
342° 14'	101 ✓	-20° 07'	236.6	89.1
290°	160 ✓	-17° 21'	223.7	145.8
302° 03'	217 ✓	-15° 21'	213.8	201.8
304° 36'	244 ✓	-15° 50'	205.1	225.8

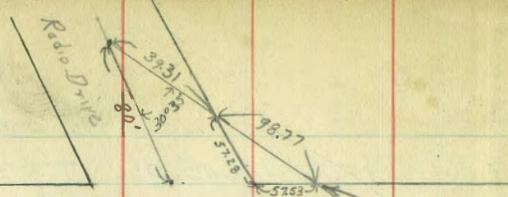
Azimuth	Stadia	vert Δ	vert Dis.	Horiz Dis.
308° 04'	276 ✓	-11° 52'	213.7	264.3 ✓
310° 34'	306 ✓	-9° 48'	217.9	297.1 ✓
323° 31'	295 ✓	-8° 56'	223.9	287.9 ✓
318° 51'	254 ✓	-12° 10'	216.9	242.7 ✓
316° 52'	237 ✓	-15° 17'	209.0	220.5 ✓
314° 43'	217 ✓	-16° 41'	209.2	198.9 ✓
313° 17'	184 ✓	-16° 46'	218.4	168.7 ✓
313° 41'	154 ✓	-18° 36'	222.6	138.3 ✓
352° 49'	145 ✓	-15° 26'	232.0	134.7 ✓
351° 11'	164 ✓	-16° 04'	225.6	151.4 ✓
352° 03'	194 ✓	-14° 40'	221.7	181.6 ✓
347° 45'	232 ✓	-15° 52'	208.2	214.7 ✓
345° 50'	242 ✓	+14° 31'	210.5	226.8 ✓
344° 27'	276 ✓	-9° 41'	223.5	268.2 ✓
344° 29'	312 ✓	-6° 53'	232.1	307.5 ✓
2° 16'	344 ✓	-6° 20'	231.5	339.8 ✓
5° 12'	306 ✓	-8° 47'	223.0	298.9 ✓
10° 04'	324 ✓	-8° 25'	222.3	317.1 ✓
11° 51'	293 ✓	-11° 10'	213.5	282.0 ✓
14°	290 ✓	-11° 39'	211.9	278.2 ✓
19° 58'	254 ✓	-9° 10'	229.2	247.5 ✓
24° 04'	236 ✓	-8° 44'	233.5	230.5 ✓
38° 35'	192 ✓	-3° 50'	256.4	191.2 ✓
47° 51'	184 ✓	-2°	262.8	— ✓
42° 14'	250 ✓	-3° 35'	253.6	249.0 ✓

AZMUTH	Stadia	Ver Δ	Ver. Dis.	Horiz. Dis.	Check on BM #2 Page 60	AZMUTH	Stadia	Ver Δ	Ver Dis	Horiz Dis	check on BM #3 Page 60
44° 04'	324	-2° 41'	254.0	—	—	17° 02'	224	+2° 33'	245.0 ✓	—	—
31° 49'	442	-4° 27'	235.0	439.3	Station #2	10° 41'	134	+0° 50'	236.9 ✓	—	—
Readings from Station #2. Elev 235.0					—	8° 41'	132	-0° 51'	233.0 ✓	—	Wedge Road
211° 49'	442	+4° 26'	269.1	439.3	Check on Station #1	21° 32'	162	-0° 20'	234.1 ✓	—	E. edge Road
203° 38'	170	+2° 42'	243.0	—	—	32° 05'	120	-1° 37'	233.7 ✓	—	E. edge Road
176°	190	+10° 39'	269.5	183.5 ✓	—	25° 35'	104	-1° 54'	231.6 ✓	—	W. edge Road
161° 16'	96	+8° 35'	249.2	93.9 ✓	—	40° 02'	110	-1° 56'	231.3 ✓	—	—
223° 33'	126	-3°	230.6	—	—	34°	140	-4° 49'	223.3 ✓	139.0	—
237°	56	-1° 40'	233.4	—	—	29° 31'	154	-4° 22'	223.3 ✓	153.1	—
47° 46'	44	0°	235.0	—	W. Edge Road	24° 30'	268	+2° 12'	245.3 ✓	267.6	—
63° 49'	70	+1° 15'	236.5	—	E. Edge Road	26° 04'	262	+1° 06'	240.0 ✓	—	—
14° 16'	76	-13° 10'	218.1	72.1 ✓	—	31° 14'	246	+0° 52'	238.7 ✓	—	—
337° 34°	54	-20° 10'	228.6	97.6 ✓	—	34° 52'	196	-3° 20'	223.6 ✓	195.3	—
343° 07'	40	-22° 34'	220.8	34.2 ✓	—	39° 15'	162	-4° 03'	223.6 ✓	161.2	—
258° 51'	94	-13° 16'	214.0	89.0 ✓	—	49° 19'	152	-1°	232.0 ✓	—	—
235° 13'	148	-7° 54'	214.9	145.2 ✓	—	40° 22'	400	+1° 50'	247.8 ✓	399.6	N. Edge Radio Rd.
248° 14'	142	-8° 50'	213.5	138.6 ✓	—	42° 32'	396	+1° 55'	240.2 ✓	—	S. Edge Radio Rd.
262° 23'	136	-4° 28'	224.4	135.2 ✓	—	—	—	—	—	—	—
274° 55'	162	-0° 30'	233.6	—	—	—	—	—	—	—	—
299° 10'	146	+0° 15'	235.6	—	—	—	—	—	—	—	—
295° 29'	100	-3° 30'	228.9	99.6 ✓	—	—	—	—	—	—	—
332° 35'	96	-2° 10'	231.4	—	—	—	—	—	—	—	—
331° 54	136	-0° 20'	234.2	—	—	—	—	—	—	—	—
331° 54	146	+1° 52'	239.8	—	—	—	—	—	—	—	—
9° 54'	212	+3° 13'	246.9	211.3 ✓	—	—	—	—	—	—	—

