Misc. Work

15th Int. H. & I.
24th " I. & J.

4398

TRANSIT

F. B. 149

149

TRAVERSE TABLE FOR TRANSIT BOOK.

Return to City Engineers Office
City Hall, San Diego, Cal.

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
7	99.25	12.19	99.20	12.62	99.14	13.05	99.09	13.49	82
8	99.03	13.92	98.97	14.35	98.90	14.78	98.84	15.21	81
9	98.77	15.64	98.70	16.07	98.63	16.50	98.56	16.93	80
10	98.48	17.36	98.40	17.79	98.33	18.22	98.25	18.65	79
11	98.16	19.08	98.08	19 51	97.99	19.94	97.90	20.36	78
12	97.81	20.79	97.72	21.22	97.63	21.64	97.53	22.07	77
13	97.44	22.50	97.34	22.92	97.24	23.34	97.13	23.77	76
14	97.03	24.19	96.92	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
31	85.72	51.50	85.49	51.88	85.26	52.25	85.04	52.62	58
32	84.80	52 99	84.57	53.36	84.34	53.73	84.10	54.10	57
33	83.87	54.46	83.63	54.83	83.39	[illegible]	83.15	55.56	56
34	82.90	55.92	82.66	56.28	82.41	[illegible]	82.16	57.00	55
35	81.92	57.36	81.66	57.71	81.41	58.07	81.16	58.42	54
36	80.90	58.78	80.64	59.13	80.39	59.48	80.13	59.83	53
37	79.86	60.18	79.60	60 53	79.34	60.88	79.07	61 22	52
38	78.80	61.57	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.		

MICROFILMED
OCT 7 1964

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149

Return to City Engineers Office
City Hall, San Diego, Cal.

Degrees.	D	
	L	
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1	99	
2	99	
3	99	
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34	82.	
35	81.	
36	80.9	
37	79.8	
38	78.8	
39	77.7	
40	76.6	
41	75.4	
42	74.3	
43	73.1	
44	71.9	
45	70.7	
Degrees.	Dep.	
	DE	

Published

15th St. bet H & I. P. 7
24th " St. " I & J " 8

Kalmia	5th to Park.	23
Ivy	5th " "	25
Levels on 5th from A to B		2.
x Section Juniper from Front to 1st		4
W. B. Street Bridge		9
E " " "		18
Cañon Road 7 to Brooks		29
Center Line of 6th		33
Brookes str. Wagon Road		34
2nd Street Laurel to Olive		37
" " Sewer		38
Center Line of 28th Str		41
Measurem. of dirt washed away from B. Str Bridge		46
Checking Sidewalks		47

over

Levels on Center of Alley from

24 to 26 betw K & L Str 51

" " " L & M 52

" " " M & N 53

Levels on Center of Alley 150' East of

and parallel to 25 str from K to 110' of N 54

9th Str Canon Road 59

1/29/04 { Hutchison
Torrance
Riplay

B.M. ~~215.81~~

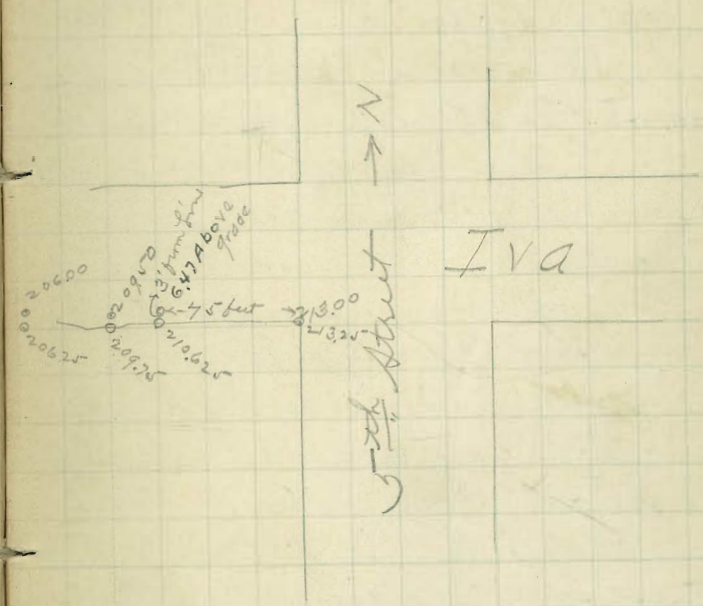
~~21.06~~
~~5.07~~
~~215.99~~

21.06
13
8.06

B.M. 215.81
5.07
20.88
13
7.88

B.M. 240.21
0.28
240.49
10.00
230.49
0.56
231.05
12.04
219.01
12.05
21.06

20.88
10.62
10.26
3.79
6.47



Levels on 5th St. from A to B.

15/2 { Davis / Torrance.

Location	+	−	I.H.	Ele.	Bet. Tracks Rod	Bet. Tracks Ele	At Rail Rod	At Rail Ele	2'E of Track Rod	2'E of Track Ele	E Gutter Rod	E Gutter Ele	E Curb Rod	E Curb Ele
				B.M.										
	0.30		67.96	67.66										
So. line A.					2.35	65.61	2.32	65.64	2.41	65.55	2.88	65.08	2.17	65.79
25' So of "					3.14	64.82	3.26	64.70	3.33	64.63	3.96	64.00	3.10	64.86
50' " " "					4.09	63.87	4.22	63.74	4.27	63.69	4.49	63.47	4.01	63.95
75' " " "					4.96	63.00	5.16	62.80	5.17	62.79	5.55	62.41	4.95	63.01
100 " " "					5.88	62.08	6.07	61.89	6.07	61.89	6.59	61.37	5.88	62.08
125 " " "					6.84	61.12	7.01	60.95	7.03	60.93	7.03	60.93	6.83	61.13
150' " " "					7.86	60.10	8.00	59.96	8.03	59.93	8.45	59.51	7.76	60.20
175 " " "					8.80	59.16	8.89	59.07	8.82	59.14	9.28	58.68	8.68	59.28
200 " " "					9.73	58.23	9.80	58.16	9.79	58.17	10.10	57.86	9.62	58.34
225 " " "					10.65	57.31	10.81	57.15	10.73	57.23	10.74	57.22	10.55	57.41
T.P.	+2.79	11.13	59.62	56.83										
250' " " "					3.29	56.33	3.46	56.16	3.43	56.19	3.82	55.80	3.22	56.40
275' " " "					4.22	55.40	4.38	55.24	4.43	55.19	4.88	54.74	4.24	55.38
No. line of B.					4.99	54.63	5.09	54.53	5.15	54.47	6.09	53.53	5.03	54.59
		3.96		BM 55.57 55.66 +0.09										

2/19/04 {Cornell / Davis} Levels to determine the Elevation at end of proposed Sewer at County Hospital.

