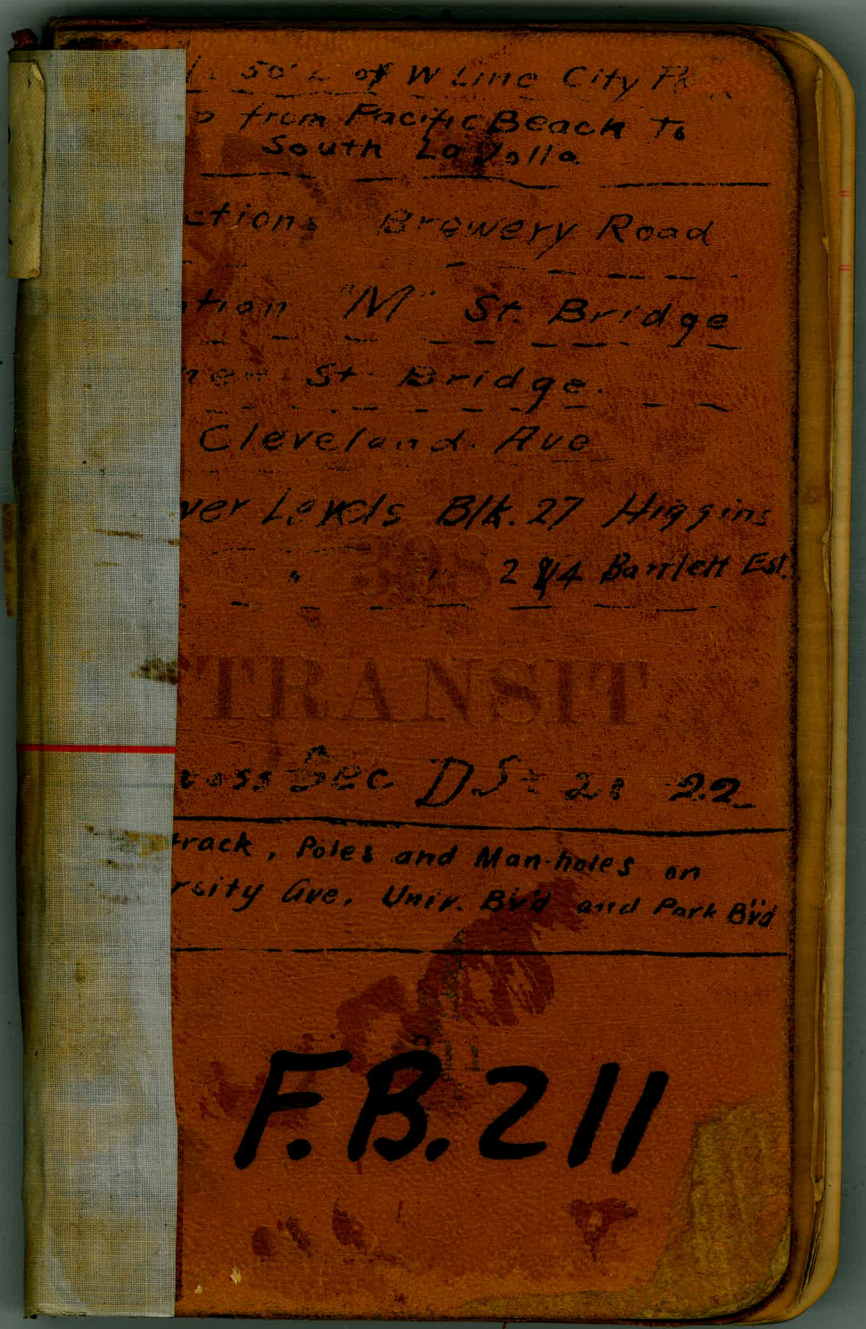
50' E of W Line City Pk
from Pacific Beach To
South La Jolla
Brewery Road
"M" St. Bridge
St. Bridge.
Cleveland Ave
Lots Blk. 27 Higgins
2 1/4 Barlett Est.
TRANSIT
Sec D5 21 22
track, Poles and Man-holes on
University Ave, Univ. Blvd and Park Blvd
F.B. 211

Table showing the difference of latitude and departure in running 80 chains at any course from 1 to 60 minutes.

Minutes	Lks.	Minutes	Lks.		
1	2⅓	21	49		
2	4⅔	22	51⅓		
3	7	23	53⅔	43	100⅓
4	9⅓	24	56	44	
5	11⅔	25	58⅓	45	
6	14	26	60⅔	46	
7	16⅓	27	63	47	
8	18⅔	28	65⅓	48	
9	21	29	67⅔	49	
10	23⅓	30	70	50	
11	25⅔	31	72⅓	51	119
12	28	32	74⅔	52	121⅓
13	30⅓	33	77	53	123⅔
14	32⅔	34	79⅓	54	126
15	35	35	81⅔	55	128⅓
16	37⅓	36	84	56	130⅓
17	39⅔	37	86⅓	57	133
18	42	38	88⅔	58	135⅓
19	44⅓	39	91	59	137⅔
20	46⅔	40	93⅓	60	140

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City Hall, San Diego, Cal.

TABLE FOR RUNNING ON SLOPES.

In the following table the first column shows the angle, th[illegible] number of links to be added to a chain on the slopes, [illegible] chain, horizontal measurement.

MICROFILMED
DEC 8 1964

Angle	Cor. in Links	Angle	Cor. in Links	Angle	Cor. in Links	An[illegible]	[illegible]
o		o		o			
4	0.24	11	1.88	18	5.14		
5	0.38	12	2.24	19	5.76		
6	0.55	13	2.63	20	6.42		
7	0.76	14	3.06	21	7.11		
8	0.98	15	3.53	22	7.85		
9	1.24	16	4.02	23	8.64		
10	1.55	17	4.56	24	9.47	35	22.07

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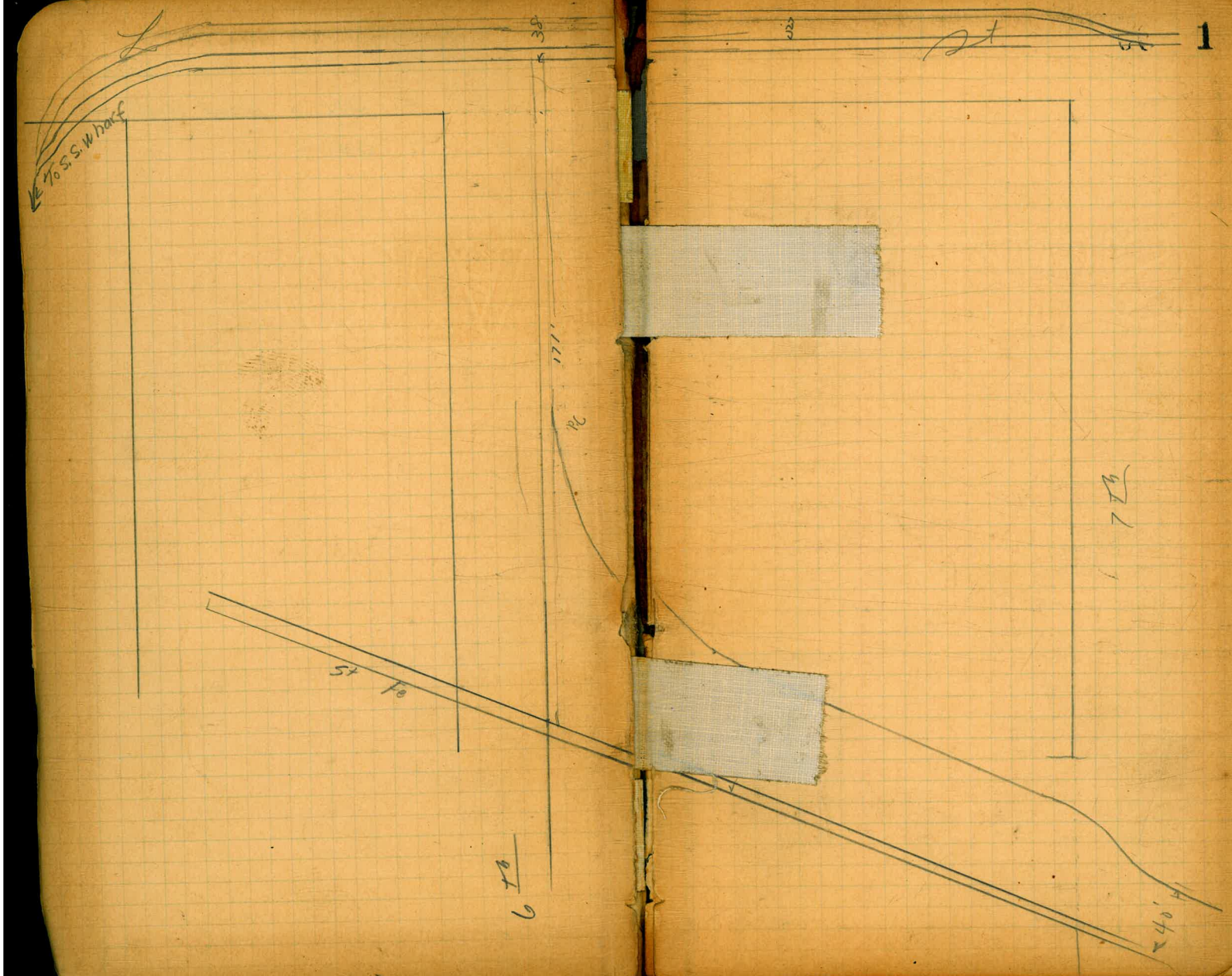
1995 G SE Cor Hydt Nozzle
25.55 F SW " N end Hydt Hinge
34.56 E SE " " " " "

= 1


To S.S. wharf
38
111'
Pl
St Fe
6 Th
7 Th
40'

Levels over a line 50' East of the West line of City Park
From the center of Juniper St. to North line. 11/24/03 { d'Hemecourt, Crowell, Fortiner, Davis

5

Sta.	+	−	H. I.	Rod	Elev.	
					B.m	
	2.90		255.97		253.07	
0	1.15	5.80	251.32		250.17	
C. of Juniper				11.90	239.4	
+ 35				11.30	240.0	
+ 55				9.40	241.9	
1				6.80	244.5	
+ 25				6.10	245.2	
2				5.30	246.0	N. ½ Rod Slope N. 0.5 in 10'
+ 70				5.50	245.8	
3				3.70	247.6	
+ 60				2.40	248.9	
4				1.90	249.4	
+ 35				1.10	250.2	
+ 5				2.20	249.1	
+ 70				1.60	249.7	
6				1.30	250.0	
0	9.25	1.20	259.37		250.12	
7				8.90	250.5	
				9.0	250.4	C. of Laurel
8				9.0	250.4	
9				8.2	251.2	

Sta	+	−	H.I	Rod	Elev	
10				7.60	251.8	
11				6.80	252.6	S. line Tingle
12				4,30	255.1	
+35				3,50	255.9	
13				2.40	257.0	
14				1.0	258.4	Slope East 0.5'
0	12,38 ~~+15~~	1.15	270.60		258.22	
+50				11.40	259.2	
15				12.10	258.5	
16				11.70	258.9	
17				10.30	260.3	
18				8.20	262.4	
19				4.30	266.3	
+40				4.0	266.6	N. line Clive
20				1.9	268.7	
0	12.55	1.19	281.96		269.41	
+50				11.4	270.6	Level
21				11.3	270.7	
22				9.9	272.1	
+44				8.3	273.7	S. line St.
23				6.4	275.6	

Sta	+	−	H.I	Rod	Elev
Sta 24				5.1	276.9
25				3.6	278.4
26				2.2	279.8
+ 65				0.9	281.1
27				1.0	281.0
~~0~~	8.33	0.89	289.40		281.07
28				7.80	281.6
29				6.90	282.5
30				6.0	283.4
31				5.0	284.4
32				4.0	285.4
33				3.2	286.2
34				2.6	286.8
35				2.0	287.4
36				1.8	287.6
~~0~~	5.71	1.48	293.63		287.92
37				5.7	287.9
38				5.0	288.6
39				5.2	288.4
40				4.6	289.0
41				4.1	289.5

Sta	+	−	H.I	Rod	Elev
42				4.5	289.1
+65				4.7	288.9

Date St. 6 to 8 - 2 teams 4 men 1 day

In park from Date to top of Hill

6 Horses 6 men 2 days.

From top of Hill to opposite Lane St.

6 Horses 7 men 1 day

1 day 4 Horses 2 men.

From opp. Lane St. to Palm St.
same as above.

From opp. Palm St. to Tepas St.
same as above.

From int. Park + Tapas to int. of
Walnut + 4th.

2 Teams 4 men 1 day

From 4th & Uni. Ave. to 6th St.
2 Teams & 4 men

Uni. Ave. 6 to 10th St.
6 Horses & 8 men 2 days.

Uni. Ave. from 10 to Uni. Blvd
4 Teams & 8 men 3 days.

Uni. Blvd. from Uni Ave to Park Blvd.
8 Horses 10 men 6 days.

Park Blvd. from Normal School
Down to Uni. Ave.
6 Horses 8 men 4 days.

~~From~~ Park Blvd. from Uni. Ave
to Country Club.
8 Teams 10 Men 3 Weeks.

From Country Club to ~~Rural School~~
a pt. opp. Cedar St.
6 Teams 10 Men 1 week.

From a pt opp. Cedar St. to 12 St
3 Teams 10 Men 2 weeks

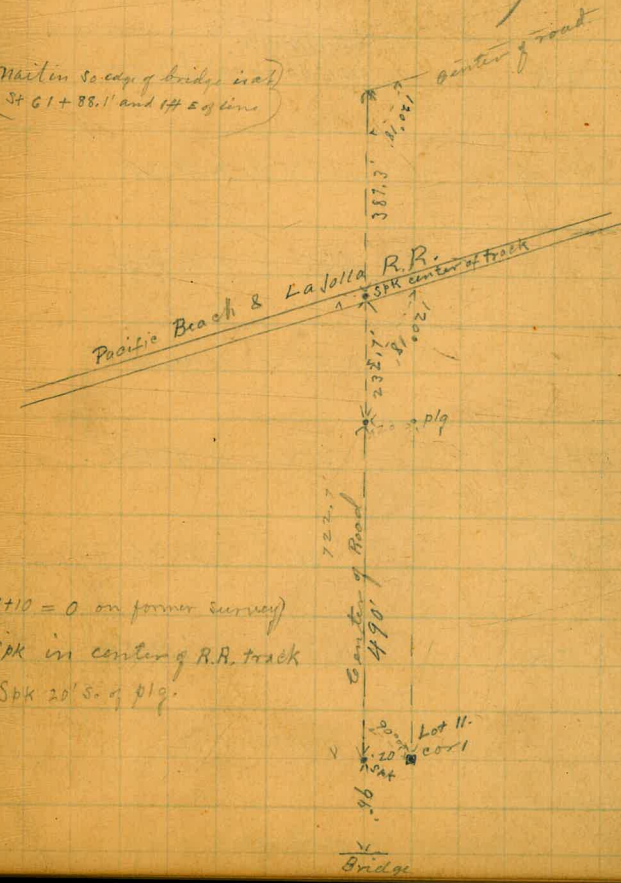
Pacific Beach & La Jolla road

12/16/03 { Anderson, Wattax, Lambert

Sta	Angle		Mag		
75 △			N 42° 40' W		
61 △ (Spk in bridge)			N 42° 40'		
50 △	0° 43' R		N 42° 40' W	N. 28° 19' W	
41+24.6' △	3° 14' R		N 43° 30' W	N. 29° 02' W	
40+40 △	4° 55' R		N 46° 40' W	N. 32° 16' W.	
38 △	4° 39' R		N 51° 10' W	N. 37° 11' W.	
35. △	03° 32' R.		N 55° 50' W	N. 41° 50' W	
29. △					
11.+10 △	59° 42' R		N 59° 20' W	N. 45° 22' W.	
7+22.7 Spk					
4+90 Spk					
0 Spk			S 61° W	S 74° 56' W	

From a spike in center of of road 20 ft South of Cor post marked Lot 11 Cor 1. and 95' West of Bridge