Back

11.07
65.00
1.87

60m



78.72

84.33

321.14

Street

McLain

0.995

Total - P.E. To P.I. = 808.60

591.80

30.00

21

34

IONA

This sketch is not drawn to scale

11.07

65.00

1.87

7-26-29 X-section proposed Road from
 J.C. Bliss 607th & Radio Drive to Iowa & Marlin
 50' wide - 10' cbs
 Drebert Sketch with Ties - Page 63 - This book
 Rauner
 B.M. N.E. Nails in Pole 607th & Radio

+ 1.97

Σ 246.53

80' along E of Radio Drive East of 607th = 0+100

Out 15	4.2	246.7
Out 20	2.1	244.4
N	4.2	242.3
+ 5	6.5	240.0
cb	6.3	240.2
¢	6.6	239.9
cb	7.4	239.1
S	8.1	238.4
Out 15	9.5	237.0
+ 25		
Out 15	11.8	234.7
S	10.9	235.6
cb	10.2	236.3
¢	8.7	237.8
cb	8.0	238.5
N	7.8	238.7
Out 10	7.9	238.6
Out 15	5.4	231.1
+ 50		
Out 15	8.4	238.1
N	8.7	237.8

Σ 246.53

64

cb	8.9	237.6
¢	12.0	234.5
cb	13.4	233.1
S	14.6	231.9
Out 15	14.4	232.1
+ 75		
Out 2.5	22.4	224.1
S	23.0	223.5
cb	22.4	224.1
¢	21.0	225.5
cb	17.3	229.2
N	13.2	233.3
Out 5	9.5	237.0
Out 15	9.5	237.0
+ 100		
Out 15	11.2	235.3
Out 8	12.0	234.5
N	16.8	228.7
cb	22.1	224.4
¢	26.0	220.5
110' Bottom Water Course	28.7	217.8
cb	25.5	221.0
S	25.4	221.1
Out 15	22.5	224.0

π 246.53

1425

Out 15	14.8	231.7
S	18.3	228.2
cb	22.3	224.2
♀ - Flowline Wooden Culvert Under 60 ^m	28.9	217.6
cb	18.2	228.3
+7	14.1	232.4
N	14.8	232.2
Out 15	13.5	233.0

1450

Out 15	14.9	231.6
N	15.2	231.3
cb	15.6	230.9
♀	16.1	230.4
+13	19.6	226.9
cb - Bottom small drain from 6 ^m	23.2	223.3
+3	18.5	228.0
S	16.2	230.3
Out 15	13.5	233.0

1475

Out 15	10.6	235.9
S	13.0	233.5
cb	14.8	231.7
♀	15.2	231.3
+12	15.2	231.3
cb	16.4	230.1

65

π 246.53

N	20.4	226.1
out 7	23.0	223.5
Out 20	21.6	224.9
2+00		
Out 20	28.0	218.5
Out 3 - Flowline Culvert Under 10 ^m	31.4	215.1
N	30.4	216.1
cb	24.0	222.5
♀	16.9	229.6
+5	14.5	232.0
cb	12.9	233.6
S	11.7	234.8
Out 15	7.8	238.7

2+25

Out 15	7.7	238.8
S	9.5	237.0
cb	10.4	236.1
♀	14.8	231.7
cb	21.0	225.5
N	25.2	221.3
Out 20 - Bottom Water Course	31.7	214.8

2+50

Out 28 - Bottom Water Course	32.3	214.2
Out 5	25.7	220.8
N	20.5	226.0

T 246.53

cb	16.4	230.1
♀	12.7	233.8
cb	8.9	237.6
S	6.6	239.9
Out 15	5.3	231.2
T.P.	-2.57	243.96

+ 5.83

T 249.79

2+75

Out 15	6.4	243.4
S	9.1	240.7
cb	11.0	238.8
♀	14.2	235.6
cb	17.2	232.6
N	20.8	229.0
Out 10	27.8	222.0
Out 25 - Bottom Water Course	32.9	216.9

3+00

Out 25	28.0	221.8
N	18.4	231.4
cb	16.4	233.4
♀	13.5	236.3
cb	10.8	239.0
S	9.3	240.5
Out 15	6.3	243.5

T 249.79

66

3+25

Out 15	6.4	243.4
S	9.3	240.5
cb	11.5	238.3
♀	14.3	235.5
cb	17.2	232.1
N	20.2	229.6
Out 25	27.1	222.7

3+50

Out 25	28.8	221.0
N	20.3	229.5
cb	18.0	231.8
♀	15.0	234.8
cb	11.4	238.4
S	8.8	241.0
Out 15	6.0	243.8

3+75

Out 15	4.6	245.2
S	8.1	241.7
cb	10.2	239.6
♀	14.0	235.8
cb	17.6	232.2
N	19.6	230.2
Out 25	28.8	221.0

π 249.79

4400

Out 25	2.6.2	223.6
N	18.4	231.4
cb	16.0	233.8
♀	12.7	237.1
cb	9.2	240.6
S	6.6	243.2
Out 15	2.2	247.6

4425

Out 15	0.0	249.8
S	4.5	245.3
cb	7.3	242.5
♀	11.0	238.8
cb	14.8	235.0
N	16.9	232.9
Out 25	2.57	224.1

4450

Out 25	20.4	229.4
N	14.5	235.3
cb	12.0	237.8
♀	8.8	241.0
cb	5.5	244.3
S	2.7	247.1

T.P. - 0.15 249.64

+11.4 261.05

Out 15	7.7	253.3
--------	-----	-------

π 261.05

67

4475

Out 15	5.3	255.7
S	9.9	251.1
cb	12.5	248.5
♀	17.0	244.0
cb	20.3	240.7
N	23.0	238.0
Out 25	29.5	231.5

5400

Out 25	28.0	233.0
N	19.3	241.7
cb	16.8	244.2
♀	12.5	248.5
cb	8.3	252.7
S	5.7	255.3
Out 15	1.0	260.0

T.P.