	+	−	H.I	Elev.		
				B.M.		
	10.25		299.40	289.15	Hub.	Sta 26 Road Survey
	5.65	4.60	300.45	294.80		
		3.95		296.60 =	Elev	of Surface of Ground
				287.10 =	"	Sewer connections according to information given by Archt. Quayle

289.15
10.25
299.40
4.60
294.80
5.65
300.45
3.95
296.60
9.50
287.10

Cross Section
Juniper St. from E. Line Front St
To West Line of 1st St

Sta	+	H.I	Rod	Elv
BM	0.16	202.73		202.57
⊙	5.93	196.90	11.76	190.97
East Line of Front St				
N.S. Bot.			9.1	187.80
bb			9.5	187.40
1/4			9.6	187.30
bt			9.3	187.60
1/4			9.3	187.60
bb			9.8	187.10
S. side			9.6	187.30
N.S. Top			6.5	190.40
bb			6.0	190.90
1/4			5.7	191.20
bt			8.1	188.80
1/4			7.6	189.30
bb			7.4	189.50
S. Side			7.6	189.30
25' East of East Line				
S. side			6.6	190.30
bb			6.3	190.60
1/4			6.1	190.80

Alverson
Torrence
Family

2/27/04

4

Sta	+	H.I	Rod	Elv
bt			6.3	190.60
1/4			6.0	190.90
bb			5.7	191.20
N. side			5.4	191.50
50' East of East Line				
N Side			4.6	192.30
bb			5.0	191.90
1/4			5.2	191.70
bt			5.0	191.90
1/4			5.7	191.20
bb			6.0	190.90
S. side			6.2	190.70
75' East of East Line				
S side			5.8	191.10
bb			5.5	191.40
1/4			4.8	192.10
bt			4.3	192.60
1/4			3.9	193.00
bb			3.8	193.10
N side			3.6	193.30

Cross Section continued

Sta	+	H I	Rod	Elev
		196.50		
	100' East of East Line			
N side			2.7	194.20
lb			2.9	194.00
1/4			2.7	194.20
lt			3.4	193.50
1/4			3.5	193.00
lb			4.0	192.90
S side			5.0	191.90
⊙	7.51	202.60	1.81	195.09
	125' East of East Line			
S side			8.9	193.70
lb			8.7	193.90
1/4			8.0	193.60
lt			7.8	194.80
1/4			7.2	194.40
lb			6.8	195.80
N side			6.5	196.10

Sta	+	H I	Rod	Elev
	150' East of East Line			
N side			5.3	197.30
lb			5.5	197.10
1/4			6.3	196.30
lt			6.7	195.90
1/4			7.1	195.50
lb			7.6	195.00
S side			8.1	194.50
	175' East of East Line			
S side			6.1	196.50
lb			5.6	197.00
1/4			5.0	197.60
lt			4.1	198.50
1/4			4.2	198.40
lb			3.7	198.90
N side			3.0	199.60

Cross Section continued

Sta	+	H I	Rod	Elv.
		202.60		
	West line of 1st St			
N side			1.2	201.40
bb			2.1	200.50
1/4			2.4	200.20
bt			2.5	200.10
1/4			2.9	199.70
bb			3.4	199.20
S. side			3.3	199.30
	b.k on B.M		O.K	

15th Street

	0.26	37.78		37.52
	2.99	30.48	10.29	27.49
	140 feet North of M Line of I st.			
Center			5.0	25.5
1/4			5.2	25.3
Curb			5.1	25.4
West Line			5.3	25.2
	125' North of I St			
West Line			5.4	25.1
Curb			5.3	25.2
1/4			5.3	25.2
Center			4.9	25.6
	100 feet N			
Center			4.8	25.7
1/4			5.6	24.9
Curb			5.6	24.9
West Line			~~5.2~~ 4.8	25.7

15th Street

4/5/04 { Hutchison, Fortmer, Conley

7

30.48		
75' North of 1st.		
West Line	5.4	25.1
Curb	5.8	24.7
1/4	5.8	24.7
Center	5.7	24.8
50' North of 1st.		
Center	5.9	24.6
1/4	5.7	24.8
Curb	5.6	24.9
West Line	5.5	25.0
25' North		
West Line	5.8	24.7
Curb	5.5	25.0
1/4	5.6	24.9
Center	5.7	24.8
North Line of 1. St.		
Center	5.3	25.2
1/4	5.5	25.0
Curb	5.6	24.9
West Line	5.9	24.6

24th Street

4/5/04 { Hutchison, Fortner, Comly

	9.09	107.48	~~10~~	98.39
North Line of J St				
West Line			9.2	98.3
Curb			9.2	98.3
1/4			9.1	98.4
Center			9.00	98.5
25' North of J St.				
Center			8.2	99.3
1/4			8.4	99.1
Curb			8.2	99.3
West Line			7.8	99.7
50' North of J St.				
West Line			5.4	102.1
Curb			5.7	101.8
1/4			6.2	101.3
Center			6.5	101.0

107.48

75 ft North of J St.		
Center	4.1	103.4
1/4	4.0	103.5
Curb	3.9	103.6
West Line	4.1	103.4
100' North of J St.		
West Line	2.9	104.6
Curb	2.8	104.7
1/4	2.7	104.8
Center	2.3	105.2
125' North of J St.		
Center	1.2	106.3
1/4	1.7	105.8
Curb	1.5	106.0
West Line	1.6	105.9
150' North of J St.		
West Line	1.0	106.5
Curb	1.2	106.3
1/4	0.6	106.9
Center	0.3	107.2

Pile Driving Began 4-6-04.

West Bridge "B", Street.

West Abutment. Bent 1.