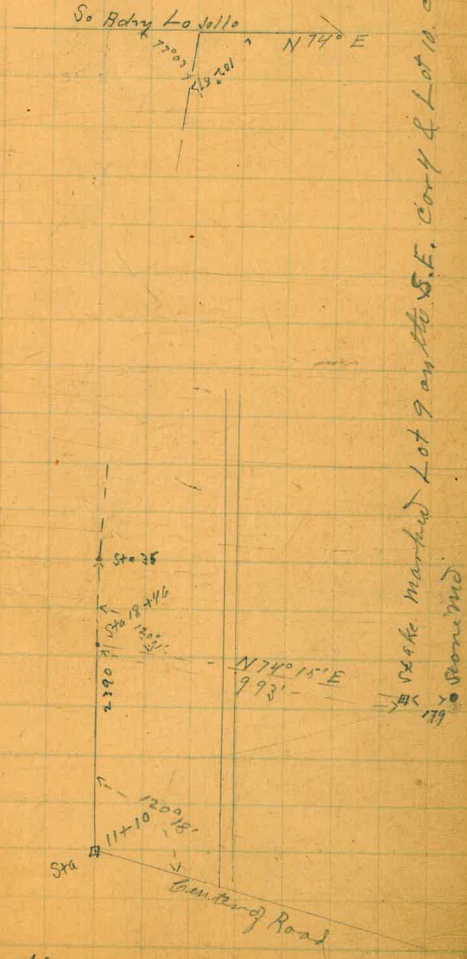
(Nail in so edge of bridge is at St 61 + 88.1' and 1 ft E of line)



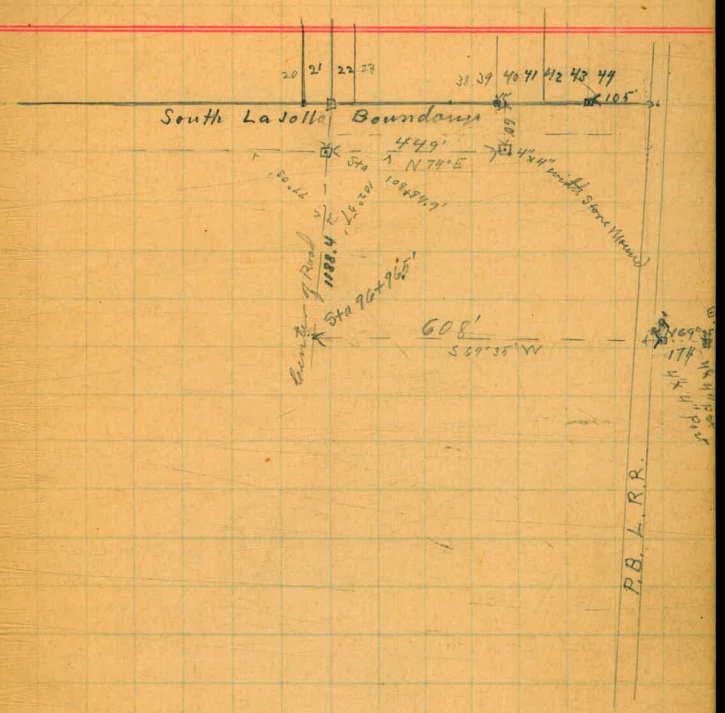
(11+10 = 0 on former survey)
Spk in center of R.R. track
Spk 20' S. of plg.

12/17/03 {Anderson, Mattax, Lambert

Sta	Angle		Mag	E W
108+46.76	= Lot stake mark		22 on the	No & 21 on the So
105 △	3°35' R		N 3°15' W	N. 2° 48' W
103 △	1° 33' R		Var N 12° 58' E (N 6° 50' W)	N. 6. 23' W
100. △	2°45' R		N 22°15' W	N. 7° 56' W.
98+50	4° 00' R		N 25° W	N. 10° 41' W.
96+60	3° 00' R.		N 29° W	N. 14. 41'
94+50 △	3° 55' R		N 32° W	N. 17° 41' W.
93 △	3° 43' R		N 36° W	N. 21. 36
90+40 △	3° 00' R		N 39° 40' W	N. 25° 19' W
89. △			N 42° 40' W	



Notes continued next page


20
21
22
23
38
39
40
41
42
43
44
105'
South Lasolle Boundary
449'
N 74° E
Sta 108+84.9'
4"x4" with Stone Mound
Center of Road
1188.4
Sta 96+96.5'
608'
S 69° 35' W
174
P.B. L.R.R.

Cross-Section of Embankment done on Street to Brewery.

1/23/04 { Hutchison, Torrance, Ripley, Davis

						Area	Cu. Yds.
Note 00 = Original Ground.							
0 = North end of Embk.							
0		00	00	00		00	
							153.4
+25		00 +9.0 / 25.0 10.0	+9.0	+9.2 / 10.2	00 / 28.0	33.130	
							263.6
+50	14.2	00 / 21.0 +7.0 / 10.0	+8.0	+7.4 / 8.0	00 / 25.0	238.00	
							172.7
+75	7.6	00 / 20.0 4.4 / 11.0	5.0	+4.2 / 8.6	00 / 20.0	135.00	
							97.6
/	7.5 / 2.9	00 / 20.0 +2.6 / 10.0	+3.0	+2.7 / 7.0	00 / 18.0	75.80	
							124.8
+50	7.7 / 4.9	00 / 17.0 2.0 / 10.0	+2.8	+2.0 / 10.0	00 / 14.0	59.00	
							125.3
2	7.9	00 +4.6 / 18.0 13.0	+3.0	+2.7 / 11.0	00 / 15.4	76.34	
							148.1
+50	7.9	00 +4.8 / 18.0 12.5	3.4	+2.8 / 9.5	00 / 15.0	83.60	
							152.4
3	7.5	00 3.0 / 18.0 12.5	+3.0	+2.7 / 10.0	00 / 15.0	81.00	
							145.6
							1383.5

fwd

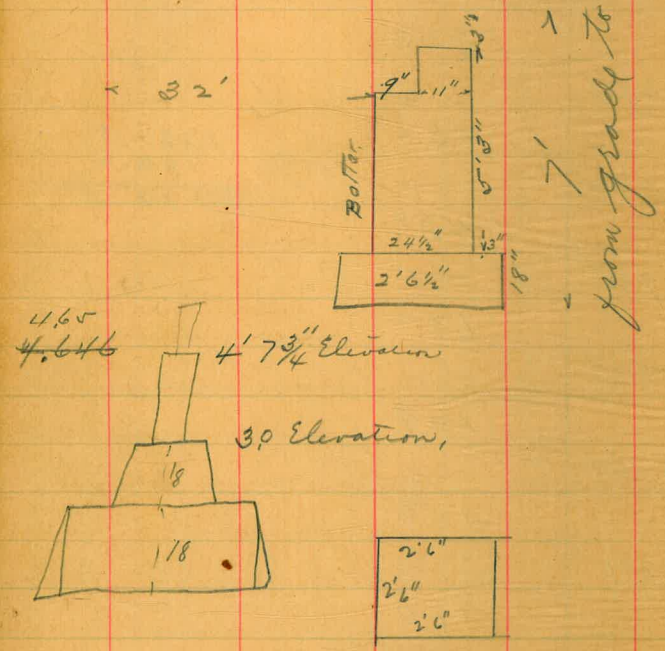
Cont.

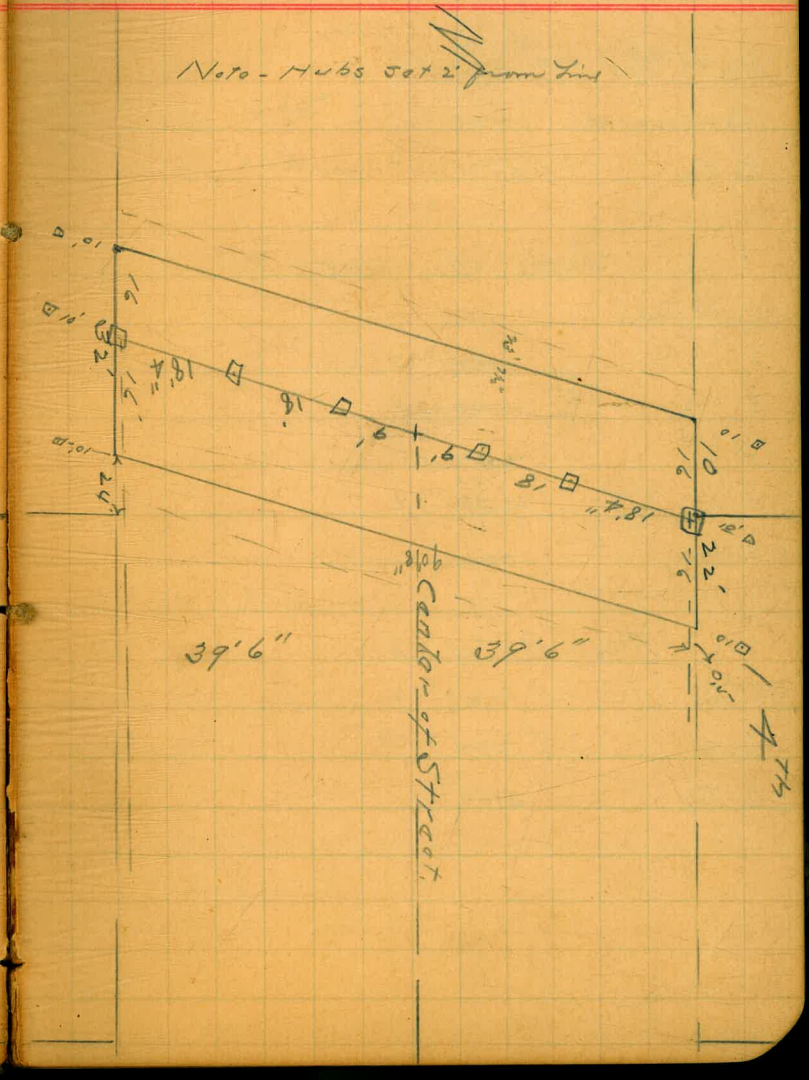
+50	7.9	00 +3.0 17.0 12.0	+3.1	+2.6 00 9.0 14.0
4	8.1 7.9 7.6 15.2	00 +2.9 14.0 11.5	+3.1	+2.7 00 9.0 14.0
+50	8.6 8.4 3.8	00 16.0 3.2 10.5	+3.6	3.2 00 9.0 14.5
5	8.4	00 +3.1 13.0 9.0	+3.4	+2.7 00 9.0 14.0
+25	8.7	00 +3.5 13.5 7.5	+4.2	+3.4 00 7.5 13.5
+30	8.6	00 +1.4 13.0 10.5	+2.2	+1.3 00 10.0 13.0
+53	8.9	00 10.5	+2.6 +2.2 11.0	00 14.5
+55		00	00	00

Brot fwd	1383.5	
76.25		
	136.3	
70.97		
	143.4	
83.90		10% 1921.3 192.2 2113.5
	142.2	
69.65		
	68.4	
78.08		
	10.9	
39.60		
	35.6	
43.90		
	1.6	
000		
	1921.9	Cu Yds of Embk in.

Hutchison

Staked 5/18/05 Hutchison
Evans
Scriven





East Abutment

	Grade	Cuts,
North Line	7.0	
Center of St.	6.76	
So Line	6.52	

Center Line of Bridge

North Pier	7.0	
2	~~6.84~~	7.0
3	~~6.68~~	7.0
4	~~6.52~~	7.0
5	~~6.36~~	7.0
6 So Pier	~~6.20~~	

West Abutment,

N° Line	7.0	
Center	~~6.84~~	7.0
So Line	~~6.88~~	7.0

Elevation for Top of Abutment
Conc = 6,76 Elevation,
Elevation of Bridge Seat. 5.90

Elevation of Top of piers about 3,0 ?

5.90 / 3.43 / 2,47 / 10.05 / 5.79 / 4.26

10.05 / 6.62 / 3.43 — 5.90 / 1.50 / 4.4 — 10.05 / 7.07 / 2.98

7.60 / 2.45 / 10.05 H.I. — 1.50 / 8.55 — 10.05 / 7.77 / 2.28 — 5.90 / 2.88 / 3.02 — 5.90 / 4.36 / 1.54

S.W. Cor of Bridg = H+ 3,02 = 3'0 1/4" Below Bridge Seat
S.E. " " " 2,98 = 2'11 3/4"
N.E. " " " 1.54 = 1'6 1/2"
N.W. 2,47 2'5 3/4"

B.1. Ct. of 4th

B.2.

7,60
2,79
10,39 H.I.

5,90
4,49
1,25
5,74

4,65
5,74
7

7,65
5,74
1,91

7,725
5,74
1,985

7,70
5,74
1,96

7,54
5,74
1,8

7,69
5,74
1,95

7,86
5,74
2,12

8,325
5,74
2,585

7,76
5,74
2,02

7,94
5,74
2,20

8,245
5,74
2,505

8,21
5,74
2,47

8,32
5,74
2,58

Quincy St Bridge 6/28/05

Hutchison
Evans
Sawyer,

259.26

18

	Grade	~~Grade of Bottom of Cap.~~	Grade of Bottom of Cap		Rod
		H.I.			
	1,74	271.14		269.40	
B.1.	268.0	1.67	266.33		4.81
	0.375	259.26	12.255	258.885	
B.2.	264.00	1.67	262.33		-10.
	0.07	248.535	10.795	248.465	
B3	260.00	1.67	258.33		-20.
	0.785	236.91	12.41	236.125 ~~246.85~~	
B4	256.00	1.67	254.33		
	0.855	226.00	11.765	225.145	
B5	252.00	250.33			
	0.595	213.86	12.735	213.265	
B6	248.00	1.67	246.33		
B7	248.00		246.33		
	0.60	202.575	11.885	201.975	
B8			246.33		
B9					
B10					
	12.43	214.54	0.465	202.11	
B11.			246.33		
B12					
	11.69	225.69	0.54	214.00	

Elevation of Stakes set to grade

	Rod				
252.33	6.93				
238.33	10.205				
So Leg.		No Leg.		To Top of Pier. So Leg Below Cap	No Leg Below Cap
226.00	10.91	227.00	9.91	28'4"	27'4"
217.50	8.50	220.00	6.00	32'10"	30'4"
211.00	2.86	210.50	3.36	35'4"	35'10"
205.0	8.86	205.50	8.36	41'4"	40'10"
197.50	5.075	201.5	1.075	48'10"	44'10"
190.00	12.575	195.0	7.575	56'4"	51'4"
194.50	8.075	193.5	9.075	51'10"	52'10"
205.00	9.54	204.5	10.04	41'4"	41'10"
214.0	0.54	214.0	0.54	32'4"	32'4"

		225.69		
B13	25-1.43	-1.67	249.76	
	11.225	235.225	1.69	224.0
B14	254.86	-1.67	253.19	
	12.27	246.02	1.475	233.75
	10.51	255.905	0.625	245.395
B15	258.28	-1.67	256.61	
	12.20	266.50	1.605	254.30
B16	260.00		258.33	Bottom of
	5.78	271.72	0.76	265.74
			2.82	269.40

Sta Leg	Rod	M' Leg	Rod		
223.50	2.19	224.00	1.69	26'3 1/8"	25'9 1/8"
233.75	1.475	233.75	1.475	19'5 1/4"	19'5 1/4"
248.50	7.405	248.50	7.405	8' 1/2	8' 1/2

Cap. 8.19

Center line of Cleveland Ave

7/7/05 Hutchison
Evans
Sawyer

240' So of Tyler

P.C. 7°18' L

Δ = 19°21'

P.T.C

Δ = 10°38'

P.C.

240 So of ~~Tyler~~ Van Buren

P.C. 7°00' L

Δ = 16°48'

240'

P.T.