0.00 261.05

+11.33

π 272.38

5425

Out 15	10.1	262.3
S	13.4	259.0
cb	15.0	257.4
♀	19.7	252.7
cb	25.0	247.4

T 272.38

N	2.88	243.6
Out 25	37.1	235.3
5+50		
Out 25	35.0	237.4
SN?	24.9	247.5
cb	21.6	250.8
£	17.5	254.9
cb	13.8	258.6
S	12.1	260.3
Out 15	7.6	264.8
5+75		
Out 15	4.1	268.3
S	8.4	264.0
cb	12.2	260.2
£	14.2	257.7
cb	20.9	251.5
N	23.7	248.7
Out 25	32.0	240.4
6+00		
Out 25	30.6	241.8
N	20.7	251.7
cb	17.9	254.5
£	14.3	258.1
cb	9.0	263.4
S	6.5	265.9

T 272.38

68

Out 15	1.7	270.7
6+25		
Out 15	0.0	272.4
S	5.2	267.2
cb	7.8	264.6
£	13.0	259.4
cb	17.0	255.4
N	20.7	251.7
Out 25	27.6	244.8
6+50		
Out 25	24.8	247.6
N	16.9	255.5
cb -	13.3	259.1
£	8.9	263.5
cb	4.5	267.9
S	2.0	270.4
T.P.	0.00	272.38
+130.7		
T 285.45		
Out 15	12.6	272.8
6+75		
Out 15	10.7	274.7
S	14.2	271.2
cb	15.8	269.6
£	18.2	267.2

π 285.45

cb	23.2	262.2
N	27.1	258.3
Out 25	33.0	252.4
7+00		
Out 25	30.0	255.4
N	22.8	262.6
cb	18.7	266.7
¢	16.6	268.8
cb	13.0	272.4
S	10.3	275.1
Out 15	8.3	277.1
7+25		
Out 15	6.4	279.0
S	9.0	276.4
cb	10.4	275.0
¢	13.1	272.3
cb	16.1	269.3
N	17.4	268.0
Out 25	26.0	259.4
7+50		
Out 25	21.4	264.0
Out 7	15.0	270.4
N	17.1	271.3
cb	13.0	272.4
¢	11.2	274.2
cb	8.4	277.0

π 285.45

69

S	6.5	278.9
Out 15	3.2	282.2
7+75		
Out 15	1.6	283.8
S	3.4	282.0
cb	6.0	279.4
¢	9.2	276.2
cb	11.4	274.0
N	12.8	272.6
Out 25	17.5	267.9
8+08 ⁶⁰ = P.I. of Proposed Road + of Tona Drive Projected		
Out 25	12.8	272.6
N	10.0	275.4
cb	8.4	277.0
¢	5.6	279.8
cb	3.0	282.4
S	1.9	283.5
Out 15	0.5	284.9
T.P.		-2.85 282.60
+7.46		
π 290.06		
X-section Tona from 90° off EL. at S.E. Cor. to 75' North - 40' wide		
90° off EL. at S.E. Cor. = +100		
E	3.4	286.7
+10	4.5	285.6