Pile No. 1, Length = 16'0"
No. of Blows. - 14
Penetration last blow = 1/2"
Length in Gd. 4-

Pile No 2. Length 16'
No of Blows 16
Penetration Last Blow 1/2"
Length in Gd. 4'

4/6/04

Alverson. Inspector 4/7/04

Pile No 3 Length 16' 0
no of blows + 8 =
Penetration last blow 1/2"
Length in ground 4'

(note) this Pile was partially driven 4/6/04

Hammer rated at 1800# C S A

Benno Goessmann Contractor
Aleck Potter Foreman Pile driving

Pile No 4 Length 16' 8"
no of Blows 8
Penetration last blow 1/4"
Length in ground 1'

4/7/04

The ground is sandstone & concrete will have to be dug out to get proper depth
This pile was set (not driven) 4/15/04
Length in ground about 2'

Pile No 5 Length 13' 2"
No of Blows 12
Penetration last blow 3/8"
Length in ground 2' 2"

4/7/04

Bottom good sandstone

Pile No 6 Length
Length in ground 2'-8"
Pile is set in Sand stone 20'
on concrete footing

Bent No 1 continued

4/7/02

Pile No 7 Length 10' 4"
No of Blows 10
Penetration last blow 1/2"
Length in ground 3' 6"

" " "

4/7/02

Pile No 8 Length 10' 0'
No of Blows 19
Penetration last blow 3/8"
Length in ground 4' 0"

4/7/02

Pile No 9 Length 10' 0'
No of Blows 17
Penetration last blow 1/2
Length in ground 3' 3"

Pile No 10 Length 10'-7"
The foundation is hardpan and the pile could not be driven. Set 3' in the ground and well into hard pan and earth thoroughly tamped around it

Pile No 11 Length 10'-4"
Length in ground 3'
Set well into hard pan and the earth thoroughly tamped around it. Could not be driven

Pile No 12 Length
Length in ground 3'
Pile is set 14" in sand stone

Bent No 1 continued

Pile No 13 Length
Length in ground 3'-3"
Pile is set 14" in Sand Stone

Pile No 14 Length 7'-10"
Length in ground 3'-7"
This pile was set well into the Sand Stone and the earth thoroughly tamped around it, could not be driven

Pile No 15 Length
Length in ground 3'-8"
Pile is set 14" in Sand stone

Bent No 2

4/7/04
Pile No 1 Length 20' 3"
No of Blows 12
Penetration last blow 1/2"
Length in ground 3' 8"

4/8/04
Pile No 2 Length 18' 0"
No of Blows 14
Penetration last blow 1/2"
Length in ground 3' 3"

4/8/04
Pile No 3 Length 16' 8"
No of Blows 10
Penetration last blow 1/2"
Length in ground 2' 8"

Bent No 2 continued

4/8/04 Pile No 4 Length 16' 9"
No of blows 15
Penetration last blow 5/8"
Length in ground 3' 4"

4/21/04 Pile No 5 Length
Length in ground 2'-8"
Pile set 1 deep in sandstone

Bent No 3

4/8/04 Pile No 1 Length 22' 6"
No of blows 17
Penetration last blow 1/2"
Length in ground 3' 6"

4/8/04 Pile No 2 Length 22' 6"
No of blows 21
Penetration last blow 1/2"
Length in ground 4' 2"

4/9/04 Pile No 3 Length 22' 0'
No of blows 17
Penetration last blow 1/2"
Length in ground 4' 3'

Bent No 3 continued

4/9/04

Pile No 4 Length 20' 0"
No of Blows 16
Penetration last blow 1/2"
Length in ground 4' 0

4/20/04

Pile No 5 Length
Length in ground 3' 6"
Not driven on account of
Rope knotted.

Bent No 4

4/9/04

Pile No 1 Length 20' 4"
No of blows 18
Penetration last blow 1/2"
Length in ground 3' 5"

4/9/04

Pile No 2 Length 20' 6"
No of blows 16
Penetration last blow 1/2"
Length in ground 3' 10"

4/9/04

Pile No 3 Length 22' 3"
No of blows 18
Penetration last blow 1/2"
Length in ground 3' 3"

Bent No 4 continued

4/9/04

Pile No 4 Length 22' 10"
No of blows 19
Penetration last blow 1/2"
Length in ground 4' 10"

4/20/04

Pile No 5 Length 25'
Length in ground 4'
Not driven on account of
Pipe trestle. Foot of pile set
in concrete

— Bent No 5 —

4/11/04

Pile No. 1 — Length 22' - 3"
No. of Blows 12
Penetration last blow ½"
Length in ground 2'-0"

4/11/04

Pile No. 2 — Length 22' - 8"
No. of Blows 12
Penetration last blow ½"
Length in ground 4'-0"

4/11/04

Pile No 3 — Length 25' - 3"
No. of Blows 22
Penetration last blow ½"
Length in ground 4' - 8"

— Bent No. 5 —

4/11/04 Pile No. 4 — Length 24'-7"
No. of Blows 20
Penetration last blow ½"
Length in ground 3'-7"

4/20/04 Pile No. 5 — Length 24'
Length in ground 3'
Foundation in cement gravel

— Bent No. 6 —

4/11/04 Pile No. 1 — Length 18' 9"
No. Blows 20
Penetration last blow ½"
Length in ground 3'-4"

4/11/04 Pile No. 2 — Length 18'-10"
No. Blows 14
Penetration last blow ½"
Length in ground 3'-4"

4/11/04 Pile No 3 — Length 19'-0"
No. Blows 14
Penetration last blow ½"
Length in ground 3'-7"

West Bridge – B. St.

No. Bent	No. Pile	Length	No. Blows	Penetration Last Blow	Length in ground	
6	4	18'-7"	21	½"	3'-0"	4/11/04
6	5	19'-0"	Not driven		3'-0"	4/21/04
7	1	16'-5"	17	½"	2'-6"	4/12/04
7	2	12'-7"	9	½"	2'-1"	4/12/04
7	3	12'-5"	10	½"	3'-1"	do.
7	4	12'-5"	17	½"	4'-5"	do.
7	5	13'-0"	Not driven		3'-7"	4/15/04 Set in ground w/ earth thoroughly tamped
8	1	12'-0"	"	"	3'-0"	4/21/04 Set 2' in hard pan
8	2	12'-0"	"	"	3'-0"	do. " " " " "
8	3	12'-2"	"	"	3'-0"	do. " " " " "
8	4	13'-0"	19	½"	2'-6"	4/13/04
8	5	12'-3"	12	½"	2'-3"	do.
8	6	10'-4"	12	½"	1'-10"	do.
8	7	12'-7"	16	½"	2'-6"	4/12/04
8	8	10'-2"	18	½"	3'-6"	do.
8	9	10'-4"	19	½"	4'-7"	do.
8	10	10'-6"	Not driven		3'-8"	4/15/04 Set in ground and earth thoroughly tamped
8	11	10'-5"	"	"	4'-0"	do. " " " " " " "
8	12	10'-0"	"	"	4'-0"	do. " " " " " " "
8	13	10'-0"	"	"	4'-0"	do. " " " " " " "

B.M. 176.355 - Plug 15' West of West End Bridge
B.M. 184.16 - Spike in Tel Pole 50' East of East End of Bridge

West Bridge

No. Bent	No. Pile	Length	No. Blows	Penetration last blow	Length in ground
8	14	12'-0"	Not driven		4'-2"
8	15	12'-10"	"	"	4'-0"

4/15/04 Set in ground and Earth thoroughly tamped
do. " " " " " " "

West Bridge.