117.6

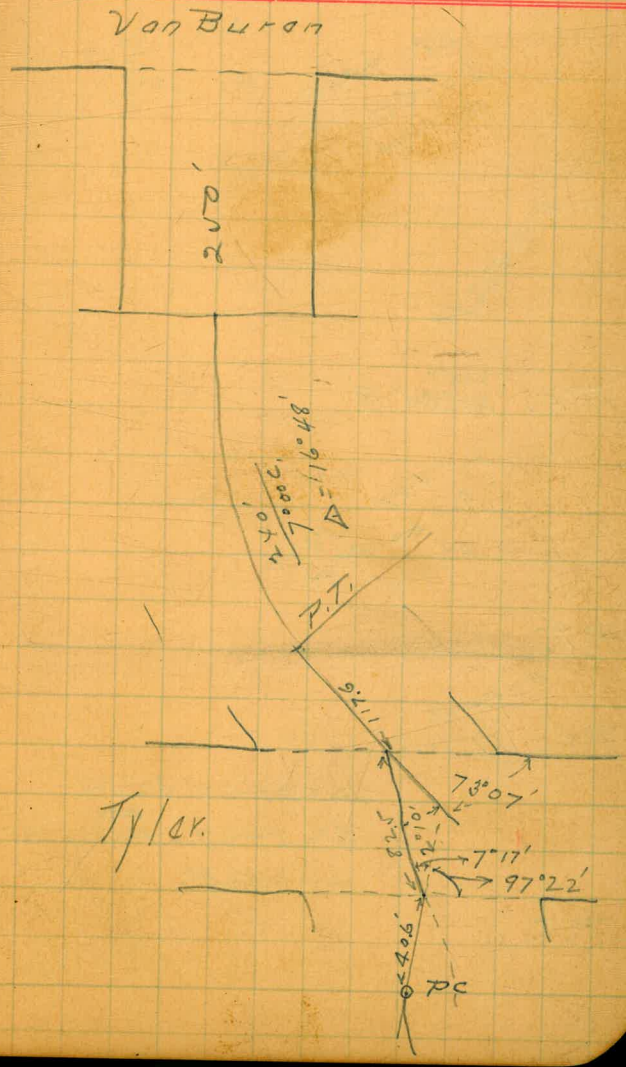
N° Line of Tyler Δ 2°10' R

82.5'

So Line of Tyler Δ 7°17' R

40.6

P.C. 7° curve L



~~St = 79.35~~
~~L = 158.1~~
~~Δ = 11°24'~~

St = 79.00
Δ = 10°56'

P.T.

~~L = 251.2 ft.~~

P.C. ~~11°30'~~ 14° R

L = ~~520'~~ 417'
Δ = ~~59°48'~~ 58°24'
St = 229.

P.T.
~~425.4 ft~~

P.C. 11°00 R

Δ = ~~31°27'~~ 32°54'
St = ~~146.9~~ = ~~154.0~~ 154'
L = ~~286 ft.~~

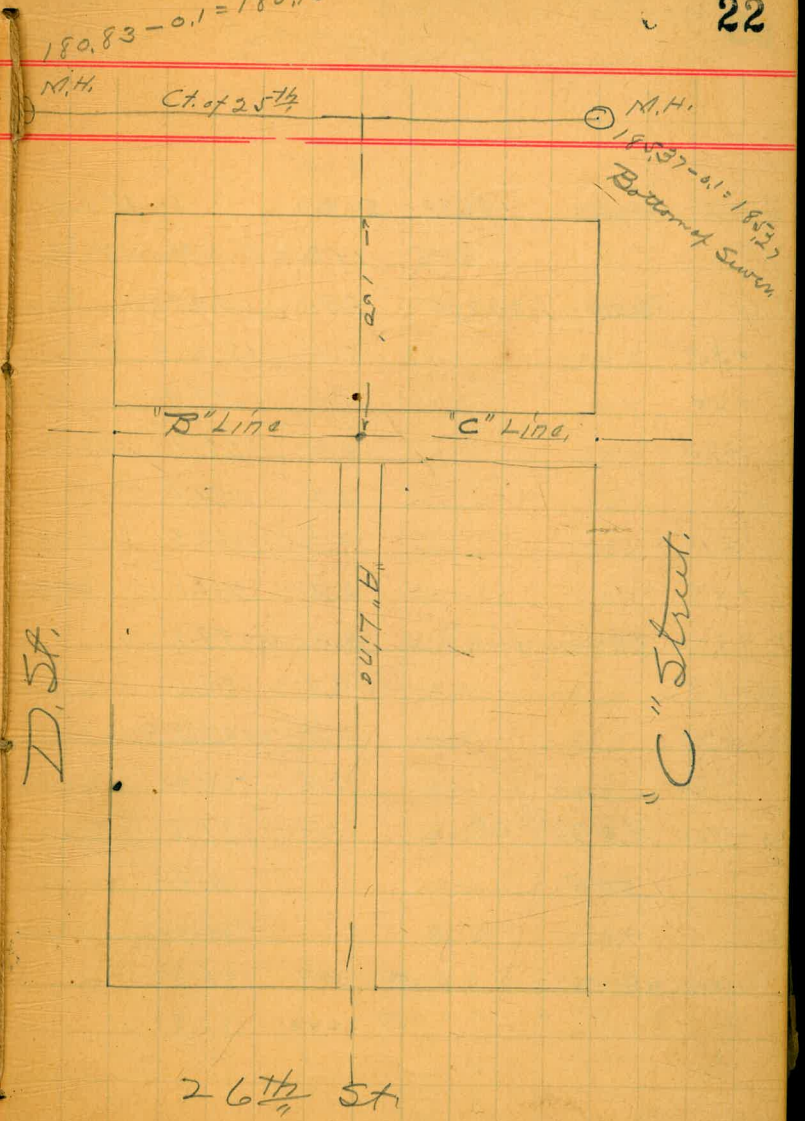
P.T.

.2953
288
23624
23624
5906
85.0464

Alley bet D. & C. from
25th to 26th
Line "A"

		H.I.		
	3.77	195.23		191.46
Ct. of 25th St.			5.6	188.6
East Gutter			6.1	189.1
East Curb			5.7	189.5
East line of 25th			5.8	189.4
5' East of 25th			5.1	190.1
19' " " "			5.2	190.0
28' " " "			9.4	185.8
50'			10.2	185.0
69'			11.0	184.2
	4.46	187.06	12.63	182.60
1+00			5.8	181.2
1+32			9.2	177.8
1+50			7.5	179.5
2			5.9	181.1
2+25			3.7	183.3
2+50			1.0	186.0
	10.21	196.80	0.45	186.59
+75			8.3	188.5
3+00			6.8	190.0
+50			3.6	193.0

180.83 − 0.1 = 180.73 Bottom of Sewer



Alley bet D. & C.
from 25th to 26th
Line "A"

3+75		196.80	2.4		194.4
4			1.5		1953
	7.06	202.96	0.90	195.90	
+35			6.1	196.9	
+50			5.1	197.9	
+75			4.3	198.7	
5			3.2	199.8	
+15			2.2	200.8	
+50			2.9	200.1	
+60.6	West Line of 26th		3.1	199.9	
5+65			4.7	198.3	
+73			5.2	197.8	
+85			8.4	194.6	
5+90.6	Ct. of 26th St.		10.2	191.8	
	~~3.05~~			~~188.34~~	
	2.33	193.79		191.46	
Bottom of Sewer in M.H. S. Line "C"			8.42	185.37	
" " " " " " D			12.96	180.83	

Alley bet 25th & 26th
from Ct of E & W alley to Center of D St.
"B" Line

		H.I.		182.60
	2.12	184.72		~~182.60~~
1+50 of "A" = 0 of B			~~5.2~~	
0			5.2	179.5
+50			10.1	174.6
+70			10.3	174.4
1+00			11.1	173.6
1+15			11.5	173.2
1+25			11.1	173.6
1+30			10.2	174.5
	12.21	191.44	5.49	179.23
+45			9.9	181.5
1+50.3	Mo Line of D		4.9	186.5
1+53			3.0	188.4
1+63			3.4	188.0
1+65			4.2	187.2
1+90.3	Center of D		3.7	187.7
	3.05	191.39		188.34

Alley bet ~~C + D~~, 25½ & 26.
from Ct of East & West alley to
Ct. of "C" St.
"C" Line

	12,06	194,66		182,60
1+80	A Line =	0		
0			15,1	179,5
0+20			12,2	182,4
+50			11,4	183,3
+70			9,4	185,3
1+00			7,8	186,9
1+15			6,6	188,1
1+42			5,9	188,8
1+50,3	So Line of	"C"	0,7	194,0
1+64			0,9	193,8
1+65			1,7	193,0
1+90,3	Ct of	"C"	0,5	194,2
	3,20	194,66		194,46

Levels over Center Line of Alley

Bet. 25 & Balic Balic – D. to E.

Transferred from Side walk Book 20 Page 81.

	2.09	190.43			188.34
3' No. of S.L.D St.			2.9		
S.L.D. St.			4.7		185.7
T.P.	2.16	179.89	12.70		177.73
18' So. D. St.			4.2		175.7
25' " "			5.1		174.8
50' " "			4.9		175.0
75' " "			5.7		174.2
100' " "			5.6		174.3
125' " "			5.67		174.2
150' " "			5.68		174.2
175' " "			5.29		173.6
200' " "			6.40		173.5
225' " "			7.44		172.5
235' " "			8.13		171.8
250' " "			6.94		173.0
275' " "			7.97		171.9
N.L.E.			8.94		171.0
Center			9.52		170.4
S.L.			9.87		170.0

		(179.89		
25' So. E.			9.73	170.2
50' " "			10.45	169.4
75' " "			10.25	169.6
100' " "			10.65	169.3
T.P.	0.31	170.68	9.52	170.37
125' " "			2.23	168.5
150' " "			2.67	168.0
175' " "			3.60	167.1
200' " "			3.64	167.1
225' " "			3.67	167.0
250' " "			3.68	167.0
275' " "			4.32	166.4
N.L.F.			5.78	164.9

Levels over Center Line of Alley bet. Balic Balic. & 26TH - D. to F.

GS

Transferred from Side Walk Book 20 - Page 82.

		(170.68)			
N.L.F.			8.98		161.7
3' No."			10.68		160.0
25' "			8.90		161.8
50' "			7.10		163.6
75' "			5.90		164.8
100' "			4.65		166.0
125' "			2.43		168.3
150' "			1.32		169.4
175' "			0.60		170.1
T.P.	12.80	180.74	2.74		167.94
200'			9.50		171.2
225'			7.38		173.3
250' "			5.15		175.5
275' "			2.90		177.8
295' "			1.47		179.2
S.L.E.			4.0		176.7
N.L.E.			1.37		179.3
1'			0.23		180.5
25'			1.03		179.7
50'			1.47		179.2
T.P.	11.07	190.92	0.89		179.85

	(190.92)		
75' No.E.		10.55	180.3
100' " "		9.22	181.7
125' " "		6.30	183.6
150' " "		4.46	186.4
175' " "		3.33	187.6
200' " " End of Alley		1.35	189.5

Cross-Section of Ivy St - 2nd to 4th

4/7/06 { Davis, Brooks, Thomas

POSTED

		H.I.			
	7.58	206.36			B.M. 198.78
		E line 2nd			
No line			9.7	196.7	
Cb			9.6	196.8	
1/4			10.3	196.1	
C			10.4	196.0	
1/4			10.9	195.5	
Cb			11.1	195.3	
So line			10.7	195.7	
		5' E 2nd			
So line			8.0	196.4	
Cb.			8.4	196.0	
1/4			7.9	198.5	
8" So Ctr			7.8	198.6	
6' " "			9.6	197.8	
Ctr			10.0	196.4	
10' No Ctr			9.3	197.1	
11' " "			6.9	199.5	
1/4			6.9	199.5	
Cb			5.8	200.6	
No line			4.9	201.5	

	20' E 2nd	
No line	4.7	201.7
Cb	5.7	200.7
1/4	6.6	199.8
C	8.3	198.1
1/4	7.6	198.8
Cb	7.6	198.8
So line	7.7	198.7
	40' E 2nd	
So line.	7.0	199.4
Cb	6.9	199.5
1/4	6.4	200.0
C	6.4	200.0
1/4	5.8	200.6
Cb	4.9	201.5
No line.	4.1	202.3
	60' E 2nd	
No line	3.1	203.3
Cb	3.8	202.6
1/4	4.7	201.7
C	5.0	201.4

	Ht. 206.36		
60 E 2nd			
So ½		5.4	201.0
Cl		5.8	200.6
So line		6.2	200.2
80 E 2nd			
So line		5.3	201.1
Cl		4.6	201.8
¼		4.2	202.2
C		3.9	202.5
¼		3.7	202.7
Cl		3.3	203.1
No line		3.0	204.4
100 E 2nd			
No line		1.0	205.4
Cl		1.7	204.7
½		2.1	204.0
C		2.8	203.6
¼		3.2	203.2
Cl		3.3	203.1
So line		4.4	202.0

120 E 2nd		
So line	4.7	201.7
Cl	3.2	203.2
¼	2.3	204.1
C	1.9	204.5
¼	1.3	205.1
Cl	0.8	205.6
No line	0.3	206.1
140 E 2nd		
No line	0.3	206.1
Cl	1.5	204.9
½	2.2	204.2
C	2.8	203.6
¼	3.6	202.8
Cl	4.9	201.5
So line	6.4	200.0
160 E 2nd		
So line	8.2	198.2
Cl	6.4	199.8
¼	5.7	200.9
C	5.1	201.3

		W.L. 206.36		
		160' E 2nd		
No 1/4			4.2	202.2
Ch			3.4	203.0
No line			2.4	204.0
		180' E 2nd		
No line			5.0	201.4
Ch			6.6	199.8
1/4			7.1	199.3
C			8.4	198.0
1/4			8.9	197.5
Ch			10.0	196.4
So line			11.2	195.2
		200' E W.L. 3rd		
No line			10.1	196.3
Ch			10.0	196.4
1/4			10.0	196.4
C			11.5	194.9
1/4			12.6	193.8
T.P.	0.07	193.58	12.85	193.51
Ch			1.3	192.3
So line			4.3	189.3

193.58

West Cont 3rd.

10'So of So line	11.4	182.2
So line	9.9	183.7
Ch	7.9	185.7
1/4	3.5	190.1
C	2.2	191.4
1/4	1.7	191.9
Ch.	0.8	192.8
No line	+0.5	194.1
	W 1/4 3rd.	
10 No of No line	6.8	186.8
No line	5.8	187.8
Ch.	6.0	187.6
1/4	7.1	186.5
Ctr	10.9	182.7
1/4	11.8	181.8
T.P. 0.84	181.53	12.89	180.69
Ch.		3.1	179.4
So line		5.1	176.4
10'So of So line		6.2	175.3

		H.I. 181.53		

Ctr 3rd.

20'So of So line			13.3	168.2
So line			12.2	169.3
Cl.			10.0	171.5
1/4			7.3	174.2
C			5.6	175.9
1/4			2.2	179.3
Ct.			1.0	180.5
No line			3.8	177.7
20'No.			3.9	177.6
	E 1/4 3rd.			
30'No			9.9	171.6
No line			10.0	171.5
Ct.			7.7	173.8
1/4			7.5	174.0
C			10.2	171.3
T.P.	1.19	170.05	12.67	168.86
1/4			2.1	168.0
Cl.			4.7	165.4
So line			7.0	163.1
30'So			10.1	160.0

East Ct. 3rd.

40'So of So line			10.5	154.6
So line			11.4	158.7
Ct.			9.6	160.5
1/4			7.3	162.8
C			4.1	166.0
1/4			2.3	167.8
Cl			3.9	166.2
No line			5.1	165.0
40'No			4.8	165.3
T.P.	4.80	166.80	8.05	162.00
	E line 3rd.			
40'No			4.0	162.8
No line			6.0	160.8
Ct.			5.7	161.1
1/4			4.8	162.0
C			5.5	161.3
1/4			7.7	159.1
Cl			8.7	158.1
So line			10.6	156.2

166.80

20 E 3rd.

No line			11.0	155.8
Cl.			10.9	155.9
1/4			9.6	157.2
C			8.6	158.2
1/4			8.4	158.4
Cl.			8.0	158.8
No line			7.7	159.1

40 E 3rd

35' No			2.8	164.0
No line			4.9	161.9
Cl.			7.4	159.4
1/4			7.6	159.2
C			8.0	158.8
1/4			8.7	158.1
Cl.			7.8	159.0
No line			6.3	160.5
T.P.	4.83	171.63	0.0	166.80

40 E 3rd

10' No	0.7		170.9
No line	3.4		168.2
Cl.	7.7		163.9
1/4	10.9		160.7
C	7.0		164.6
1/4	5.8		165.8
Cl.	3.9		167.7
No line	2.9		168.7
TP	9.93	181.24	0.32	171.31

80 E 3rd

20' No	1.4		179.8
No line	8.3		172.9
Cl.	12.9		168.3
2'So Cl.	13.4		167.6
	19.6		161.6
8'So Cl.	19.6		161.6
	14.4		166.8
1/4	13.7		167.5
C	9.5		171.7
1/4	6.4		174.6
Cl.	3.0		178.2
No line	1.5		179.7

181.24

100' E 3rd.