T 290.06

£	5.0	285.1
+10	6.0	284.1
W	7.0	283.1

0+25

W	8.3	281.7
+10	7.6	282.4
£	7.1	283.0
+10	6.0	284.1
E	5.2	284.9

0+55 = P.I. - See sketch page 63

E	7.9	282.2
+10	8.8	281.3
£	10.3	279.8
+10	11.2	278.9
W	13.0	277.1

0+75

W	15.2	274.9
+10	14.6	275.5
£	14.1	276.0
+10	12.9	277.2
E	11.4	278.7

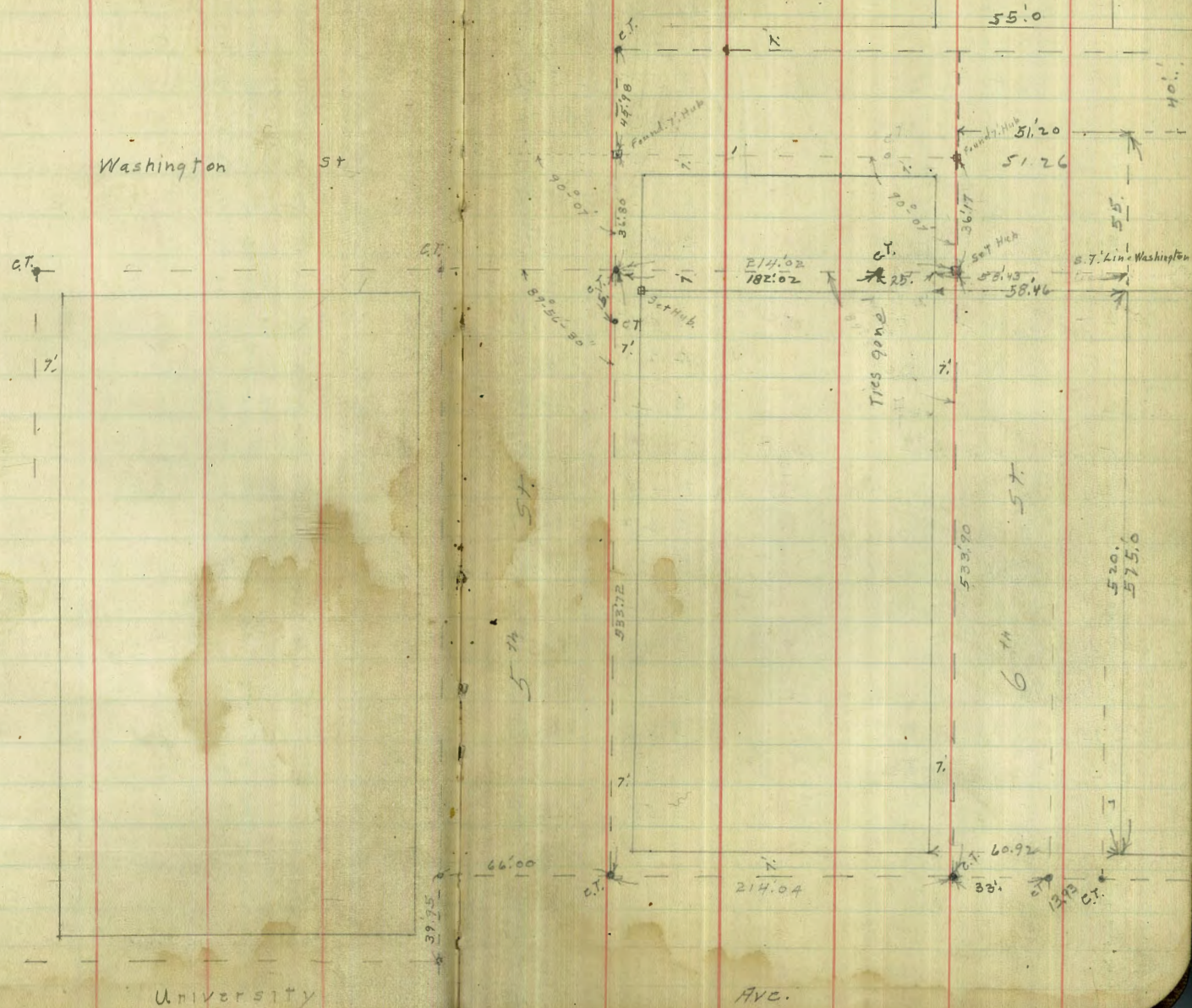
B.M. S.E. Paving St. at the Jono & Merley -297 287.09

+389 290.98

B.M. S.W. Nails Bach +60th -174 289.24

Correct 289.28

Survey of Proposed Opening on S. Side
 of Washington St Bet 5th + 6th 51s
 11-20-19
 Mills.



9/12/30
London

X sec. Opening of Washington St.
From 5th to 6th

B.M	2.77	286.77	284.02	B.P. SW. 5 th & Wash.
0-66 = web	5 th		286.8	
S.L.	top eb		2.77	284.02
S.L.	gut		3.52	283.27
cb			3.05	283.74
1/4			2.90	283.89
⊕			2.83	283.96
1/4			2.86	283.93
eb				
+5	gutter		3.05	283.74
+5	top eb		2.25	284.54
N.L.			2.2	284.6
0-53 = W's	5 th			
N.L.			3.44	283.35
eb			3.22	283.57
1/4			3.32	283.47
⊕			3.24	283.54
1/4			3.20	283.59
eb			3.20	283.59
S.L.			3.10	283.69
0-40 = ⊕	5 th			
S.L.			3.51	283.28
eb			3.49	283.30
1/4			3.75	283.04
⊕			3.90	282.89
1/4			3.81	282.98
eb			3.68	283.11

60' wide 10' ebs 40' Rdway.
Sec P71

				288.8
N.L.			3.76	283.03
0-27 = E 4	5 th			
N.L.			4.20	282.59
cb			4.37	282.42
1/4			4.73	282.06
+4			4.90	281.89
⊕			4.72	282.07
1/4			4.36	282.43
eb			4.12	282.67
S.L.			4.07	282.72
0-14 = Feb	5 th			
S.L.	top eb		4.38	282.41
S.L.	gut		4.81	281.98
cb	top eb		4.49	282.30
eb	gutter		4.89	281.90
1/4			5.03	281.76
⊕			5.16	281.63
1/4			5.32	281.47
cb			4.98	281.81
N.L.			4.70	282.09
0+00 = E.L	5 th			
N.L.			4.91	281.88
cb			5.38	281.41
+2			5.5	
+7			4.3	

Washington

0+00		<u>286.8</u>
1/4	4.4	
1/2	4.4	282.4
1/4	4.1	
cb	4.0	
S.L.	4.0	282.8
0+50		
S.L.	4.3	282.5
cb	4.4	
1/4	4.6	
1/2	4.8	282.0
1/4	4.9	
+9	5.0	
cb	5.6	
+5	5.1	
N.L.	4.9	281.9
1+00		
N.L.	5.2	281.6
+6	5.0	
+8	6.0	
cb	4.5	
1/4	4.6	
1/2	4.8	282.0
1/4	4.8	
cb	4.4	
S.L.	4.4	282.4