	Grade		Cut off
Bent No. 1	197.117	−21.125	175.992
" " 2	197.143	−	176.018
" " 3	197.168	−	176.043
" " 4	197.195	−	176.070
" " 5	197.222	−	176.097
" " 6	197.248	−	176.123
" " 7	197.275	−	176.150
" " 8	197.303	−	176.178

0.0267

(1)
B.M. 176.355
3.083
+0 179.438
175.992
3.446

(2)
0 179.438
176.018
3.420

(3)
179.438
176.043
3.395

(4)
179.438
176.070
3.368

(5)
179.438
176.097
3.341

(6)
179.438
176.123
3.315

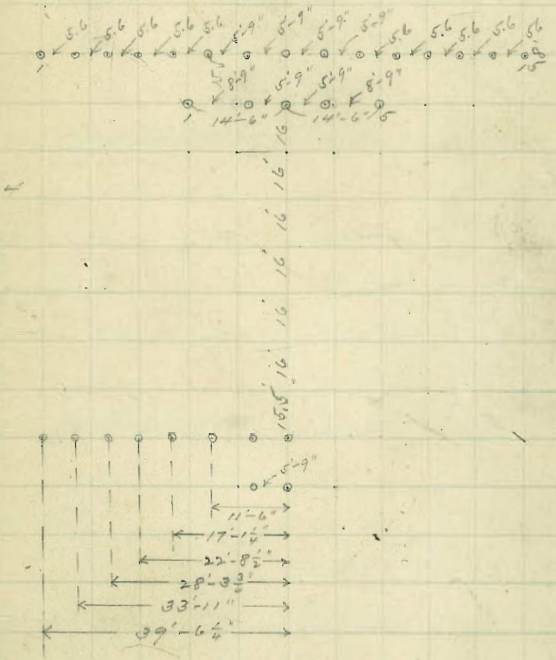
(7)
179.438
176.150
3.288

(8)
179.438
176.178
3.260

Note — Bents are numbered from West to East
Piles " " " North " South
Thus - Bent No. 1 is the West abutment
Pile - No. 1 in the North pile in each bent.
The West Bridge is numbered the same

East "B" St. Bridge

No. Bent	No. Pile	Length	No. Blows	Penetration last blow	Length in ground	
1	1	7'-0"	Not driven		2'10"	5/4/04
1	2				2'-9"	
1	3				3'-0"	
1	4				3'-0"	
1	5				2'-9"	
1	6	7'-6"	7	½"	3'-0"	4/14/04
1	7	7'-1"	6	½"	2'-8"	do.
1	8				3'-0"	
1	9				2'-9"	
1	10				3'-0"	
1	11				3'-0"	
1	12				2'-8"	
1	13				2'-7"	
1	14				2'-9"	
1	15				2'-7"	
2	1	10'-6"	8	⅜"	2'-0"	4/14/04
2	2	10'-7"	11	½"	2'-7"	do.
2	3	10'-2"	12	½"	2'-3"	4/15/04
2	4	10'-3"	Not driven		2'-6"	do.
2	5	9'-10"	Not driven			5/4/04



No. Bent	No. Piles	Length	No. Blows	Penetration last blow	Length in ground	
3	1	16'-3"	14	½"	2'-3"	4/16/04
3	2	14'-0"	15	½"	4'-0"	4/16/04
3	3	14'-0"	12	½"	3'-4"	4/16/04
3	4	14'-5"	10	½"	3'-10"	4/15/04
3	5	14'-3"	Not driven		3'-6"	4/16/04 Foundation - cement gravel
4	1	20'-0"	9	½"	2'-6"	4/16/04
4	2	18'-2"	9	½"	2'-2"	do.
4	3	20'-0"	15	½"	2'-1"	do.
4	4	18'-1"	11	½"	2'-6"	do.
4	5	19'-7"	Not driven		3'-6"	5/4/04 - Foundation - cement gravel
5	1	20'-0"	24	½"	4'-2"	4/18/04
5	2	22'-6"	17	½"	2'-10"	do.
5	3	20'-6"	13	½"	2'-0"	do. This pile is in the bottom of wash 1.5' deep
5	4	20'-5"	21	½"	3'-7"	do.
5	5	19'-4"	Not driven		2'-8"	5/4/04 - Foundation Cement gravel
6	1	16'-6"	11	½"	3'-0"	4/18/04
6	2	16'-6"	17	½"	2'-4"	do.
6	3	16'-7"	16	½"	2'-6"	4/19/04

No. Bent	No. Pile	Length	No. Blows	Penetration last blow	Length in ground	
6	4	16'-2"	15	½"	3'-0"	4/18/04
6	5	16'-0"	Not driven		2'-6"	Foundation - cement gravel
7	1	10'-0"	20	½"	3'-6"	4/19/04
7	2	10'-0"	13	½"	3'-6"	do
7	3	10'-0'	6	½"	2'-0"	do.
7	4	12'-0"	10	½"	2'-5'	4/19/04
7	5	~~10'-0"~~ 12'-8"	Not driven		2'-4"	5/4/04 - Foundation cement gravel
8	1				2'-5"	
8	2				2'-3"	
8	3				2'-3"	
8	4				2'-7"	
8	5				2'-7"	
8	6	7'-0"	10	½"	3'-3"	
8	7	7'-0"	25	½"	4'-0"	
8	8	7'-6"	11	½"	3'-3"	
8	9				2'-9"	
8	10				2'-7"	
8	11				3'-0"	
8	12				2'-8"	

No. Bent	No. Pile	Length	No. Blows	Penetration last blow	Length in ground
8	13				2'-8"
8	14				2'-7"
8	15				2'-6"