15' No		+0.8	182.0
No line		4.3	176.9
4' No Ch.		7.7 / 13.7	173.5 / 167.5
Ch.		12.6	168.6
4' So Ch.		17.6 / 8.0	168.6 / 173.2
1/4		7.0	174.2
C		2.8	178.4
TP.	9.81	190.53	0.52	180.72
1/4			9.0	181.5
Ch.			8.0	182.5
No line			6.5	184.0

120' E 3rd.

No line		4.6	185.9
Ch		5.2	185.3
1/4		4.4	186.1
C		4.8	185.7
1/4		8.5	182.0
Ch.		11.6	178.9
2' No Ch		16.6	173.9
4' No		16.6	173.9

120' E 3rd

9' No Ch.		12.3	178.2
No line		10.2	180.3
15' No		4.6	185.9

140' E 3rd.

15' No		1.7	188.8
No Line		5.0 / 7.0	185.5 / 183.5
5' So "		7.7	182.8
7' " "		5.8	184.7
Ch.		4.9	185.6
1/4		2.1	188.4
Ctr		1.8	188.7
T.P.	9.31	199.16	0.68	189.85
1/4			10.8	188.4
Ch.			10.4	188.8
No line			11.1	187.1

160' E 3rd

No line		6.9	192.3
Ch		6.3	192.9
1/4		5.5	193.7
C		5.4	193.8

POSTED

		199.16		
		160' E 3rd		
No 1/4			4.7	194.5
4:50 Cr.			5.1	194.1
Cr.			8.2	191.0
6' No Cr.			9.2	189.9
			7.3	191.9
No line			4.6	192.6
15' No			5.3	193.9
TR.	7.64	206.46	0.34	198.82
		180' E		
15' No			7.5	199.0
No line			8.6	197.9
Cr.			7.5	199.0
1/4			6.4	200.1
C			4.8	199.7
1/4			8.3	198.2
Cr.			8.7	197.8
No line			9.7	196.8
		194' E 3rd.		
No line			6.6	199.9
Cr.			4.9	201.6
1/4			5.3	201.2
C			4.3	202.2

1/4		4.1	202.4
Cr		5.5	201.0
No line		5.5	201.0
	201' E = W.L. 4th		
No line		1.2	205.3
Cr.		1.4	205.1
1/4		2.4	204.1
C		3.5	202.0
1/4		2.3	204.2
Cr		2.0	204.5
No line		1.6	204.9
		1.24	205.22 / 205.20

Cross Section D St Bet 20 + 22

7 P Clough
Evans
Moore

POSTED
Apr 13/06

BM	138.55 + 0.52	S W Cor	D + 22	Spike in Pole
		139.07		
West Line 22nd		N C	1.75	137.4
		out 5'	1.8	137.3
		1/4	1.4	137.7
		2' from Rail	1.3	137.8
		" "	1.3	137.8
		1/4	1.2	137.9
		out 5'	1.5	137.6
		" 2'	2.7	136.4
		S C	1.9	137.2
	50 ft W	N C	7.2	131.9
		+ 5'	6.3	132.8
		1/4	6.2	132.9
		N 2 ft	6.0	133.1
		S 2 ft	6.1	133.0
		1/4	6.0	133.1
		+ 5	6.4	132.7
		S C	7.0	131.1
	100' West	N C	12.0	127.1
		5' out	11.7	127.4

	139.07		
	N 1/4	11.0	128.1
	N 2' from R	11.2	127.9
	S 2 " "	11.2	127.9
	S 1/4	11.3	127.8
	5' out	11.2	127.9
	S C	11.7	127.4
TP		12.58	126.49
	+ 0.34' 126.83		
	150' W N C	5.0	121.8
	out 5'	4.3	122.5
	N 1/4	4.1	122.7
	2' from Rail	4.1	122.7
	S 2' "	3.9	122.9
	S 1/4	4.0	122.8
	out 5'	4.5	122.3
	" 2'	5.0	121.8
	S C	4.3	122.5

		126.83		
East line 21	st N C	9.8	117.5	
	out 5'	9.5	117.3	
	N 1/4	8.5	118.3	
	sill 2'	8.6	118.2	
	S " 2'	8.6	118.2	
	S 1/4	8.7	118.1	
	5' out	8.6	118.2	
	S C	9.4	117.4	
East curb line 21	S Property	9.6	117.2	
S curb of D		9.9	116.9	
S	out 5'	9.6	117.2	
	S 1/4	9.5	117.3	
	2' S Rail	9.4	117.4	
	2' N "	9.3	117.5	
	N 1/4	9.3	117.5	
	5' out	9.5	117.3	
	N C	9.9	116.9	
	N Property	9.1	117.7	

East 1/4 line 21 st	N Property	10.0	116.8
	N C	10.2	116.6
	5"	10.2	116.6
	N 1/4	10.00	116.8
	2' N Rail	10.00	116.8
	2' S "	10.00	116.8
	S 1/4	10.00	116.8
	5' out	10.2	116.6
	S C	10.6	116.2
	S Property	9.9	116.9
Center 21 st N	S Prop.	10.4	116.4
	S C	11.0	115.8
	5'	10.9	115.9
	S 1/4	10.6	116.2
	2' S sill	10.5	116.3
	2 N "	10.5	116.3
	N 1/4	10.5	116.3
	5'	10.5	116.3
	N C	11.0	115.8
	N Prop.	11.0	115.8

		126.83		
West 1/4 Line 21st	N Prop	11.6	115.2	
	N C	11.7	115.1	
	5'	11.2	115.6	
	N 1/4	11.1	115.7	
	2' N	11.2	115.6	
	2' S	11.2	115.6	
	S 1/4	11.2	115.6	
	5'	11.3	115.5	
	S C	11.5	115.3	
	S Prop	11.2	115.6	
W Comb Line 21st	S Prop	11.6	115.2	
	S C	11.9	114.9	
	5'	12.2	114.6	
	S 1/4	11.5	115.3	
	2' South	11.8	115.0	
	2' N Rail	11.6	115.2	
	N 1/4	11.6	115.2	
	5	11.7	115.1	
	N C	12.4	114.4	
	N Prop	11.9	114.9	

West Line 21st	N C	12.7	114.1
	+2'	13.6	113.2
	5' out	12.3	114.5
	N 1/4	12.2	114.6
	2' N R	12.4	114.4
	2 S R	12.4	114.4
	S 1/4	12.3	114.5
	5	12.6	114.2
	S C	12.7	114.1
TP		12.60	114.23
0.50 114.73			
50' west of 21st	S C	5.0	109.7
	5'	4.5	110.2
	S 1/4	4.3	110.4
	2' S R	4.3	110.4
	2' N R	4.3	110.4
	N 1/4	4.2	110.5
	5'	5.7	109.0
	N C	5.1	109.6

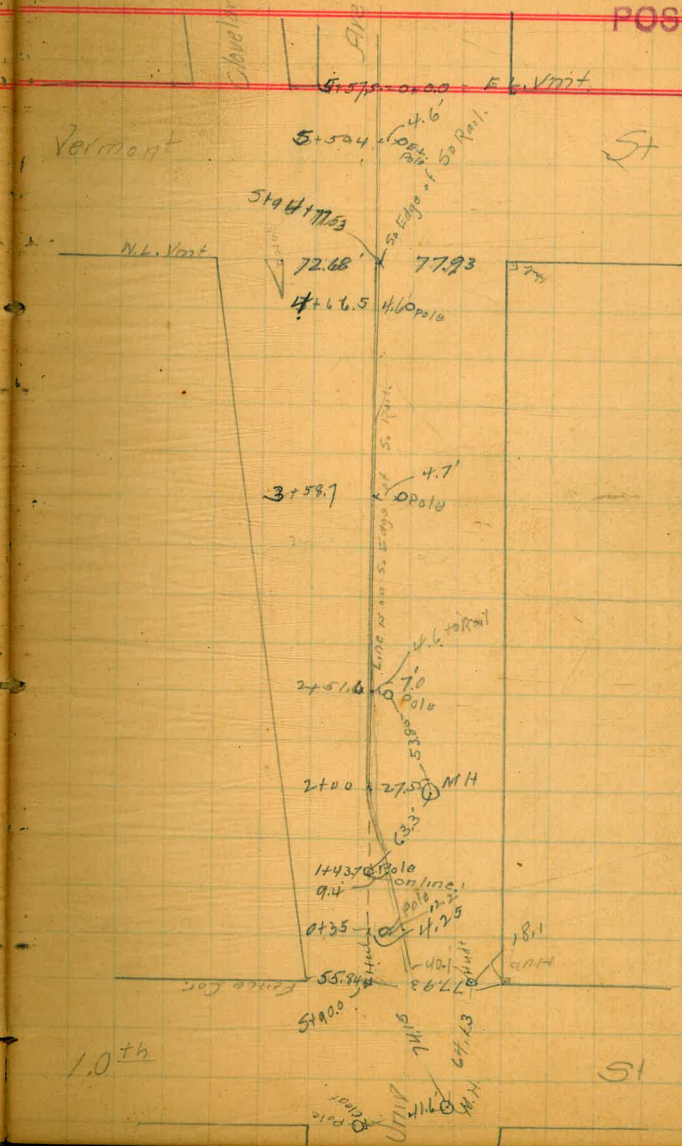
		114.73							
100 ft	W of 21	2+ N 6	9.8	104.9	East Line 25	N 6	7.2	96.7	
		5'	9.1	105.6		5'	7.2	96.7	
		N ¼	8.7	106.0		N ¼	6.7	97.2	
		2' N R	8.8	105.9		2' N R	6.5	97.4	
		2 S R	8.8	105.9		2' S R	6.5	97.4	
		S ¼	8.8	105.9		S ¼	6.6	97.3	
		5	11.0	103.7		5	7.2	96.7	
		S 6	9.3	105.4		S 6	7.6	96.3	
TP		N 6	12.54	102.19					
	1.76	103.95							
130' W	21.0+	S 6	3.3	100.6					
		5'	4.0	99.9					
		S ¼	2.7	101.2					
		2 S R	2.5	101.4					
		2' N R	2.6	101.3					
		N ¼	2.5	101.4					
		5'	3.2	100.7					
		N 6	3.8	100.1					

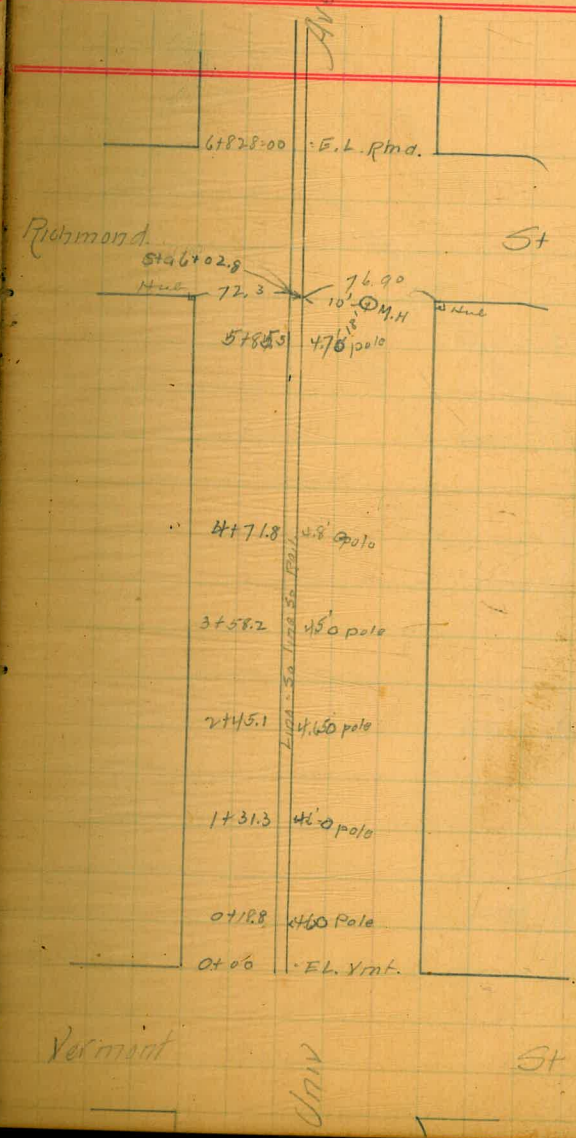
4/19 06 { Davis Brooks Thomas

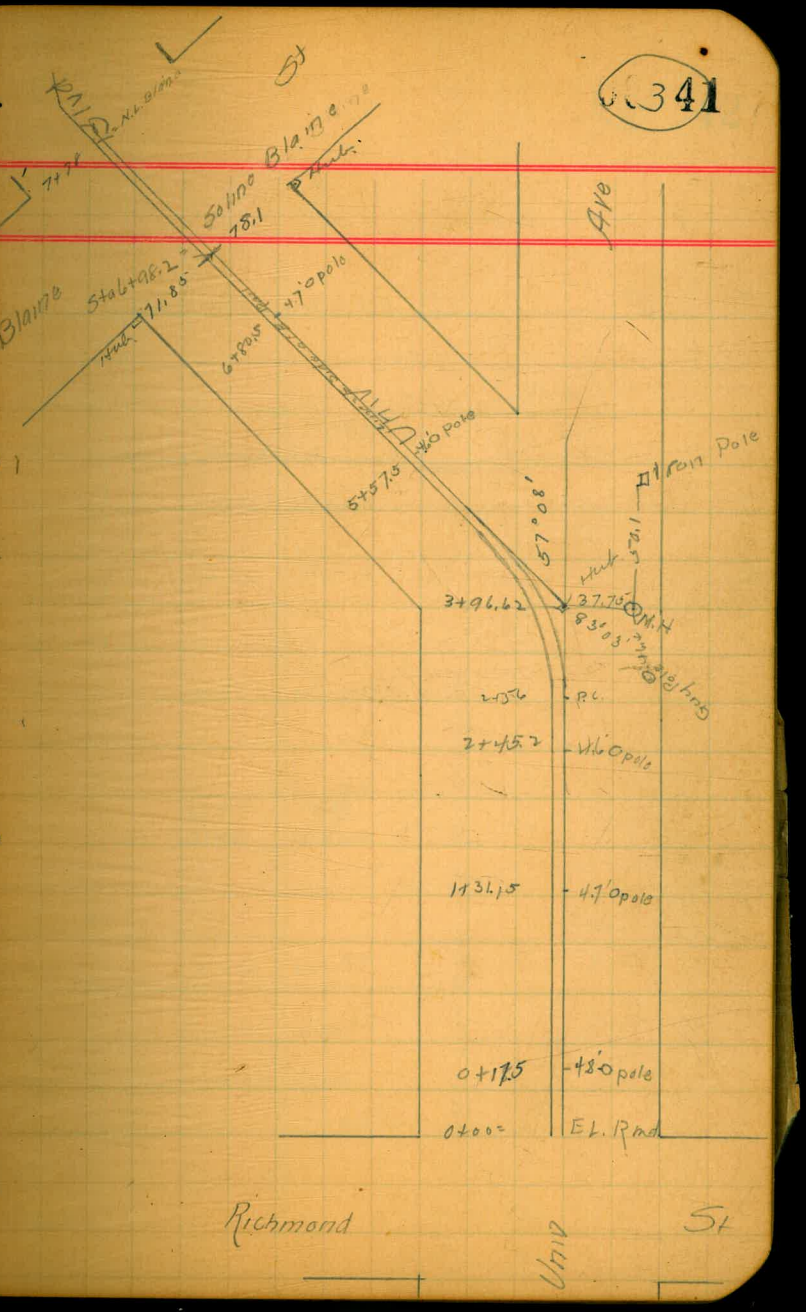
Survey for Location of Poles and Manholes in Univ Ave. & Univ' Blvd - 10th to Pavilion.