Washington

73

1+50		<u>286.8</u>
S.L.	4.2	282.6
cb	4.5	
1/4	4.5	
1/2	4.8	282.0
1/4	4.9	
cb	5.1	
+2	6.2	
+4	5.3	
N.L.	5.2	281.6
2+00 = N.L. 6th		
N.L.	4.9	281.9
+7	4.8	
+8	6.4	
cb	4.8	
1/4	4.7	
1/2	4.7	282.1
1/4	4.3	
cb	4.4	
S.L.	4.3	282.5
10'S	4.2	
2+10 = web 6th		
S.L.	4.4	282.4
cb	4.4	
1/4	4.2	
1/2	4.2	282.6
1/4	4.7	

Washington

2+10	286.79		<u>286.8</u>
eb		4.9	
NL		4.6	282.2
2+20			
NL		4.6	282.2
eb		4.6	
1/4		4.7	
±		4.7	282.1
1/4		4.5	
eb		4.4	
S.L.		4.4	282.4
2+30			
S.L.		4.6	282.2
TP	4.56	286.79	4.56 282.23
eb		4.6	
1/4		4.5	
±		4.5	282.3
1/4		4.5	
eb		4.6	
N.L.		4.6	282.2
2+40			
N.L.		4.6	282.2
eb		4.5	
1/4		4.4	
±		4.5	282.3
1/4		4.5	

Washington.

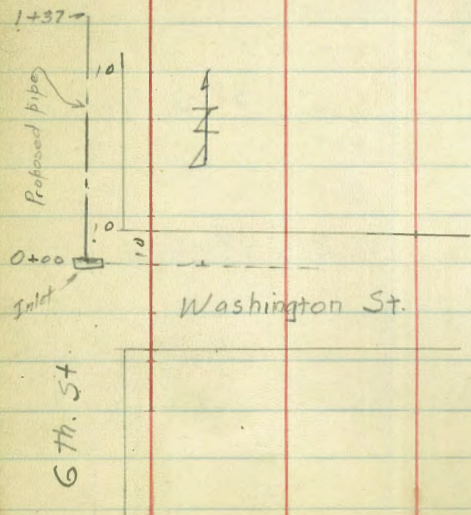
74

2+40			
eb		4.6	
S.L.		4.7	282.1
2+50			
S.L.		4.8	282.0
eb		4.7	
1/4		4.5	
±		4.4	282.4
1/4		4.5	
eb		4.6	
N.L.		4.7	282.1
2+60 = FL 6th			
N.L.		4.6	282.2
eb		4.6	
1/4		4.7	
±		4.5	282.3
1/4		4.7	
eb		4.8	
S.L.		4.3	282.5

Profile of Proposed Culvert
 6th & Washington shown below.

28679

0+00	4.6
+06	4.6
+20	5.2
+22	4.6
+30	5.4
+34	4.6
+55	5.0
+75	5.4
+94	5.8
1+02	7.5
+13	13.6
1+37	24.4



Levels on E. line 6th St.
N. of 6th St. Extension
Flat P. 71.

10-2-30
Miller
Summering
Osborne

Q

76

S.W. 5th +
Washington

B.M.	2.23	286.25	286.3	284.02	
oo = S. line Washington from N. of 5 th St.		New line Produced	4.0	284.3	✓
o + 40 S.			4.9	281.4	✓
o + 70 S			8.4	277.9	✓
o + 85 S			12.7	273.6	✓
1 + 00 S			13.8	272.5	✓
1 + 10 S			9.6	276.7	✓
1 + 45 S			10.4	275.9	✓
1 + 58 S			11.1	275.4	✓
1 + 61 S			15.8	270.5	✓
T.P.	3.20	276.75	12.70	273.55	
1 + 90 S			276.8 13.1	263.7	✓
2 + 10 S			9.2	267.6	✓
2 + 44 ⁸⁰ W. edge parmc 6 th St. Extension			9.04	267.76	
T.P.	9.76	286.46	0.05	276.70	
ch B.M. N.W. 6 th + Univ			2.60	283.86 = 283.87	

7-25-34
Miller
Walton
Blair

X Sec. 6th Ave
University Ave North

Indexed
C.S.K.

B.M. B.P.	2.38	292.32		289.94
B.M. B.P. ^{new}	3.39	287.31	8.40	283.92
T.P.	6.05	284.28	9.08	278.23

100' N. of N. line Univ Ave.

W. line				284.28 4.7	✓
+3 = W. edge oiled pav		4.92		✓79.56	✓
+10		4.80		✓79.48	✓
+20		4.71		✓79.37	✓
+30 W. edge cont. Pav		4.75		279.53	✓
+40	±	"	"	4.70	279.58 ✓
+50	±	"	"	4.87	✓79.41 ✓
+60		5.1		✓79.1	✓
+80		5.0		✓79.0	✓

120' N. of Univ

N +80' E		5.6		✓78.6	✓
+60		6.0		✓78.0	✓
+51.1 E. edge cont. pav		6.22		✓78.06	✓
+41.1	±	"	"	6.04	✓78.04 ✓
+31.1 W " " "		6.13		✓78.15	✓
+26		5.98		✓78.30	✓
+24		5.69		✓78.59	✓
+20		5.53		✓78.75	✓
+10		5.34		✓78.94	✓
+3 W. edge oiled pav.		5.20		✓79.08	✓
W. line		5.1		✓79.1	✓

284.28

123' N. of Univ Ave

29' E. of W. line = Post. S. End Guard Rail

125' N. of Univ Ave

27' E. of W. line = Post.

31' E. " " " = Post.