Sta.	+	⊖	−	Elev.	
B.M.	12.028	188.383		176.355	Plug at West Bridge
T.P.	12.372	199.339	1.416	186.967	
" "	7.633	206.084	0.888	198.451	
" "	1.203	195.197	12.090	193.994	
" "	0.766	185.669	10.294	184.903	
B.M. Wire Nail in North leg Pipe Trestle Nearest the West End of East Bridge			10.333	175.336	

0.0267

0'-3"
17'-10"
1'-3½"
0'-11½"
0'-9½"
21'-1½"
= 21.125'

East Bridge

	Grade		Cut off
	−21.125		
Bent No. 1 −	196.79	—	175.662
" " 2 −	196.76	—	175.635
" " 3 −	196.74	—	175.608
" " 4 −	196.71	—	175.582
" " 5 −	196.68	—	175.555
" " 6 −	196.66	—	175.528
" " 7 −	196.63	—	175.502
" " 8 −	196.60	—	175.475

176.355
12.028
⊖188.383
1.416
186.967
12.372
⊖199.339
0.888
198.451
7.633
⊖206.084
12.090
193.994
1.203
⊖195.197
10.294
184.903
0.766
⊖185.669
10.333
175.336

	+	⊖	−	Elev.	Grade
	175.84				
	4.32				
	179.66 H.I.		East Bridge		
	2.19				
	177.47 B.M. Hub 15' south of West Bent and 3' west.				
Bent	1.		175.66	4.00	
Bent	2.		175.635	4.025	
	3		175.608	4.052	
	4		175.582	4.078	
	5		175.555	4.105	
	6		175.528	4.132	
	7		175.502	4.158	
	8		175.475	4.185	

May 9/04 - Hutchison

Kalmia St. 5th to Park

	B.S.	H.I.	F.S.		
	~~6.18~~	~~253.25~~		~~253.07~~	
	11.24	251.45	~~[illegible]~~	240.21	

East Line of 5th Street,

So Line	8.40		243.1
Curb	9.2		242.3
1/4	9.9		241.6
Center	8.5		243.0
1/4	8.1		243.4
Curb	6.0		245.5
No Line	5.6		245.9

25' East of 5th St.

No Line	5.2		246.3
Curb	5.6		245.9
1/4	6.0		245.5
Center	6.3		245.2
1/4	7.7		243.8
Curb	7.9		243.6
So Line	7.3		243.2

50' East of 5th

So Line	6.6	244.9
Curb	6.3	245.2
1/4	6.0	245.5
Center	5.6	245.9
1/4	5.4	246.1
Curb	5.1	246.4
No Line	4.5	247.0

75' East of 5th St.

No Line	4.1	247.4
Curb	4.2	247.3
1/4	4.3	247.2
Center	4.4	247.1
1/4	4.8	247.7
Curb	5.0	246.5
So Line	5.5	246.0

Kalmia bet. 5th + Park Line

251,45

100' East of 5th Street.

So Line	4,4	247.1
Curb	4,4	247.1
1/4	4,2	247.3
Center	3,8	247.7
1/4	3,4	248.1
Curb	3,3	248.2
No Line	3,3	248.2

125' East of 5th St.

No Line	2,7	248.8
Curb	2,8	248.7
1/4	3,2	248.3
Center	3,3	248.2
1/4	3,6	247.9
Curb	3,8	247.7
So Line	3,8	247.7

150' East of 5th St.

So Line	251,45	3,10	248.4
Curb		3,20	248.3
1/4		3,3	248.2
Center		2,7	248.8
1/4		2,5	249.0
Curb		2,2	249.3
No Line		2,0	249.5

178 ft East of 5th West Line of Park.

No Line	1,3	250.2
Curb	1,6	249.9
1/4	2,1	249.4
Center	2,4	249.1
1/4	2,6	248.9
Curb	2,9	248.6
So Line	3,4	248.1

Ivy. 5th St. to Park Line

May 9. 1904. Hutchison.

		Hil.	Rod.	Elev	
	12.21		210.95	198.74	
	11.91	222.35	0.51	210.44	
B.M.			6.57	215.78	S. E. Cor. West Hing of Hyd. Ivy + 5th
~~West~~ East Line of 5th Street.					
So Line			4.6	217.7	
Curb.			4.3	218.0	
1/4			4.3 6.2	218.0 216.1	
Center.			6.2	216.1	
1/4			5.2	217.1	
Curb			3.3	219.0	
9' So of Mo. line			2.8	219.5	
Mo line			0.8	221.5	
25' East of East Line of 5th					
Mo Line			0.5	221.8	
5' So of Mo Line			3.0	219.31	
Curb.			3.0	219.3	
1/4			3.8	218.5	
Center			4.3	218.0	
1/4			4.5	217.8	
Curb			3.9	218.4	
So Line			4.1	218.2	

Long St.

222.35

50' East of 5th Street.

So Line		2.8	219.5
Curb		3.0	219.3
1/4		2.6	219.7
Center		2.5	219.8
1/4		1.9	220.4
Curb		1.9	220.4
3' So of Mo Line		1.5	220.8
Mo Line		+0.65	222.0
	6.98	227.60	1.73	220.62

65' East of 5th Street

Mo Line		3.6	224.0
3' So of Mo Line		6.0	221.6
Curb		6.0	221.6
1/4		6.0	221.6
Center		6.0	221.6
1/4		6.3	221.3
Curb		6.9	220.7
So Line		7.3	220.3

227.60

75' East of 5th Street.

So Line	7.0	220.6
Curb	6.2	221.4
1/4	5.8	221.8
Center	5.3	222.3
1/4	5.0	222.6
Curb	5.4	222.2
3' So of Mo Line	5.6	222.0
Mo Line	3.2	224.4

85' East of 5th

Mo Line	3.2	224.4
Curb	3.7	223.9
1/4	4.3	223.3
Center	5.3	222.3
1/4	6.0	221.6
Curb	6.4	221.2
So Line	6.8	220.8

~~Dyr~~ Ivy St.

5th to Park Line

227.60

100' East of 5th St.

So Line	6.0	221.6
Curb	6.6	221.0
1/4	6.2	221.4
Center	5.3	222.3
1/4	4.4	223.2
Curb	4.0	223.6
No Line	3.3	224.3

125' East of 5th St.