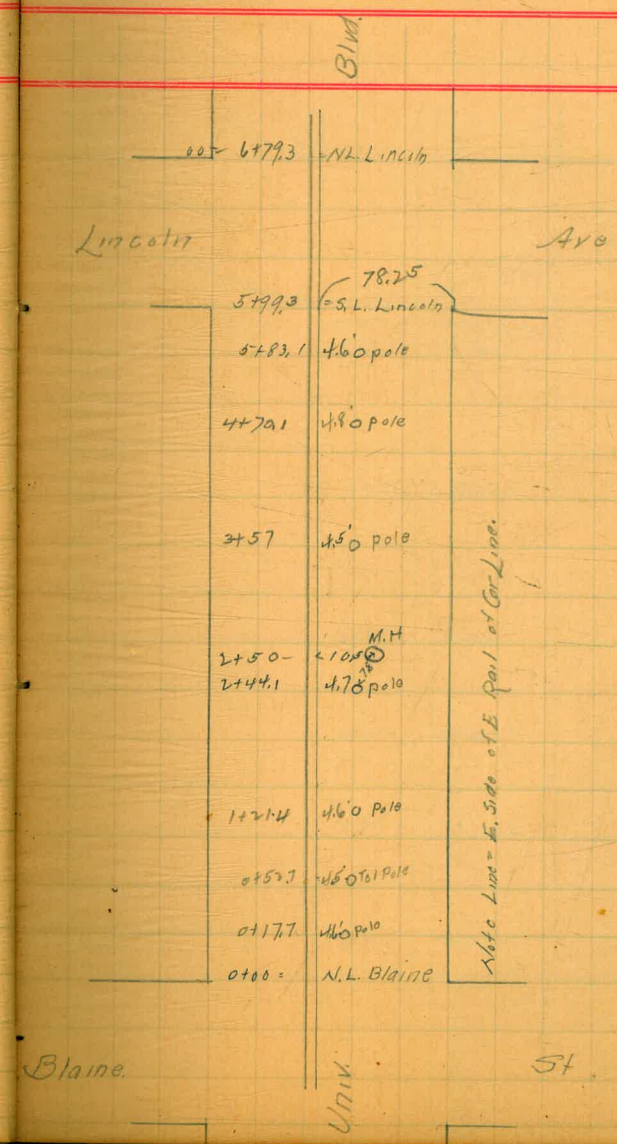
39

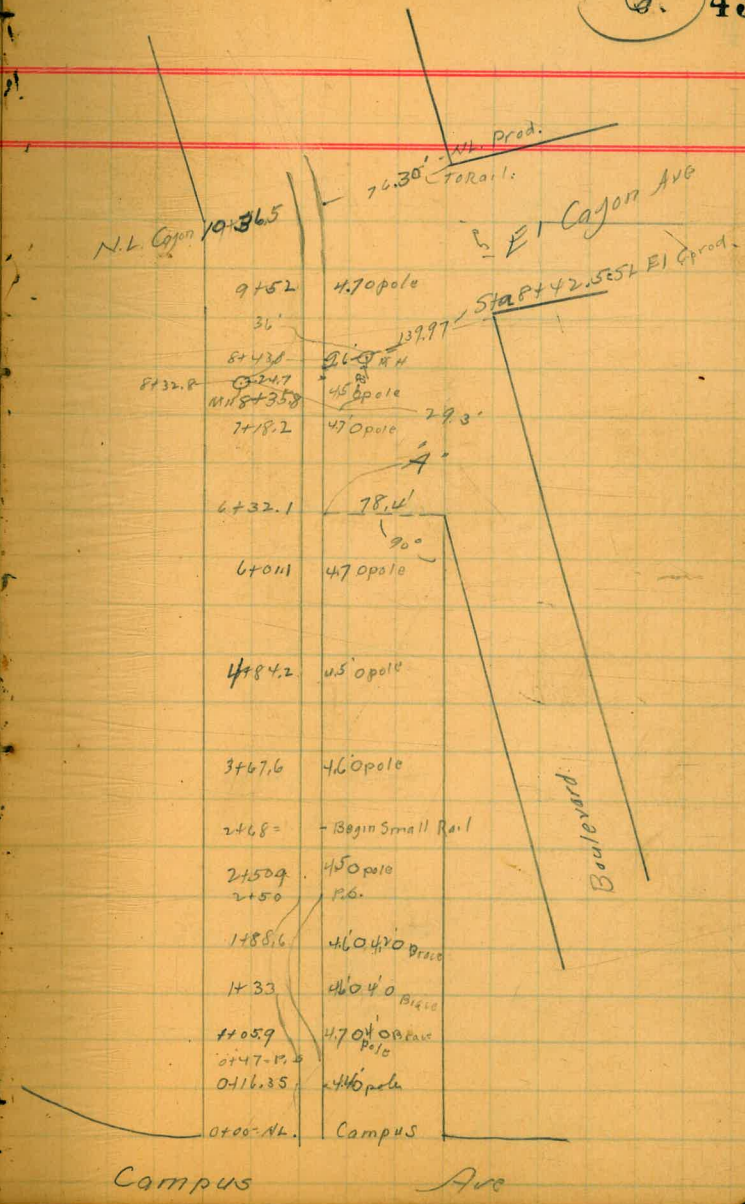
POSTED

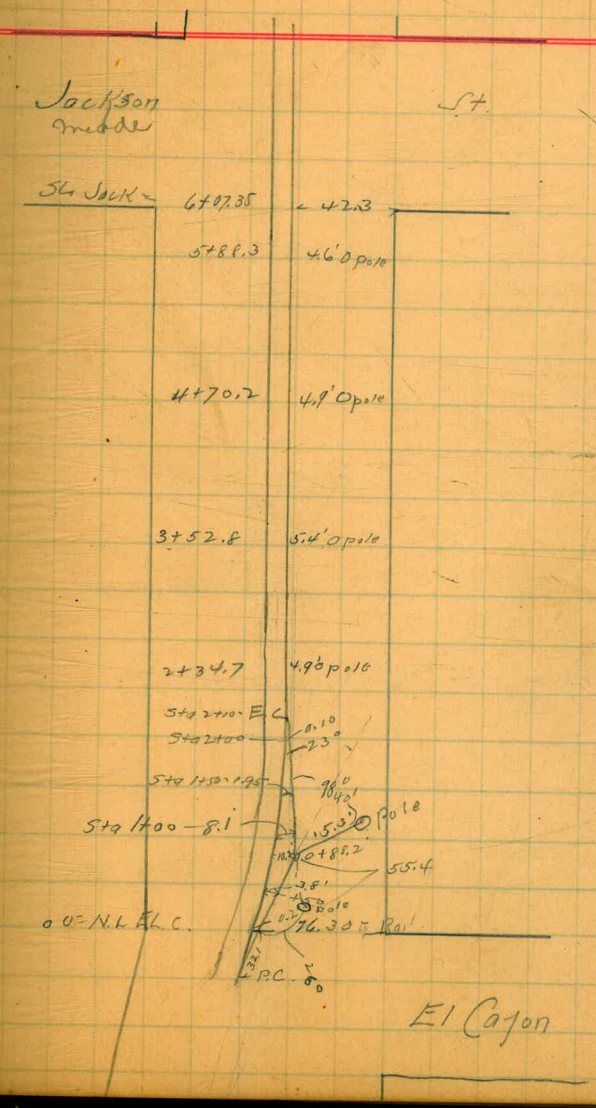


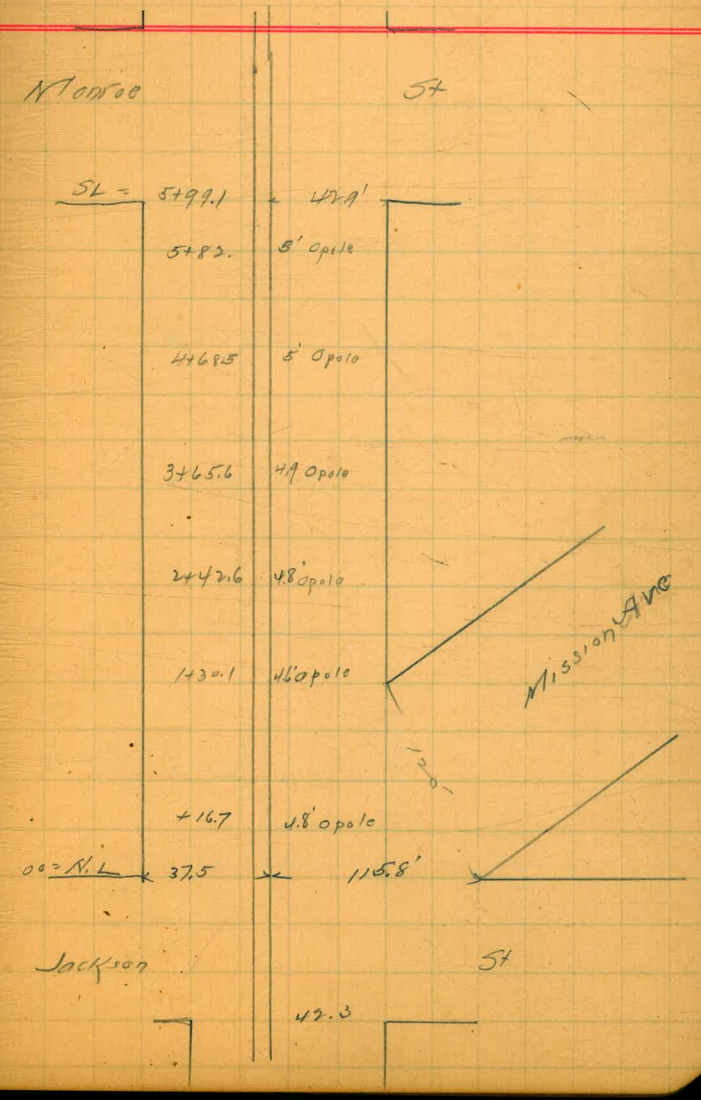

Ave
6+82.8=00
E.L. Rmd.
Richmond
St
Sta 6+02.8
Hub
72.3
76.90
10'
M.H
Hub
5+85.5
4.76 pole
4+71.8
4.8' pole
3+58.2
4.50 pole
2+45.1
4.650 pole
1+31.3
4.60 pole
0+18.8
4.60 Pole
0+00
EL. Vmt.
Vermont
Univ
St

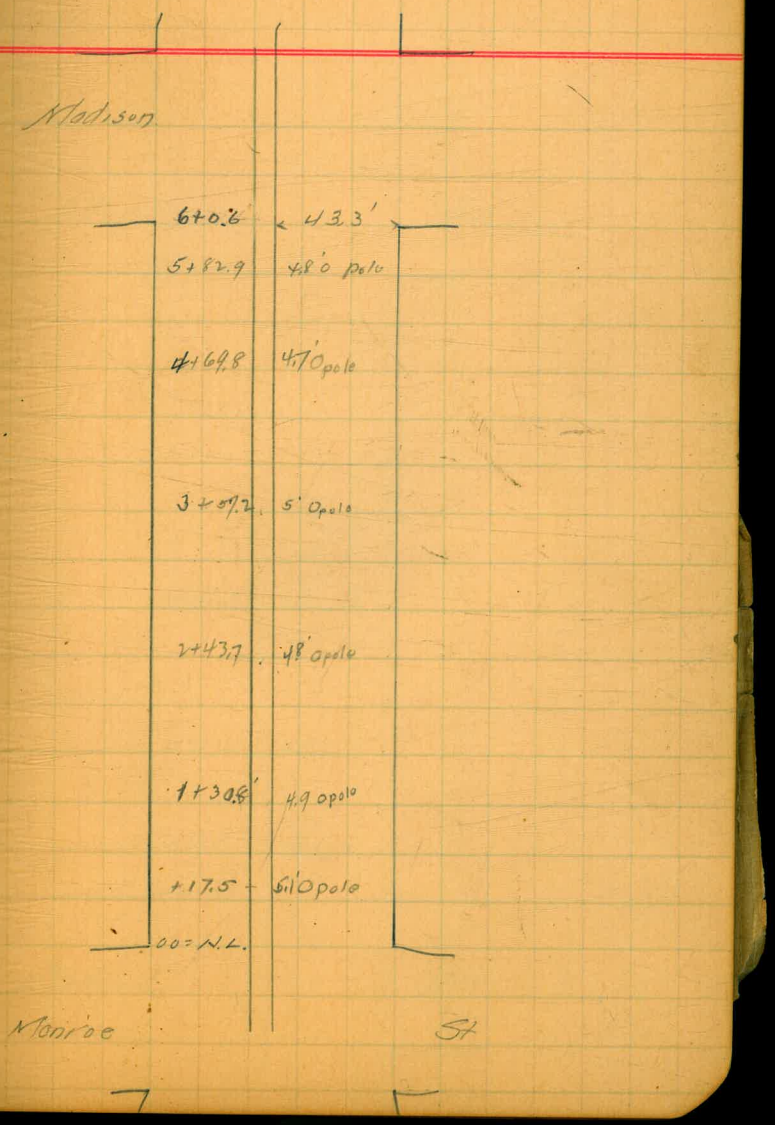

St
Blaine
Solino Blaine
Ave
Iron Pole
Sta 6+98.2
71.85
78.1
6+80.5
5+57.5
57°08'
3+96.62
37.75
83°03'
P.C.
2+45.2
1+31.15
0+17.5
0+00=
E.L. Rmd
Richmond
Univ
St

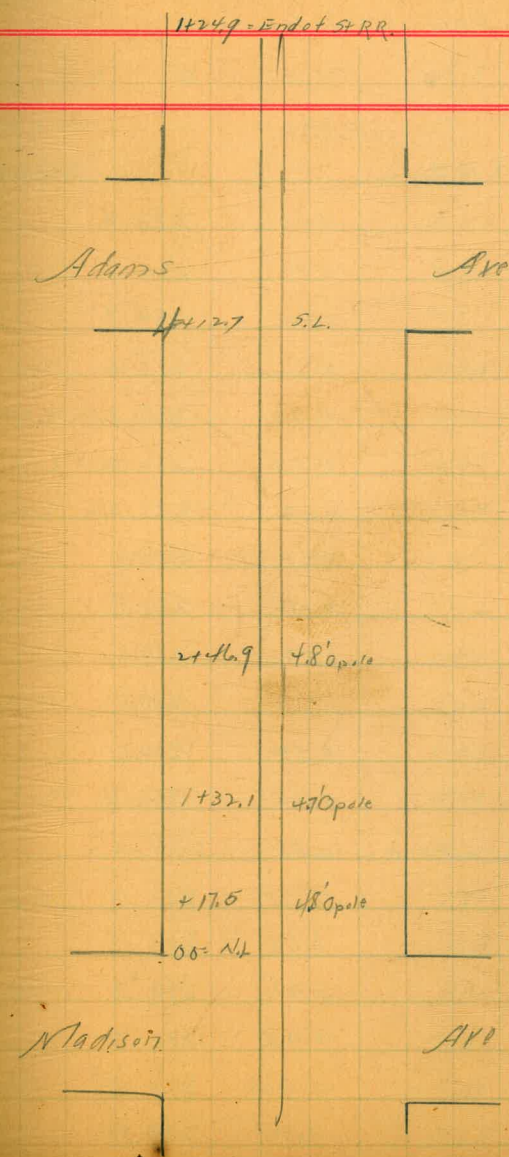

Blvd.
00 6+79.3 N.L. Lincoln
Lincoln
Ave
78.25
5+99.3 S.L. Lincoln
5+83.1 4.6' pole
4+70.1 4.8' pole
3+57 4.5' pole
M.H
2+50 10.5
2+44.1 4.7 pole
1+21.4 4.6' pole
0+52.7 4.5' Tel Pole
0+17.7 4.6' pole
0+00 N.L. Blaine
Note Line = E. Side of E Rail of Car Line.
Blaine.
Univ.
St


N.L. Prod.
76.30' To Rail.
El Cajon Ave
N.L. Cajon 10+36.5
9+52 4.7 Opole
Sta 8+42.5 SL El Cprod.
36'
139.97
8+43.8 9.6 MH
8+32.8 24.7
MH 8+35.8 4.5 Opole
29.3'
7+18.2 4.7 Opole
"A"
6+32.1 78.4'
90°
6+01.1 4.7 Opole
4+84.2 4.5 Opole
3+67.6 4.6 Opole
2+68 = Begin Small Rail
2+50.9 4.5 Opole
2+50 P.G.
1+88.6 4.6 O 4.2 O Brace
1+33 4.6 O 4 O Brace
1+05.9 4.7 O 4 O Brace Pole
0+47 - P.G.
0+16.35 4.4 Opole
0+00 - NL. Campus
Boulevard
Campus Ave