284.28
130' N. of Univ Ave

W.		5.0		✓79.2	✓
+3 = W. edge oiled Pav		5.27		✓79.03	✓
+10		5.39		✓78.94	✓
+20		5.56		✓78.70	✓
+25 = E. edge oiled Pav		5.61		✓78.67	✓
+27 = line of guard Posts		5.8		✓78.48	✓
+30		6.0		✓78.0	✓
+32 = W. edge cont. Pav		6.80		✓77.4	✓
+42	±	"	"	6.76	✓77.50 ✓
+52 E. edge " "		6.90		✓77.38	✓
+60		7.0		✓77.0	✓
+70		6.9		✓77.3	✓
+80		6.8		✓77.0	✓
+90		6.7		✓77.5	✓

140' N. of Univ

W +90		7.8		✓76.4	✓
+80		7.8		✓76.4	✓
+60		7.8		✓76.4	✓
+52.8 = E. edge cont. Pav		7.61		✓76.67	✓
+42.9	±	"	"	7.46	✓76.80 ✓
+32.9 = W " " "		7.50		✓76.70	✓

77

284.24

~~284.28~~

W + 30	6.3	277.9	✓
+ 28	5.5	278.7	✓
+ 27 = line Guard Posts	5.4	278.8	✓
+ 24 E. edge oiled Pav	5.50	278.8	✓
+ 20	5.56	278.72	✓
+ 10	5.42	278.86	✓
+ 3 = W. edge oiled Pav	5.36	278.92	✓
W.	5.0	279.2	✓

150' N. of Univ

W	5.2	279.0	✓
+ 3 = W. edge oiled Pav.	5.43	278.85	✓
+ 10	5.28	279.00	✓
+ 20	5.43	278.85	✓
+ 24 = E. edge oiled Pav	5.42	278.86	✓
+ 26.7 = Line Guard Posts	5.4	278.8	✓
+ 30	5.5	278.7	✓
+ 34.5 = W. edge emt. Pav	8.19	276.09	✓
+ 44.5 = E " " "	8.16	276.12	✓
+ 54.5 = E " " "	8.27	276.01	✓
+ 40	8.4	275.8	✓
+ 80	8.5	275.7	✓
+ 90	8.4	275.8	✓

175' N. of Univ.

26.3' E. of W. Line = Line of Guard Posts

6th Ave

200' N. of Univ

78

26.8' E. of W. Line = line of Guard Posts
250' N. of Univ
30.8' E. of W. Line = Line of Guard Posts
308' N. of Univ
38.5' E. of W. Line = N. End. of Guard Posts

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 body

of table in same row and column gives distance from side stake to slope stake. If ground is not

level, the level of the side stake and slope stake tower label by this amount if cut, else subtract. Add this amount

to cut or fill and find distance in table. Set up rod at this point and line of slope stake cut

target.
 necessary.

TABLE No. 2

To find Tangent and External for curve of any other degree, divide by degree of curve and add connection found in column of connections.

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.

**IMPROVED TABLES
AND
INFORMATION**

TABLE II—Continued
TRIGONOMETRIC FORMULAE (continued)

In any triangle:

Given a, b, C; to find c, B, A.

Use Law of Tangents.

Given A, B, c; to find a, b, C.

Use Law of Sines.

Given a, b, c; to find A, B, C.

$$\text{Let } \frac{a+b+c}{2} = s, \sqrt{\frac{(s-a)(s-b)(s-c)}{s}} = r$$

$$\cos \frac{1}{2} A = \sqrt{\frac{s(s-a)}{bc}}$$

$$\tan \frac{1}{2} A = \frac{r}{s-a}$$

$$\tan \frac{1}{2} B = \frac{r}{s-b}$$

$$\tan \frac{1}{2} C = \frac{r}{s-c}$$

Area of a triangle:

$$\text{Area} = \frac{1}{2} ab \sin C$$

$$\text{Area} = \sqrt{s(s-a)(s-b)(s-c)}$$

PRISMOIDAL FORMULA.

$$\text{Vol.} = \frac{h}{6} (E+b+4M)$$

h = altitude; b, B = bases; M = midsection

TABLE III
INCHES AND FRACTIONS OF AN INCH IN DECIMALS OF A FOOT

	0	1	2	3	4	5	6	7	8	9	10	11
$\frac{1}{16}$	.0052	.0885	.1719	.2552	.3385	.4219	.5052	.5885	.6719	.7552	.8385	.9219
$\frac{1}{8}$	.0104	.0938	.1771	.2604	.3438	.4271	.5104	.5938	.6771	.7604	.8438	.9271
$\frac{3}{16}$	.0156	.0990	.1823	.2656	.3490	.4323	.5156	.5990	.6823	.7656	.8490	.9323
$\frac{1}{4}$	.0208	.1042	.1875	.2708	.3542	.4375	.5208	.6042	.6875	.7708	.8542	.9375
$\frac{5}{16}$	.0260	.1094	.1927	.2760	.3594	.4427	.5260	.6094	.6927	.7760	.8594	.9427
$\frac{3}{8}$	.0313	.1146	.1979	.2813	.3646	.4479	.5313	.6146	.6979	.7813	.8646	.9479
$\frac{7}{16}$	.0365	.1198	.2031	.2865	.3698	.4531	.5365	.6198	.7031	.7865	.8698	.9531
$\frac{1}{2}$	.0417	.1250	.2083	.2917	.3750	.4583	.5417	.6250	.7083	.7917	.8750	.9583
$\frac{9}{16}$	.0469	.1302	.2135	.2969	.3803	.4635	.5469	.6302	.7135	.7969	.8802	.9635
$\frac{5}{8}$	.0521	.1354	.2188	.3021	.3854	.4688	.5521	.6354	.7188	.8021	.8854	.9688
$\frac{11}{16}$	.0573	.1406	.2240	.3073	.3906	.4740	.5573	.6406	.7240	.8073	.8906	.9740
$\frac{3}{4}$	.0625	.1458	.2292	.3125	.3958	.4792	.5625	.6458	.7292	.8125	.8958	.9792
$\frac{7}{8}$	.0677	.1510	.2344	.3177	.4010	.4844	.5677	.6510	.7344	.8177	.9010	.9844
$\frac{15}{16}$	.0729	.1563	.2396	.3229	.4063	.4896	.5729	.6563	.7396	.8229	.9063	.9896
$\frac{1}{1}$	.0781	.1615	.2448	.3281	.4115	.4948	.5781	.6615	.7448	.8281	.9115	.9948
	.0833	.1667	.2500	.3333	.4167	.5000	.5833	.6667	.7500	.8333	.9167	1.0000
	0	1	2	3	4	5	6	7	8	9	10	11