No Line	1.4	226.2
3' So of No Line	2.9	224.7
Curb	3.2	224.4
1/4	3.6	224.0
Center	4.2	223.4
1/4	4.9	222.7
Curb	5.8	221.8
So Line	5.8	221.8

150' East of 5th

150' East of 5th

So Line	5.3	222.3
Curb	5.3	222.3
1/4	4.8	222.8
Center	4.2	223.4
1/4	3.6	224.0
Curb	3.3	224.3
2' So of No Line	3.0	224.6
No Line	1.5	226.1

Park Line.

No Line	2.2	225.4
Curb	2.7	224.9
1/4	3.1	224.5
Center	3.7	223.9
1/4	4.3	223.3
Curb	5.0	222.6
So Line	5.4	222.2

	0.26	280.59		280.33	
B.M.	0.30	271.68	9.21	271.38	
			5.7	266.0	
			10.7	261.0	

Canon Road.

7th & Brookes.

5/10/04.

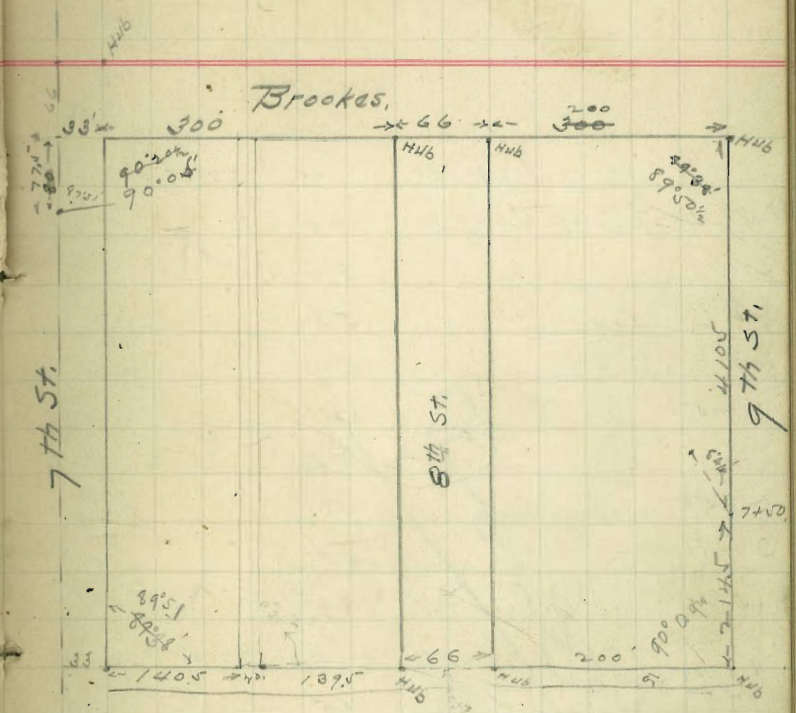
214.5 No. of No. Line of Ally

7+50 = ~~Wes~~ Point on West side of 9th St.

7+50	△	R	8°44'
~~8~~	~~End. Bottom of Canon~~		
7+15	△	R	~~16°00'~~ 15°18'
6+50	△	R	18°00
4+90	△	R	39°30'
3+90	△	L	22°30'
2+00	△	R	24°30'
1+00	△	R	9°04'

77.5 ~~80'~~ = Stat 0' So of So Line of Brookes. R 87°30'
Center Line of 7th St

5+48' North of N. line of Ally = 77.5 So of



So Line of Brookes St. = 0 of Canon Road.

Levels on 7th St.

5/11/04
Hutchison,

	10.70	282.08		271.38	
NO Mc Line of Alley			0.9		
1			3.2		
2			5.3		
3			6.1		
+50			6.1		
4			5.5		
+50			5.8		
+80			6.5		
5			8.9		
	1.20	272.58	10.70	271.38	
+48 = At a.			6.5	266.1	
0			6.5		at Canon Road.
+40			6.5		
+50			9.7		
+65			9.6		
	0.75	260.40	12.93	259.65	
1			4.3		
+50			6.3		
+65			6.7		

Center Line of 7th

No Good

Brooks + 7th
Canon Road

490		260.40	11.7		
I.P.	0.48	248.85	12.03 ~~11.7~~	248.37	
2			3.3		
+50			7.4		
+80			8.0		
3			11.7		
	0.55	236.99	12.41	236.44	
+25			4.3		
+50			10.8		
+60			12.4		
+90			10.9		
4			12.0		
	0.54	225.66	11.87	225.12	
+50			2.6		
+75			4.4		
+90			7.3		
5			9.1	216.6	
	0.49	213.50	17.65	213.01	
+50			4.0		
6			4.8		

Canon Road

+25		213,50	10,5		
	1,22	20,63	18,09	200,41	
+50			2,0	199,6	
7			5,3	196,3	
+15			7,3		
+50			7,8		
+60			8,7		
+70			7,5		
8			8,6	193,0	
B.M.			10,35	191,28	Hub 30' East of 7+80.

Center Line of 6th St.

	5+8	285.81		280.33	
B.M.			6.07	279.72	Spk in Tel Pole 100' S. of S.E. Cor. 6th & Brooks.
	8.12	293.31	0.62	285.19	
		Center line of 6th St.			
At line of alley.			6.0		
100' N. of At line of alley			4.3		
210' " " " " "			4.1		
250			4.5		
300			9.0		
400			12.6	280.7	
500			13.8	279.5	
	7.38	280.10		279.72	
550			5.9	274.2	
640 ~~550~~ At line of Brooks.					