Jackson
Meade
St.
St. Jack
6+07.35
42.3
5+88.3
4.6' O pole
4+70.2
4.9' O pole
3+52.8
5.4' O pole
2+34.7
4.9' O pole
Sta 2+10 - E.C.
Sta 2+00
0.10
23°
Sta 1+50 - 1.95
98°
40'
Sta 1+00 - 8.1
15.3' O pole
0+88.2
55.4
3.8'
O pole
0.0 = N.L. EL C.
76.30 = Rail
P.C.
El Cajon


Monroe
St
SL = 5+99.1
42.9'
5+82.
5' Opole
4+68.5
5' Opole
3+65.6
4.9 Opole
2+42.6
4.8' opole
1+30.1
4.6' opole
Mission Ave
120'
+16.7
4.8' opole
00 = N.L
37.5
115.8'
Jackson
St
42.3


Madison
6+0.6
43.3'
5+82.9
4.8'o pole
4+69.8
4.7'Opole
3+87.2
5'Opole
2+43.7
4.8'opole
1+30.8
4.9 opole
+17.5
6.1'Opole
00=N.L.
Monroe
St


1+24.9 = End of St RR.
Adams
Ave
4+12.7
S.L.
2+46.9
4.8' Opole
1+32.1
4.7' Opole
+17.5
4.8' Opole
00 = N.L.
Madison
Ave

Levels over Car Track from 10th and University to the Pavilion 5/12/06 Dave Burton Hawkins

Note Measurements taken along So. Rail on Univ Ave. and on E. Rail on Univ Boulevard

POSTED

Sta	B.S	H.I.	F.S.	Elev	
					BM. 10th & Univ.
	8.27	291.01			282.74
00=EL. 10th			7.60	283.4	
+50			6.88	284.1	
1			6.25	284.7	
+50			5.62	285.4	
2			5.06	285.9	
+50			4.58	286.4	
3			3.92	287.1	
+50			3.19	287.8	
4			2.46	288.5	
+50			1.72	289.3	
WL: +77.5			1.27	289.7	
5+17.5 Ctr			0.80	290.2	
5+37.5=EL=00			9.35	290.6	
T.P.	7.98	298.41	0.58	290.43	
+50			7.14	291.3	
1			6.62	291.8	
+50			6.11	292.3	
2			5.55	292.8	
+50			4.94	293.5	
3			4.44	294.0	

Sta	B.S.	H.I.	F.S	Elev
		298.41		
3+50			3.85	294.5
4			3.30	295.1
+50			2.70	295.7
5			2.20	296.2
+50			1.65	296.8
6+02.8: W.L. Rmd			1.11	297.3
+42.8 Ctr			0.77	297.6
+82.8 EL = =0+00			0.34	298.1
T.P.	8.78	306.48	0.71	297.70
+50			7.92	298.6
1			7.54	299.0
+50			7.00	299.6
2			6.53	300.0
+50			5.97	300.5
3			5.31	301.2
+50			4.77	301.7
4			4.18	302.3
+50			3.40	303.1
5			2.90	303.6
+50			2.40	304.1
6			1.88	304.6

Sta	B.S	H.I.	F.S	Elc	
		306.48			
6+50			1.33	305.2	
+62.6 = S.L. Blaine			1.18	305.3	
T.P.	9.73	314.94	1.27	305.21	
7+02.6 = Ctr. "			9.22	305.7	
7+42.6 N.L. " = 0+00			8.82	306.1	
+50			8.39	306.5	
1			7.85	307.0	
+50			7.39	307.5	
2			6.90	308.0	
+50			6.42	308.5	
3			6.03	308.9	
+50			5.57	309.3	
4			5.07	309.8	
+50			4.51	310.4	
5			3.82	311.1	
+50			2.61	312.3	
+99.3 = S.L. Lincoln			1.16	313.7	
∠ BM			2.39	312.55	312.55
T.P.	13.00	327.40	0.54	314.40	
6+39.3 Ctr.			12.39	315.0	
6+79.3 = 0.0 N. ∠ Lincoln			10.91	316.5	

Sta.	B.S	H.I.	F.S.	Elc
		327.40		
0+50			8.60	318.8
1			6.15	321.2
+50			3.75	323.6
2			1.28	326.1
T.P.	12.93	340.13	0.20	327.20
+50			11.54	328.6
3			9.08	331.0
+50			6.63	333.5
4			4.14	336.0
+50			1.71	338.4
T.P	8.64	348.64	0.13	340.00
5			7.78	340.8
+50			6.16	342.4
6+00 = S.L. Campus			4.86	343.7
+40 Ctr. "			4.22	344.4
+80 = 0+00 N.L. "			3.85	344.7
+50			3.85	344.7
1			3.91	344.7
+50			3.99	344.6
2			4.05	344.5
+50			4.13	344.5

Sta	BS	HI	FS	Elev	
		348.64			
3+00			4.28	344.3	
+50			4.24	344.3	
4			4.38	344.2	
+50			4.42	344.2	
5			4.46	344.1	
+50			4.58	344.0	
T.P.	3.65	347.71	4.58	344.06	
6			3.72	344.0	
+32.1 = ℄ P.C.			3.66	344.0	
+50			3.68	344.0	
7			3.71	344.0	
+50			3.72	344.0	
8			3.81	343.9	
+42.5 S.L. E.I.C. Prod.			3.79	343.9	
9			3.97	343.7	
+50			4.33	343.4	
10			4.45	343.2	
+36.5=00 N.L. E.I.C Prod.			4.83	342.9	
+50			5.48	342.2	
Cor. HI. =		347.77	7.69	340.02	340.08

Sta	BS	HI	FS	Elev	
		347.77			
1+00			6.04	341.8	
+50			6.47	341.3	
2			6.66	341.1	
+50			6.67	341.1	
3			6.59	341.2	
+50			6.51	341.3	
4			6.44	341.3	
T.P.	5.44	346.64	6.57	341.20	
+50			5.20	341.4	
6			5.10	341.5	
+50			4.87	341.7	
607 S.L. Jack			4.61	342.0	
+47 CH "			4.46	342.1	
+87=0+00 N.L. "			4.32	342.3	
+50			4.14	342.5	
1			3.97	342.6	
+50			3.81	342.8	
2			3.57	343.0	
+50			3.31	343.3	
3			3.07	343.6	
+50			2.84	343.8	

Sta	B.S	H.I.	F.S		Elev
		346.64			
4+00			2.78	343.8	
+50			2.55	344.0	
5			2.37	344.2	
+50			2.20	344.4	
+99 = St. Monroe			2.00	344.6	
6+39 Ctr "			1.79	344.8	
6+79 = N.L " = 0+00			1.75	344.8	
T.P.	6.94	352.00	1.58	345.06	345.06
+50			6.80	345.2	
1			6.65	345.3	
+50			6.48	345.5	
2			6.21	345.8	
+50			5.88	346.1	
3			5.28	346.7	
+50			4.67	347.3	
4			3.92	348.1	
+50			3.21	348.8	
5			2.49	349.5	
+50			1.84	350.2	
6+00	St. Madison		1.16	350.8	
T.P	8.10	358.87	1.23	350.77	350.77

Sta	BS	H.I	FS	Elev
		358.87		
6+40 = Ctr. Mad.			7.47	351.4
+80 = N.L " = 0+00			7.00	351.9
+50			6.37	352.5
1			5.82	353.1
+50			5.49	353.4
2			5.18	353.7
+50			4.87	354.0
3			4.50	354.4
+50			4.21	354.7
4			3.90	355.0
+50			3.64	355.3
+63 St. Line Adams			3.54	355.4
5+03 Ctr "			3.27	355.6
+43 N.L = 0+00 "			2.97	355.9
+50			2.53	356.4
1			2.50	356.4
+25 = End Car-Track			2.21	356.7
			2.46	356.41 356.41

279.645

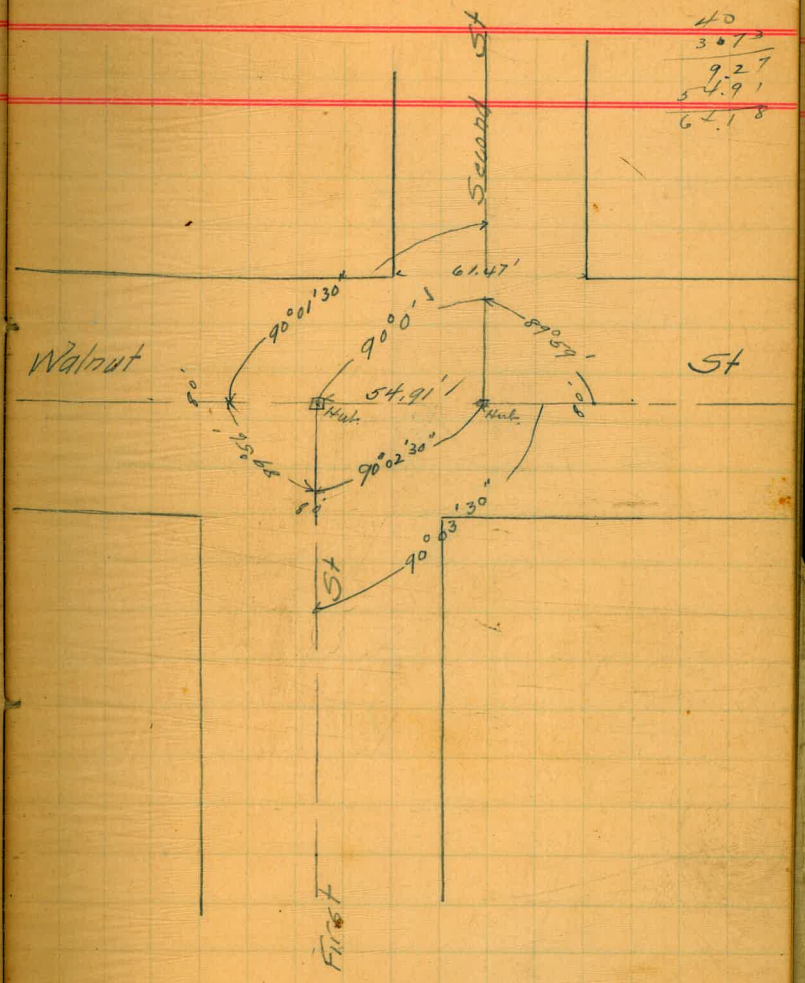
POSTED

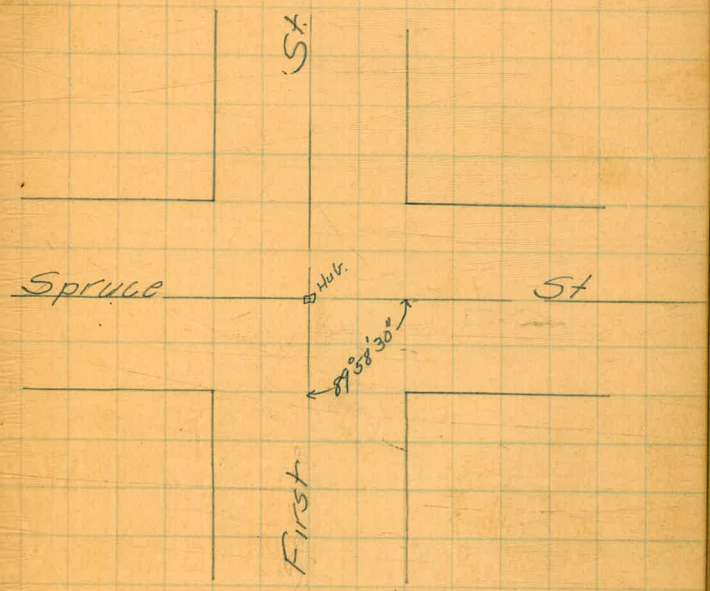
12.21	252.16		239.95
5.54	255.45	2.22	249.94
		2.44	253.01
2.44	255.57		253.07
		4.50	251.01
	H.		
10.99	241.74		230.75
12.88	254.050	0.57	241.17
		5.64	248.41 —
4.976	256.243	2.783	251.267 —
5.861	260.169	1.935	254.308 —
9.090	267.139	2.120	258.049
10.103	274.897	2.345	264.794
9.120	282.375	1.642	273.255 —
5.920	286.360	1.935	280.440 —
5.990	290.080	2.270	284.090 —
5.720	292.825	2.975	287.105
		5.060	287.765 —
		3.34	289.485
3.22	285.495	10.55	282.295
		5.880	279.615 ✓ 279.48

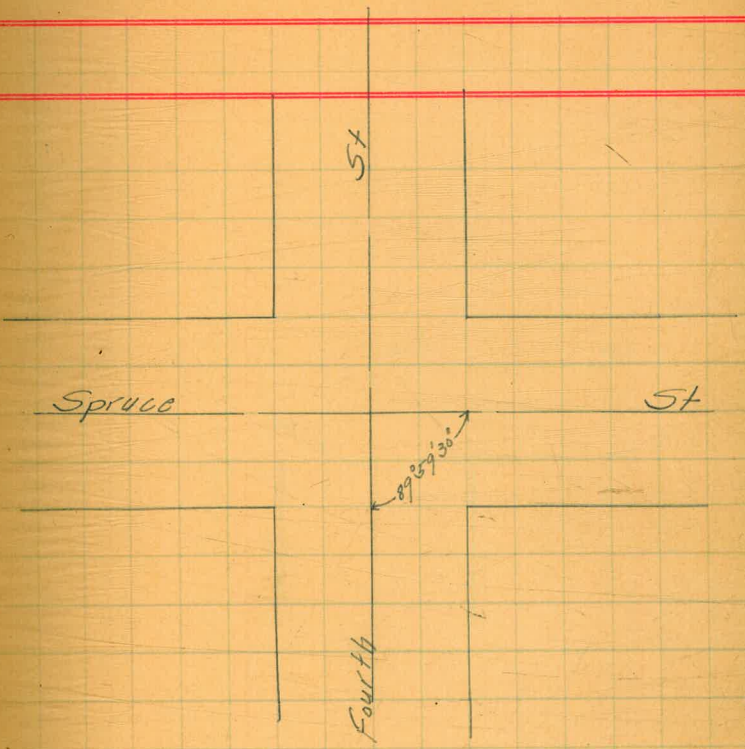
B.M – Spk in Pole – 75 W of N.W Cor P.Blvd & Kalmia.
" " " " " – S.W Cor P.Blvd & Laurel
" " Hub 10'E of E.L P.Blvd – Ctr Maple.
" " " " " " " " " – " Nutmeg
" " " " " " " " " " Olive
" " Spk 6" E of Hub 10'E of E.L R.B – Ctr Palm.
" " Hub 10'E of E.L P.B – Ctr Quince.
" " " " " " " " – " Redwood.
" " " " " " " " " " Spruce
" " " " " " " " " " Thorn
" " Spk in Pole S.W P.Blvd & Upas

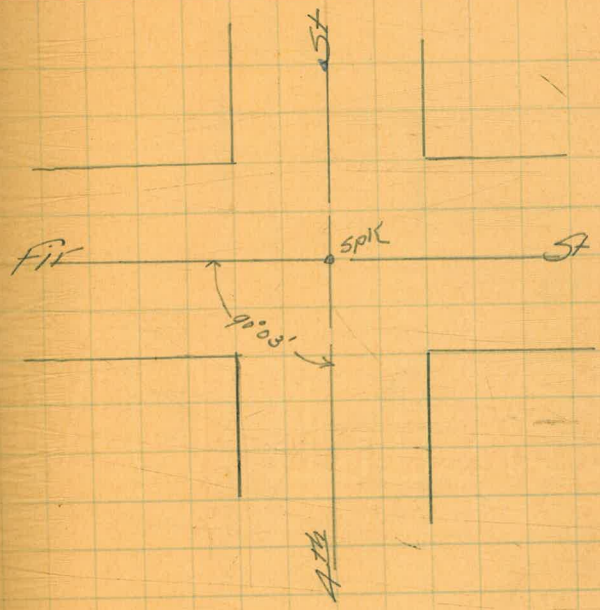
Angles of Streets for St. Ry. Co.