TABLE IV
USEFUL RELATIONS.

Lineal feet	×.00019	= miles
Lineal yards	×.0006	= miles
Square inches	×.007	= square feet
Square feet	×.111	= square yards
Square yards	×.0002067	= acres
Acres	×4840	= square yards
Cubic inches	×.00058	= cubic feet
Cubic feet	×.03704	= cubic yards
Links	×.22	= yards
Links	×.66	= feet
Feet	×1.5	= links

$$360^\circ = 21600' = 1296000''$$

$$\text{Radius} = \text{arc of } 57.2957790^\circ$$

$$\text{Arc of } 1^\circ (\text{radius} = 1) = .017453292$$

$$\text{Arc of } 1' (\text{radius} = 1) = .000290888$$

$$\text{Arc of } 1'' (\text{radius} = 1) = .000004848$$

$$\pi = 3.141592654 \quad \sqrt{\frac{1}{4\pi}} = 0.564190$$

$$\frac{\pi}{4} = 0.785398163 \quad \sqrt{\frac{6}{\pi}} = 1.240700982$$

$$\frac{\pi}{6} = 0.523598776 \quad \pi^2 = 9.869604401$$

$$\sqrt{\frac{4}{\pi}} = 1.128379167 \quad \frac{1}{\pi^2} = 0.101321184$$

$$\frac{\pi}{6} = 0.523598776 \quad \sqrt{\pi} = 1.772453851$$

$$\frac{4\pi}{3} = 4.188790205 \quad \frac{1}{\pi} = 0.3183099$$

Curvature of Earth's surface = about 0.7 feet in 1 mile

Curvature in feet = 0.667 (Dist. in miles)²

Difference between arc and chord length, 0.05 feet in 11½ miles

$$\text{Probable error of a single observation} = 0.6754 \sqrt{\frac{M^2}{n-1}}$$

Error in chaining of 0.01 feet in 100 feet:

Due to—

1. Length of tape error of 0.01 feet
2. Alignment. One end 1.4 feet out of line
3. Sag of tape at centre of 0.61 feet.
4. Temperature difference of 15°
5. Difference of pull of 15 lbs.

STADIA REDUCTION FORMULAE.

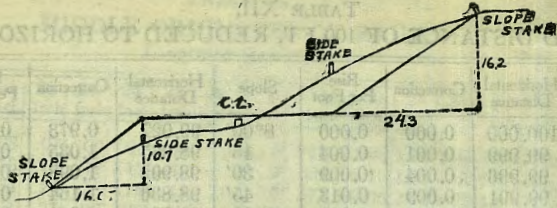
$$\text{Horizontal Distance} = R - R \sin^2 a + C \cos a$$

$$\text{Vertical Distance} = R \frac{1}{2} \sin 2a + C \sin a$$

$$R = \text{Reading} \times \frac{\text{distance from Object glass to cross hairs}}{\text{distance between cross hairs}}$$

C = distance from Object glass to cross hairs + distance from Object glass to center of instrument.

a = angle of elevation for mid Reading



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.