Brookes St. Wagon Road

5/14/04

	1.57	281.31		279.72	
90' S of Brooks = 0 on Brooks St. Road.					
0			5.2	76.1	
+50			8.6	72.7	
	0.74	271.10	10.95	70.36	
1			4.2	66.9	
+25			8.1	63.0	
+50			9.8	61.3	
	0.32	258.94	12.48	58.62	
2			1.8	57.1	
+25			5.2	53.7	
+50			7.5	51.4	
3			12.6	46.3	
	2.04	49.19	11.79	47.15	
+20			3.7	45.2	
+50			7.4	41.8	
+80			9.5	39.7	
4			12.7	37.0	
	0.71	438.28	11.12	38.07	
+50			6.7	31.6	

Brooks Bet 6th & 9th

+70		238,28	8,6	29.7
5			12,0	26,3
	0,56	227,68	11.16	27,12
+25			2,5	25.2
+50			4,6	23.1
+70			7,1	20.6
6			11,8	15,9
	1,20	217,99	10,89	216.79
+50			4.4	13.6
+75			5.2	12.8
7			7,1	10.9
+15			6,9	11.1
+50			8,9	9.1
8			12,4	5.6
+10			13,8	4.2
+20			12,8	5.2
T.P.	0,19	205,82	12,36	205.63
+50			1,3	4.5
9			1,5	4.3
+20			3,5	2.3

9+50	205,82	3,5		2.3
10.		5,8		0.0
+50		7,2		198.6
11.		9,2		96.6
+25		10,7		95.1
+50		10,6		95,2
+75		11,8		95.0
12		11,8		94.0
12+12		12,2		93.6
		14.65	191,17	

Brooks Street Wagon Road

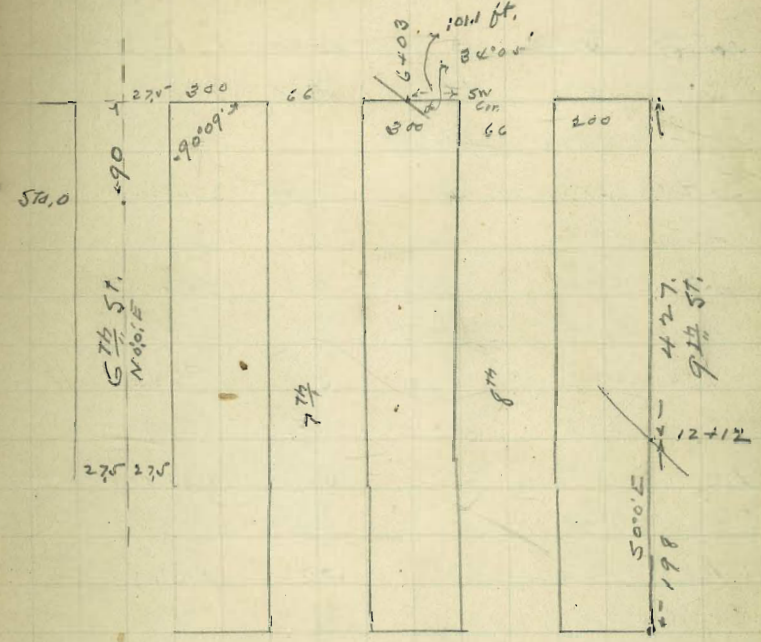
Bet. 6th & 9th Streets.

12+12	Δ	R	7°26'	S 0°00 E
11+25	Δ	R	12°35'	S 7°26' E
10+00	Δ	R	13°00	S 20°00 E
9+20	Δ	R	43°00	S 33°00 E
8+20	Δ	L	30°00	S 76°00 E
7+50	Δ	R	10°00	S 46°00 E
6+00	Δ	R	35°00	S 56°00 E
5+00	Δ	R	6°00	N 89°00 E
3+50	Δ	R	10°30'	N 83°00 E
2+50	Δ	L	10°00	N 72°30' E
1+50	Δ	R	4°00	N 82°30 E
0	Δ	R	18°30	N 78°30 E

90' S. of So. Line of Brooks Center of 6th St. = 0

5/14/04 Hutchison.

West Line 9th St.



2nd Street, Hutchison

Levels in Center of Street

Stat 0=	Center of Manhole So. Side Laurel,			
		Hil.	Rod	Elev.
	7.015	236.325		229.31
Bottom of Flush Tank			11.45	224.87
Top of Manhole			6.9	229.4
25			6.3	230.0
0+40.3	Center of Laurel		6.0	230.3
+50			5.8	230.5
+75			5.6	230.7
1+00			5.2	231.1
+25			4.3	232.0
+50			3.3	233.0
+75			2.4	233.9
2			1.6	234.7
+25			0.7	235.6
	10.45	245.75	1.025	235.30
+50			9.2	236.5
+75			8.3	237.4
3			7.4	238.3
+25			6.5	239.2
+50			5.6	240.1

Laurel to Olive

Stat 0= Center of Manhole So. Side Laurel

		Hil.		
+75		245.75	4.7	241.00
4			4.2	241.5
4+21.	Center of Maple		3.9	241.8
+25			3.7	242.0
+50			3.3	242.4
+75			3.1	242.6
5			2.9	242.8
+25			2.7	243.0
+50			2.4	243.3
+75			2.3	243.4
6			1.9	243.8
	6.405	250.255	1.90	243.85
+25			6.3	244.0
+50			5.9	244.4
+75			5.8	244.5
7			5.5	244.8
+25			5.1	245.2
+50			4.8	245.5
+75			4.8	245.5
8			4.5	245.8

2nd St. Sewer.

7/7/04. Hutchinson T/C

8+01.5 Center of Nutmeg.

~~8+25~~	7.74	250.255	3.005	247.25
825		254.99	8.8	246.2
+50			8,1	246.9
+75			7,3	247.7
9			6,3	248.7
+25			5,3	249.7
+50			4,4	250.6
+75			3,3	251.7
10			2,8	252.2
+25			3,3	251.7
+50			4,2	250.8
+75			5,0	250.0
11			5,3	249.7
+25			5,9	249.1
+37			6,1	248.9
+41.5 So Line Olive			9.8	245.2

7/18/04 { Hutchison
Hannance
Comly

25.55
2.82
28.37 Hi.!