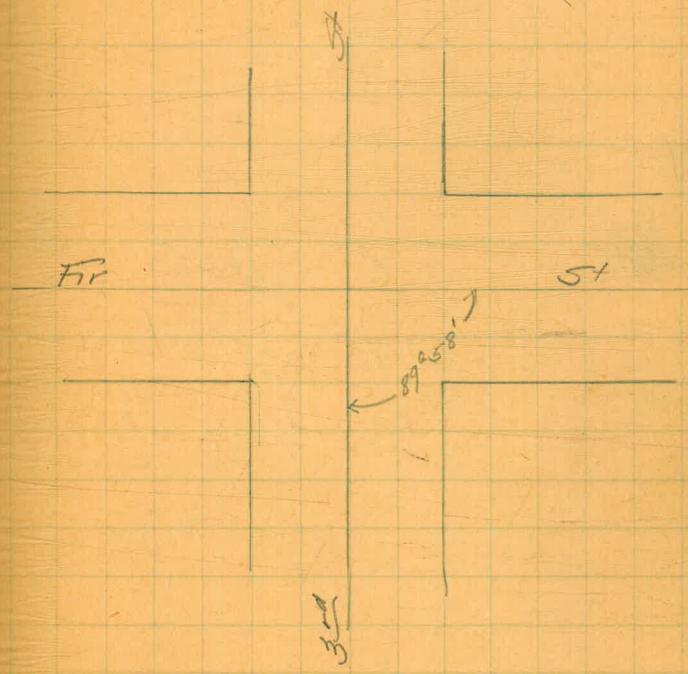
POSTED 8/18/06

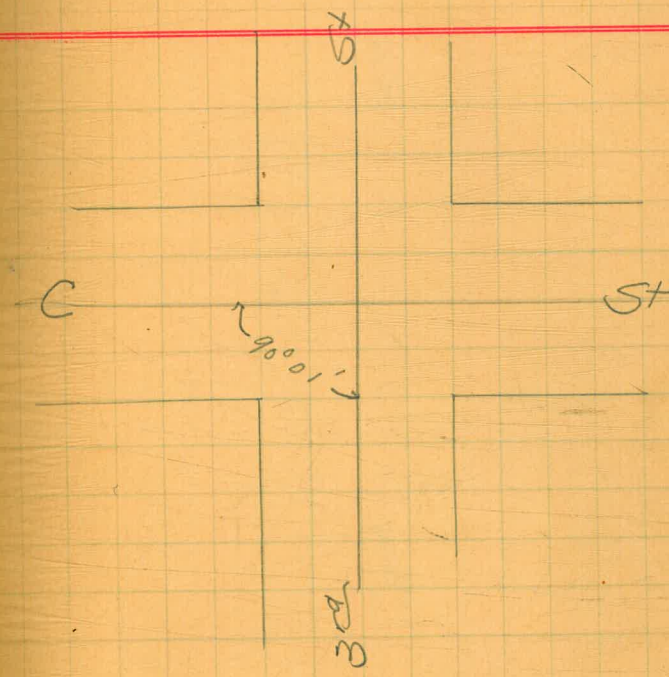


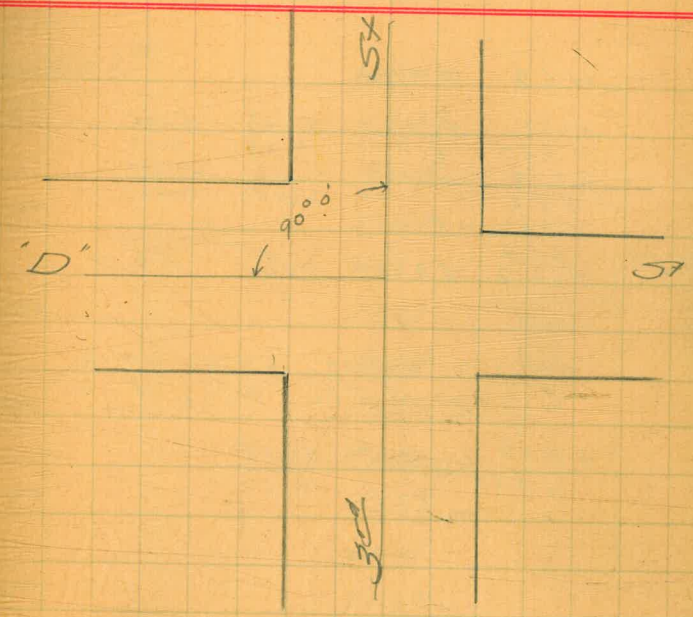

St.
Spruce
Hub.
St
89°58'30"
First


5t
Spruce
St
89°59'30"
Fourth


5th
Fit
spik
5t
90°03'
11th


5th
Fir
5th
89°58'
3rd


6th
C
St
90°01'
3rd


5th
90°
"D"
5th
3rd

Grades for Car Track on Nat'l Ave - 26th to 31st

POSTED

		14			13
	4.62	55.75			51.13
	50.62	51.00	51.37	51.75	
	5.13	4.75	4.38	4.00	
	52.12	52.50	52.87	53.25	
	3.63	0.25	2.88	2.50	
	53.62	54.00			
	2.13	1.75			
T.R.	51.06	60.25	0.56	55.19	
	54.00	54.37	54.75	55.12	
	6.25	5.88	5.50	5.13	
	55.50	55.87	56.25		
	4.75	4.38	4.00		

	Grade
0 - EL. 26th	49.50
+50	49.87
1	50.25
+50	50.62
2	51.00
+50	51.37
3	51.75
+50	52.12
4	52.50
+50	52.87
5	53.25
+50	53.62
6 - W. L. 27th	54.00
Ctr	54.00
0 = EL. 27th	54.00
+50	54.37
1	54.75
+50	55.12
2	55.50
+50	55.87
3	56.25

		Ht.			
		60.25			
	56.62 / 3.63	57.00 / 3.25	57.37 / 2.88	57.75 / 2.50	58.12 / 2.13
	58.50 / 1.75				
TP	4.30	63.49	1.06	59.19	No 2 Hyd. St. & 28th & Nu. H.
	58.50 / 4.99	58.75 / 4.74	59.00 / 4.49	59.25 / 4.24	59.50 / 3.99
	59.75 / 3.74	60.00 / 3.49	60.25 / 3.24	60.50 / 2.99	60.75 / 2.74
	61.00 / 2.49	61.25 / 2.24	61.50 / 1.99		
T.P.	6.41	67.50	2.40	61.09	

Sta.	Grade
3+50	56.62
4	57.00
+50	57.37
5	57.75
+50	58.12
6 = W.L. 28th	58.50
Ctr "	58.50
0 = E.L. 28th	58.50
+50	58.75
1	59.00
+50	59.25
2	59.50
+50	59.75
3	60.00
+50	60.25
4	60.50
+50	60.75
5	61.00
+50	61.25
6 = W.L. 29th	61.50
Ctr "	61.50

	HI.				
	67.50				
61.50	61.75	62.00	62.25	62.50	
6.00 ✓	5.75	6.00 ✓	6.25	6.00	
62.75	63.00	63.25	63.50	63.75	
4.75	4.50 ✓	4.25 ✓	4.00	3.75	
64.00	64.12				
3.50	3.38				

Sta	Grade.
0 = EL. 29 Th	61.50
+50	61.75
1	62.00 ✓
+50	62.25 ✓
2	62.50
+50	62.75
3	63.00
+50	63.25
4	63.50 ✓
+50	63.75 ✓
5	64.00
+50	64.25
6+00 = W.L. 30 Th	64.50

POSTED Levels for Sewer on 3d st from J to D

	0.58	6.76		6.18	BM 4th & J Hyd
			7.40	-0.64	
				20.00	
2400 ft					
.0086					
.43 for 50'					
-.60					
0.0			6.89	-.13	
+50			6.46	.30	
1.00			6.03	.73	
+50			5.60	1.16	
TP	8.00	9.16	5.60	1.16	
2	8.00		7.57	1.59	
+50			7.14	2.02	
3			6.71	2.45	
	3.68	12.06		8.38	BM J + 3d
+50			9.18	2.88	
4			8.75	3.31	
+50			8.32	3.74	
5			7.89	4.17	

Clough
Moore
Thomas

12/10/06

344
243
279

POSTED

El of bottom Sewer in J st at 3d st
El of Sewer at D + 3d
Length of Sewer
= Ratio

= Sewer in J st
= N Line J st

19.95
8.12
11.83
1.61
13.44
2.80
10.64

= S Line J st

2.80
El M + J St

Rate = 0.8833 %

		12.06			
5+50			7.46	4.60	
6			7.03	5.03	
+50			6.60	5.46	
	2.07	13.64		13.57	BM 3d & H
7+15			8.62	6.02	
+50			9.32	6.32	
8			8.89	6.75	
+50		HI 17.57	10.35	7.22	
9		from stakes	9.91	7.66	
+50	19.95 BM 2.24 22.19 HI		9.46	8.11	
10			9.02	8.55	
+50			13.20	8.99	
11			12.76	9.43	
+60	NE G St.		12.24	9.95	9.60 El. mH
12+10			11.80	10.39	
+50			11.45	10.74	
12+90			11.70	11.09	
13+30	12.87	24.32	10.74	11.45	
13+95			12.30	12.02	
14+40			11.90	12.42	

12.60 gr. SL F.

El mH H St.

= 20' N of H St

25.55 BM 3d - F.

M H at F. grade = one gutter

19.95 BM 3 - G

grade = one gutter

Manhole at H H. grade (took car track) El. 11.80

Manhole at I St. grade 6.20 / 6.54 two gutters

3456 SE Cor N Hyll Hinge

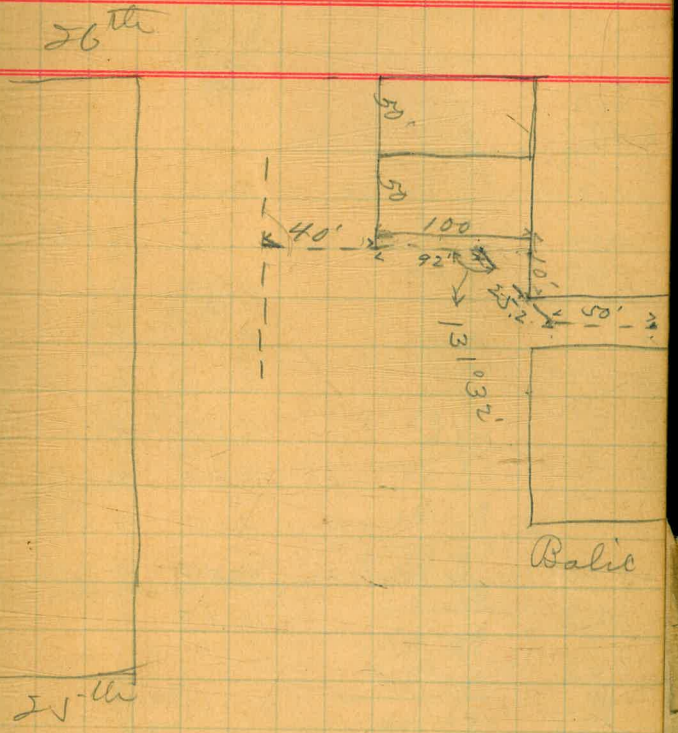
				Grade				
14+74				12.72				
15+26	14' So. No. line F. St.			13,18				
15+85	45' No. F. St.			13.70				
16+08				13.90				
16+47				14.24				
17+05				14.75				
17+60				15.23 ✓				
18+40	S L E			15.93				
18+85		36.31	19.98	16,33.				
19+30	10' N L E		19,55	16.73				
19+70			19,20	17.08				
20+35			18,66	17.65 ✓ Jan 14				
21+20			25.65	18,40	4.05	44.05		40.00 BM
22+05	5' S D		24,90	19.15				
22+50			25.62	19.55	5.17	45.17		40.00 BM
Curb	SE 3d + D		25,17	20.00				

Sewer levels in alley bet
Balic Balic & 26th So. of D.

POSTED

Dec. 19, 1906. { Childs, Evans, Bell

Sta		Rod	Elev
	H.I.		
~~0+00~~	194.55		
0+00	center D	5.4	189.2
26' So	" Gutter	6.2	188.4
26' "	" Curb	5.8	188.8
38' "	" D	5.7	188.9
So. line D		5.0	189.6
2' So. D.		2.2	192.4
50' "	"	3.6	191.0
92' "	" △ point	4.7	189.9
25.2 So. last point	△ point	6.0	188.6
50' So. "	" center alley	8.9	185.7



5/3/07 { Hatch, Donnan, Emery

Sewer on C St.

POSTED

4th St. to Scripps Bldg.

Note

{ Spikes are set at stations indicated 3' North of Cr of Pipe, or 12.75' N. of South Curb of C. St. }

BM.	2.66	57.08		54.42		SE Cor 5th-C NH Hydt = Curb Line 103' E of 5th St.
0+00					43,91	43/57
0+13 MH			3.35	53.73	43.77	9.96
+50			3.95	53.13	43.39	9.74
+57					43.32	
1			4.86	52.22	42.86	9.36
+25					42.60	
			4.93	52.15	42.34	9.81
2 +60 +89 MH N side 5th					42.23	
					41.93	
			5.36	51.72	41.81	9.91
			6.57	50.51	41.29	9.22
3			7.73	49.35	40.77	8.58
			9.10	47.98	40.24	7.74
+87.5	angle left.		9.98	47.10	39.85	7.25
4 +05			10.07	47.01	39.72	7.29
+34	MH 4th St				39.67	
					39.36	

1.28 55.70 54.42 BM

41.29 / 14.41 — 40.77 / 14.93 — 40.24 / 15.46 — 39.85 / 15.85 — 39.67 / 16.03

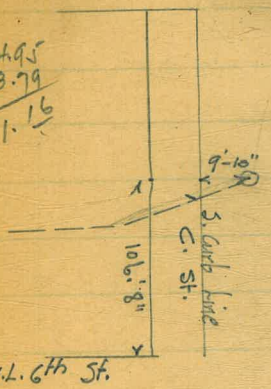
2.57 56.99 54.42 BM.

41.81 / 15.18 — 41.93 / 15.06 — 42.23 / 14.76 — 42.60 / 14.39 — 42.86 / 14.13

54.42 / 1.29 / 55.71 — 42.86 / 12.85 — 43.32 / 12.39 — 43.77 / 11.94 — 1.048 / .07336

B.M. 5th & C. 52.758

N.W. Cor Brass plug end return.