SLOPE 1 1/2 TO 1. ROADWAY OF ANY WIDTH.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0 00	0 15	0 30	0 45	0 60	0 75	0 90	1 05	1 20	1 35	0
1	1 50	1 65	1 80	1 95	2 10	2 25	2 40	2 55	2 70	2 85	1
2	3 00	3 15	3 30	3 45	3 60	3 75	3 90	4 05	4 20	4 35	2
3	4 50	4 65	4 80	4 95	5 10	5 25	5 40	5 55	5 70	5 85	3
4	6 00	6 15	6 30	6 45	6 60	6 75	6 90	7 05	7 20	7 35	4
5	7 50	7 65	7 80	7 95	8 10	8 25	8 40	8 55	8 70	8 85	5
6	9 00	9 15	9 30	9 45	9 60	9 75	9 90	10 05	10 20	10 35	6
7	10 50	10 65	10 80	10 95	11 10	11 25	11 40	11 55	11 70	11 85	7
8	12 00	12 15	12 30	12 45	12 60	12 75	12 90	13 05	13 20	13 35	8
9	13 50	13 65	13 80	13 95	14 10	14 25	14 40	14 55	14 70	14 85	9
10	15 00	15 15	15 30	15 45	15 60	15 75	15 90	16 05	16 20	16 35	10
11	16 50	16 65	16 80	16 95	17 10	17 25	17 40	17 55	17 70	17 85	11
12	18 00	18 15	18 30	18 45	18 60	18 75	18 90	19 05	19 20	19 35	12
13	19 50	19 65	19 80	19 95	20 10	20 25	20 40	20 55	20 70	20 85	13
14	21 00	21 15	21 30	21 45	21 60	21 75	21 90	22 05	22 20	22 35	14
15	22 50	22 65	22 80	22 95	23 10	23 25	23 40	23 55	23 70	23 85	15
16	24 00	24 15	24 30	24 45	24 60	24 75	24 90	25 05	25 20	25 35	16
17	25 50	25 65	25 80	25 95	26 10	26 25	26 40	26 55	26 70	26 85	17
18	27 00	27 15	27 30	27 45	27 60	27 75	27 90	28 05	28 20	28 35	18
19	28 50	28 65	28 80	28 95	29 10	29 25	29 40	29 55	29 70	29 85	19
20	30 00	30 15	30 30	30 45	30 60	30 75	30 90	31 05	31 20	31 35	20
21	31 50	31 65	31 80	31 95	32 10	32 25	32 40	32 55	32 70	32 85	21
22	33 00	33 15	33 30	33 45	33 60	33 75	33 90	34 05	34 20	34 35	22
23	34 50	34 65	34 80	34 95	35 10	35 25	35 40	35 55	35 70	35 85	23
24	36 00	36 15	36 30	36 45	36 60	36 75	36 90	37 05	37 20	37 35	24
25	37 50	37 65	37 80	37 95	38 10	38 25	38 40	38 55	38 70	38 85	25
26	39 00	39 15	39 30	39 45	39 60	39 75	39 90	40 05	40 20	40 35	26
27	40 50	40 65	40 80	40 95	41 10	41 25	41 40	41 55	41 70	41 85	27
28	42 00	42 15	42 30	42 45	42 60	42 75	42 90	43 05	43 20	43 35	28
29	43 50	43 65	43 80	43 95	44 10	44 25	44 40	44 55	44 70	44 85	29
30	45 00	45 15	45 30	45 45	45 60	45 75	45 90	46 05	46 20	46 35	30
31	46 50	46 65	46 80	46 95	47 10	47 25	47 40	47 55	47 70	47 85	31
32	48 00	48 15	48 30	48 45	48 60	48 75	48 90	49 05	49 20	49 35	32
33	49 50	49 65	49 80	49 95	50 10	50 25	50 40	50 55	50 70	50 85	33
34	51 00	51 15	51 30	51 45	51 60	51 75	51 90	52 05	52 20	52 35	34
35	52 50	52 65	52 80	52 95	53 10	53 25	53 40	53 55	53 70	53 85	35
36	54 00	54 15	54 30	54 45	54 60	54 75	54 90	55 05	55 20	55 35	36
37	55 50	55 65	55 80	55 95	56 10	56 25	56 40	56 55	56 70	56 85	37
38	57 00	57 15	57 30	57 45	57 60	57 75	57 90	58 05	58 20	58 35	38
39	58 50	58 65	58 80	58 95	59 10	59 25	59 40	59 55	59 70	59 85	39
40	60 00	60 15	60 30	60 45	60 60	60 75	60 90	61 05	61 20	61 35	40
41	61 50	61 65	61 80	61 95	62 10	62 25	62 40	62 55	62 70	62 85	41
42	63 00	63 15	63 30	63 45	63 60	63 75	63 90	64 05	64 20	64 35	42
43	64 50	64 65	64 80	64 95	65 10	65 25	65 40	65 55	65 70	65 85	43
44	66 00	66 15	66 30	66 45	66 60	66 75	66 90	67 05	67 20	67 35	44
45	67 50	67 65	67 80	67 95	68 10	68 25	68 40	68 55	68 70	68 85	45
46	69 00	69 15	69 30	69 45	69 60	69 75	69 90	70 05	70 20	70 35	46
47	70 50	70 65	70 80	70 95	71 10	71 25	71 40	71 55	71 70	71 85	47
48	72 00	72 15	72 30	72 45	72 60	72 75	72 90	73 05	73 20	73 35	48
49	73 50	73 65	73 80	73 95	74 10	74 25	74 40	74 55	74 70	74 85	49
50	75 00	75 15	75 30	75 45	75 60	75 75	75 90	76 05	76 20	76 35	50

Computed by L. Leland Locke.

4th & Wash N.W.

5th S.W.

289.01

284.02

100.444

100.444

22200

00444

50

22200

0444

34

1778

1332

15096

.0444

38

3532

1332

16872

.0444

12

888

444

5328

333

130

3

H63 - 77

4476
5

120
31.49
211.19
47
36
17
100

2367
2355
11.2

17
16 - 87
50
60
147

ENGINEERING DEPARTMENT
CITY OF SAN DIEGO
CALIFORNIA

3 45
012
87
12
207
24566
183
749
0518
12
1036
0518
6276

40547
84.33
14

0518
0518
3108
1036
1346.8

0518
2
1026
223.65
62
223.03

012
47
87
481
564
5058
58

4105
2757
732

260.53
0.86
261.39
- 8.16
253.23
+ 1.62
254.85
- 12.52
242.33
+ 0.22
242.55
13.23
229.32
0.54
229.86
- 13.25
216.61
0.15
216.76
- 12.80
203.96
+ 0.25
204.21
12.83
191.38
+ 0.25
191.63
- 11.89
179.74
+ 5.27
185.01
- 1.92
183.09
9.03
192.12

185.01
14.30
172.71
185.01
12.60
172.41
185.01
13.10
171.91
192.12
11.20
151.59
180.92
192.12
13.20
151.12
13.09
178.92
2.20
164.21
0.11
181.12
164.10
13.11
192.12
10.90
177.21
- 0.70
181.22
1.80
176.51
12.06
183.02
188.57
192.12
12.70
179.42
3.10
182.52
192.12
12.10
186.02

214
50.29
1926
428
6206
3615
3678

12.72
1.28
14.00
4.85

57018

533.86
36.15
570.01

10
281

160
200