44.95
43.79
1.16

43.79 Elev. flow of N.H.

50.05 — 6.30 — 43.75

50.05 — 6.37 — 43.68

52.7
5.5
H.I. 58.2
14.47
43.79

9.93
4.54
14.47

10.0
4.61
14.68

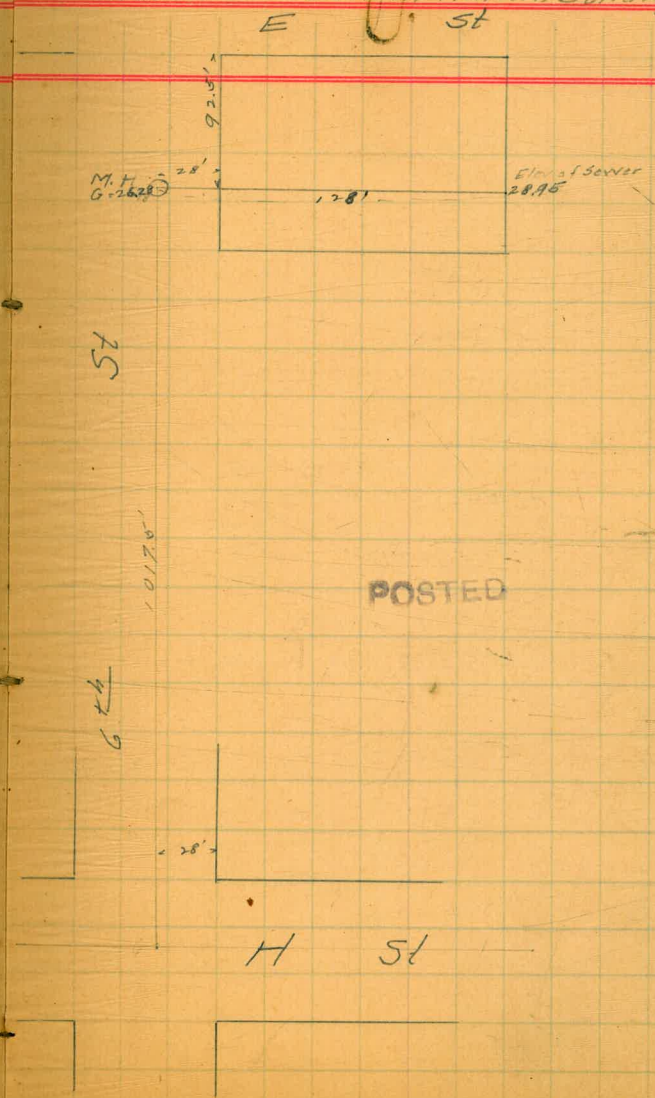
58.76
3.55
54.71
4.97
59.63
14.68
44.95
5.12
50.09
5.12
44.97
5.08
H.I. 50.05

5.84
5.91
.46
6.37
5.84
.46
6.30

2.53	45.97		43.44	BMb+E
		4.51	41.46	= Top slab

1/19/09 { Davis, Donnan, Shaw

Grades for Sewer in Timkin Building



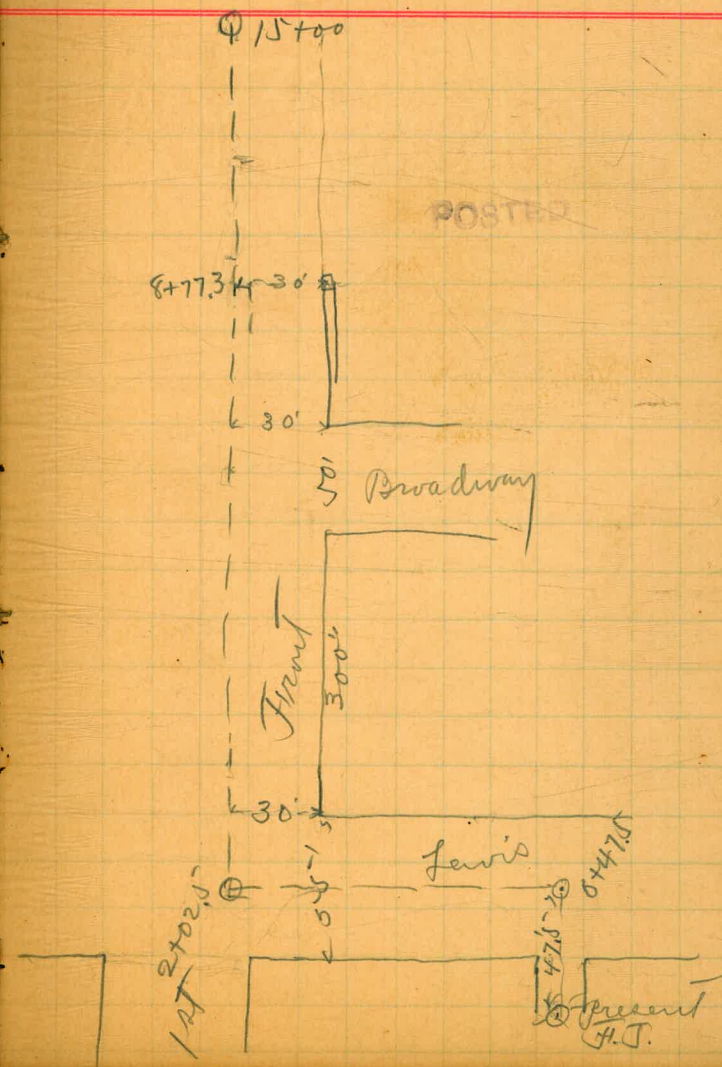
POSTED

Lewis st. from alley bet. 1st & second
& Front from center Lewis to County hospital

Feb. 27/09 { Childs, Barber, Rogers

70

Sta.		H.I.	Rod	Elev.
0+00	F.J. of present sewer	291.86	4.8	287.1
+47.5	center Lewis		4.1	
1+00			4.0	
2+02.5	center Front		3.4	
3+00			3.0	
4+00			2.2	
5+00			2.4	
			4.4	
6+00			4.4	287.5
7+00			3.2	
8+00			0.3	
8+77.3	[illegible] 6th st. add.	297.08	2.7	
9+00			2.7	294.4
10+00			3.4	
11+00			5.6	
+45			9.2	287.9
+70		284.63	2.4	
12+18			17.6	
12+70		297.08	11.5	285.6
13+00			10.9	286.2
14+00			8.7	
15+00			4.1	293.0



POSTED

POSTED

12.88
278.98
291.86
0.78
291.08

297.08
13.18
283.90
.73
284.63

5.2
280.45
285.65

280.45
3.8
284.25

Sewer on 5th & H.
7/10/05

		Grade Elevation	Elevation of Nail	
0		12,88	13,56	.68
17,5		13,06	19,44	6,38
27,5		13,16	19,51	6,35
37,5		13,27	19,76	6,49
47,5		13,37	19,81	6,44
57,5		13,48	19,98	6,50
67,5		13,58	19,97	6,39
77,5		13,68	20,01	6,33
87,5		13,79	20,13	6,34
97,5		13,89	20,44	6,55
107,5		14,00	20,64	6,64
117,5		14,10	20,97	6,87
127,5		14,20	21,27	7,07
137,5		14,31	21,40	7,09
147,5		14,41	21,51	7,10
157,5		14,52	21,74	7,22
167,5		14,62	22,07	7,45
177,5		14,73	22,30	7,57
187,5		14,83	22,47	7,64
197,5		14,94	22,66	7,72
200,5		11	22,77	
212,5		15,10		

Grade 1" = 10'

	Elevation Grade	Elevation of Nail	Cut
0	12,88		
17,5	13,03		0,68
			6,41
27,5	13,11		6,40
	13,19		6,57
	13,28		6,53
	13,36		6,62
	13,44		6,53
	13,53		6,48
	13,61		6,52
	13,69		6,75
	13,78		6,86
	13,86		7,11
	13,94		7,33
	14,03 ~~13,93~~		7,37
	14,11		7,40
	14,19		7,55
	14,28		7,79
	14,36		7,94
	14,44		8,03
	14,53		8,13
	14,65		0,0

5th & "H" St Sewers
7/8/05
Hutchinson
Evans
Sawyer,

2.84
2.08
24.92

Grade of Main Sewer	Grade Elevation	M.I. 25.09 Rod.	Levy Rod.	Cut.
	12.88	12.21	11.54	0.67
17.5	13.01	12.08	5.65	6.43
27.5	13.085	12.01	5.58	6.43
37.5	13.16	11.93	5.34	6.59
47.5	13.235	11.86	5.30	6.56
57.5	13.31	11.78	5.18	6.60
67.5	13.385	11.71	5.13	6.58
77.5	13.46	11.63	5.08	6.55
87.5	13.535	11.56	4.96	6.60
97.5	13.61	11.48	4.65	6.83
107.5	13.685	11.41	4.46	6.95
117.5	13.76	11.33	4.13	7.20
127.5	13.835	11.26	3.82	7.44
137.5	13.91	11.18	3.69	7.49
147.5	13.985	11.11	3.58	7.53
157.5	14.06	11.03	3.34	7.69
167.5	14.135	10.96	3.02	7.94
177.5	14.21	10.88	2.78	8.10
187.5	14.285	10.81	2.61	8.20
197.5	14.36	10.73	2.42	8.31
200.3				
212.5	14.48	~~10.69~~ 10.61	~~4.69~~	

M.I. 24.92	Elevation of Main		
	11.86	13.56	0.68
	5.48	19.44	
	5.41	19.51	
	5.16	19.76	
	5.11	19.81	
	4.94	19.98	
	4.95	19.97	
	4.91	20.01	
	4.79	20.13	
	4.48	20.44	
	4.28	20.64	
	3.95	20.97	
	3.65	21.27	
	3.52	21.40	
	3.41	21.51	
	3.18	21.74	
	2.85	22.07	
	2.62	22.30	
	2.45	22.47	
	2.26	22.66	
	2.15	22.77	

11°30 Curve L

520. 59°48'

P.T.

P.C. 7° R

1581 St = 79°35 ft.

Δ = 11°04

P.T.

Grade on 6th

From Upas to Ivy Lane

Loma Grande Add

Lot 13

LOT

89°51'
89 56
179°12'
60
52

34.56 N [illegible]
SE bar [illegible]

40.00 SW bar NW b [illegible]

Suns Declanation for Dec 17th 03)

12 = 23° 18' 54"

1 = 23° 16' 47"

2 = 23° 16' 21"

3 = 23° 15' 23"

0 = 0

50 1°24'

100 2°56'

150 5°15'

200 4°35'

4.55 | 4.34
4.34 | 10481
2100
1736
3640
3472
1680

1.048
13
3144
1048
13624

1.048
.524

44.33
42
43.91
3936
455

57.08
12.75
44.33
4.97
39.36

43.91
136
43.774
524
43.250
42.726
42.202
41.678
41.154
40.630
40.106
39.582
356
39.226

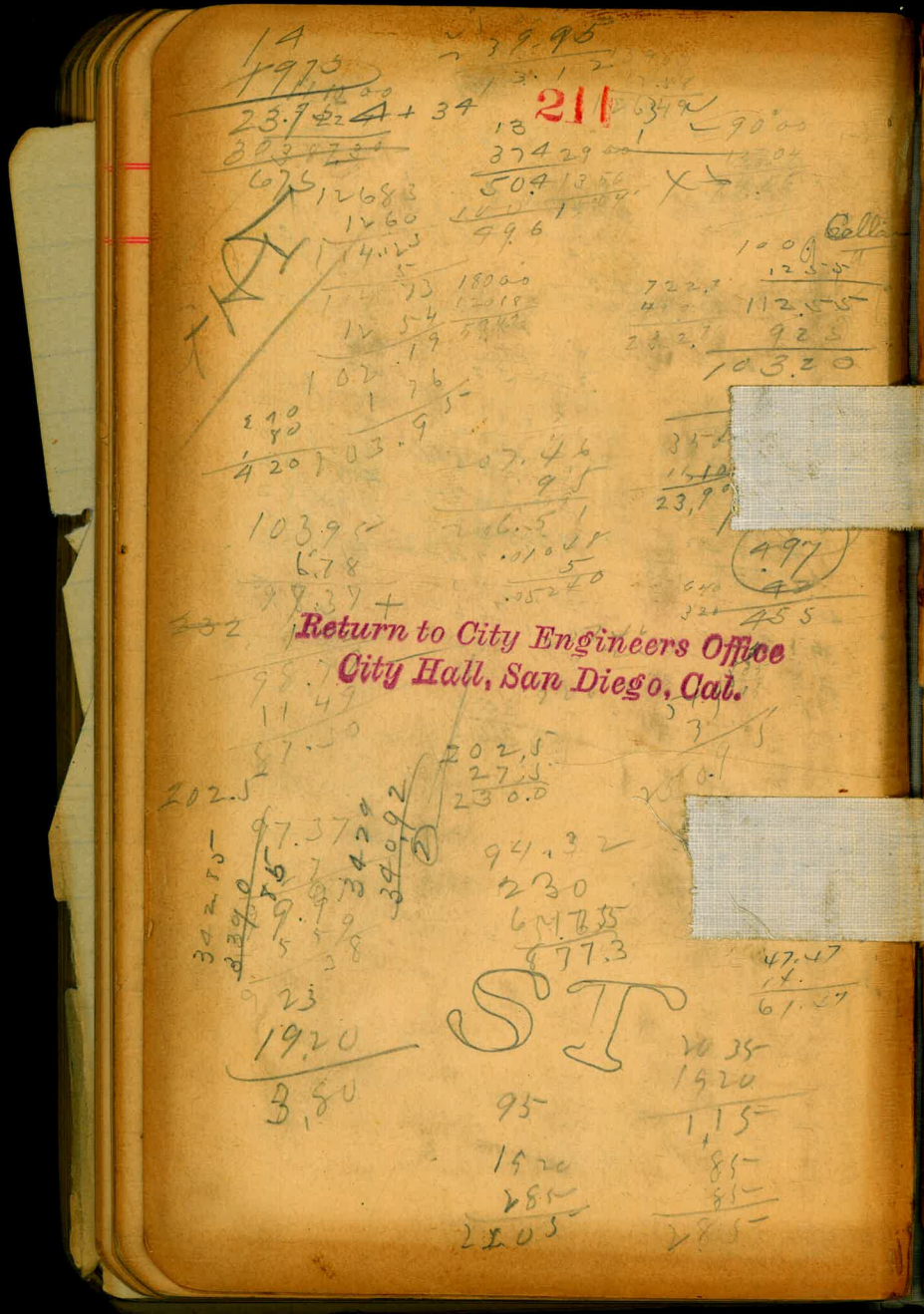
5240
2096
1048
131000

4391
419
39.72
1048
375
5240
7336
2144
393000
40242
39849
131
39,718

.4192
3144
35632

4391
524
43,386
42,862
42,338
41,814
41,290
40,766
40,242
39.718
356
39.362

52 1 56
54 6
5



TRAVERSE TABLE FOR TRANSIT BOOK.

From 1° to 90° for a distance of 100.

Degrees.	DEGREES.		¼ DEGREE.		½ DEGREE.		¾ DEGREE.		Degrees.
	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	
0			100.00	0.44	100.00	0.87	99.99	1.31	89
1	99.98	1.75	99.98	2.18	99.97	2.62	99.95	3.05	88
2	99.94	3.49	99.92	3.93	99.91	4.36	99.88	4.80	87
3	99.86	5.23	99.84	5.67	99.81	6.10	99.79	6.54	86
4	99.76	6.98	99.73	7.41	99.69	7.85	99.66	8.28	85
5	99.62	8.72	99.58	9.15	99.54	9.58	99.50	10.02	84
6	99.45	10.45	99.41	10.89	99.36	11.32	99.31	11.75	83
				12.62	99.14	13.05	99.09	13.49	82
				14.35	98.90	14.78	98.84	15.21	81
				16.07	98.63	16.50	98.56	16.93	80
				17.79	98.33	18.22	98.25	18.65	79
				19 51	97.99	19.94	97.90	20.36	78
				21.22	97.63	21.64	97.53	22.07	77
				22.92	97.24	23.34	97.13	23.77	76
				24 62	96.81	25 04	96.70	25.46	75
15	96.59	25.88	96.48	26.30	96.36	26.72	96.25	27.14	74
16	96.13	27.56	96.00	27.98	95.88	28 40	95.76	28.82	73
17	95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.49	72
18	95.11	30.90	94.97	31.32	94.83	31.73	94.69	32 14	71
19	94.55	32.56	94.41	32.97	94.26	33.38	94.12	33.79	70
20	93.97	34.20	93.82	34.61	93.67	35.02	93.51	35.43	69
21	93.36	35.84	93.20	36.24	93.04	36.65	92.88	37.06	68
22	92.72	37.46	92.55	37.86	92.39	38.27	92.22	38.67	67
23	92.05	39.07	91.88	39 47	91.71	39.87	91.53	40.27	66
24	91.35	40.67	91.18	41.07	91.00	41.47	90.81	41.87	65
25	90.63	42.26	90.45	42.66	90.26	43.05	90.07	43.44	64
26	89.88	43.84	89.69	44.23	89.49	44.62	89.30	45 01	63
27	89.10	45.40	88.90	45.79	88.70	46.17	88.50	46.56	62
28	88.29	46.95	88.09	47.33	87 88	47.72	87.67	48.10	61
29	87.46	48.48	87.25	48 86	87.04	49.24	86.82	49.62	60
30	86.60	50.00	86.38	50.38	86.16	50.75	85.94	51.13	59
			85.49	51.88	85.26	52.25	85.04	52.62	58
			84.57	53.36	84.34	53.73	84.10	54.10	57
			83.63	54.83	83.39	55.19	83.15	55.56	56
			82.66	56.28	82.41	56.64	82.16	57.00	55
			81.66	57.71	81.41	58.07	81.16	58.42	54
			80.64	59.13	80.39	59.48	80.13	59.83	53
			79.60	60 53	79.34	60.88	79.07	61 22	52
			78.53	61.91	78.26	62.25	77.99	62.59	51
39	77.71	62.93	77.44	63.27	77.16	63.61	76.88	63.94	50
40	76.60	64.28	76.32	64.61	76.04	64.94	75.76	65.28	49
41	75.47	65.61	75.18	65.93	74.90	66.26	74.61	66.59	48
42	74.31	66.91	74.02	67.24	73.73	67.56	73.43	67.88	47
43	73.14	68.20	72.84	68.52	72.54	68.84	72.24	69.15	46
44	71.93	69.47	71.63	69.78	71.33	70.09	71.02	70.40	45
45	70.71	70.71							
Degrees.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Degrees.
	DEGREES.		¾ DEGREE.		½ DEGREE.		¼ DEGREE.		

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