3.65 3.62 3.5 3.37
24.72 24.75 24.87

4.05 3.75
24.32 24.62

4.91 4.12 3.83
23.46 24.25 4.54

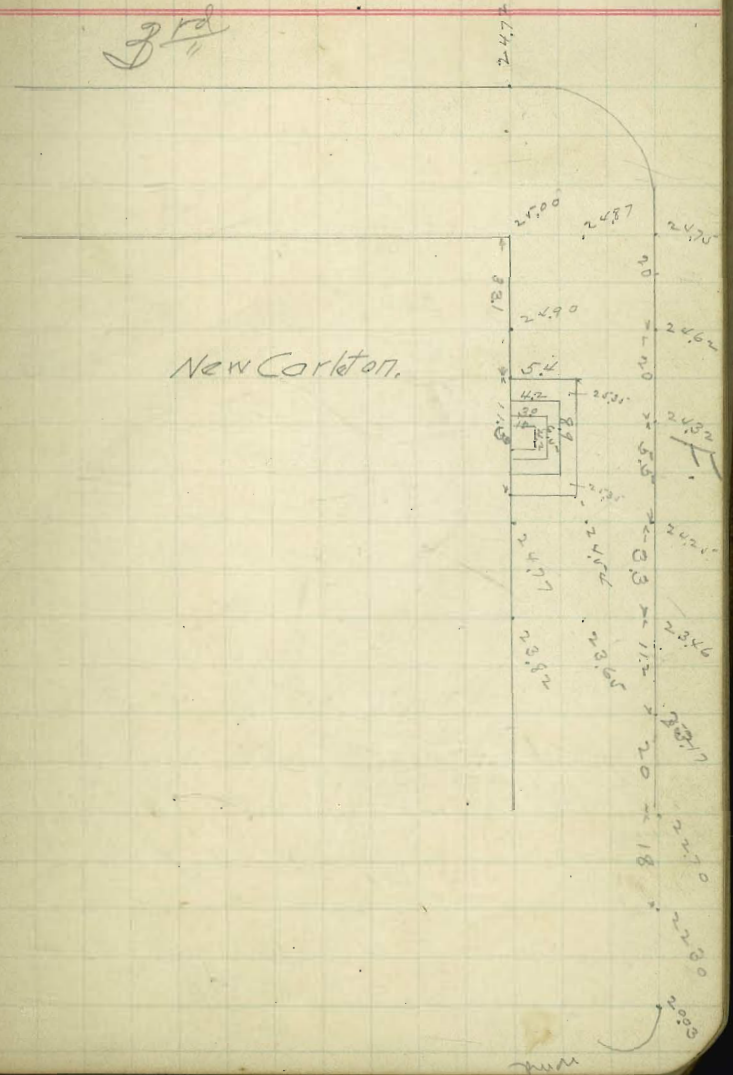
4.72 3.60 4.55
23.65 24.77 23.82

3.47 5.67 5.20
24.90 22.70 23.17

8.34 6.07
20.03 22.30

3.00 3.03

3rd



Sewer Hutchison
Torrance
Evans
8/8/04

520) 13.00 (2.05 25
1040
2600
2600

191.46
6.37
197.83 H.I.

9.77
9.27
.6

197.83
9.77
188.06

	Grades.				Cuts
		197.83			
		1.31			
0	188.00	196.52			
		9.00			
		205.52 H.I.			
		0.58			
+50	189.25	204.94	8.58	4.01	+4.57
		6.29			
1	190.50	211.14	7.33	4.13	+3.22
+50	191.75		6.08	2.80	+3.28
2	193.00		4.83	1.50	+3.33
+50	194.25		11.27	7.77	+3.5
3	195.50		10.02	6.28	3.74
+50	196.75		8.77	4.67	4.10
4	198.00		7.52	2.74	4.78
+50	199.25		6.27	0.57	5.7
5	200.50		10.64	4.64	6.0
+50	201.0		10.14	5.38	4.76
~~5+10~~					

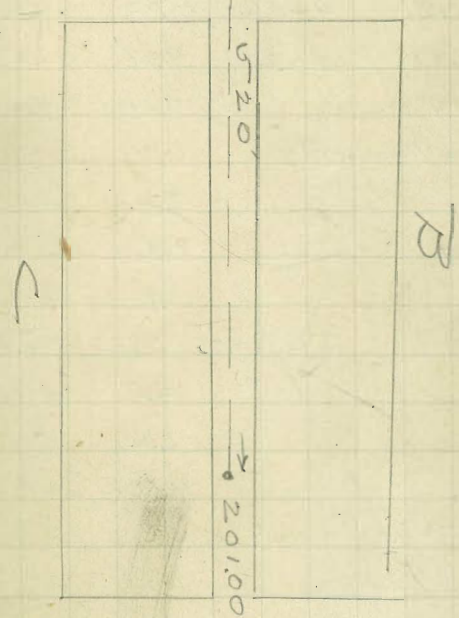
12.52
9.19
3.33

11.89
6.21
5.69

8/31/04.
191.12 BM.
6.66
200.78 H.I.
191.75
9.03

188.66 Top of Pipe
188.06 Bottom of Pipe
188.00
187.98 O.K.

25th



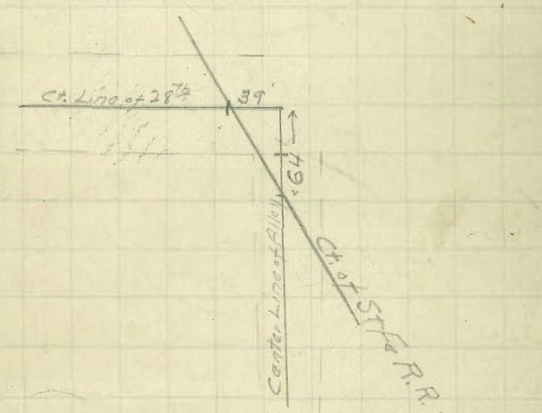
76th

Center Line of So. 28th St.

8/8/04 Hutchison Torrance Evans

B.M.	0.70	51.85		51.15	
	1.51	42.36	11.00	40.85	
	1.81	34.21	9.96	32.40	
B.M.			7.00	27.21	13' Pin Main 2.8
Center of Main St.			6.7	27.5	
So Line "		"	7.2	27.0	
50' Soof "		"	7.9	26.3	
100' " " "		"	8.9	25.3	
	0.84	26.27	8.78	25.43	
150'			2.0	24.3	
200			3.2	23.1	
250			4.4	21.9	
300. (North Line Pierce)			5.3	21.0	
Center Line Pierce			6.0	20.3	
So Line "			6.8	19.5	
50' Soof "			7.3	19.0	
75' " " "			6.7	19.6	
	3.08	21.52	7.83	18.44	
85			13.3	8.2	
100			14.8	6.7	

110 Top of Rail.	21.52	13.7	7.8
125' Soof Pierce		14.0	7.5
140 " "		9.6	11.9
145		1.7	19.8
150' ((Cent. of Alley))		1.3	20.2



Center Line of Alley bet. Pierce + Railroad Avee.

660
191.46
198.06 H.I.

Center Line of So. 28th	21.52	1.3	20.2	
11' West of Ct Line		2.7	18.8	
25 " " " "		14.0	7.5	
West		14.5	7.0	
Top of Rail		13.7	7.8	
50' West of So 28th		14.6	6.9	
80		13.6	7.9	
90 " " " "		4.1	17.4	
100		4.8	16.7	
125		5.3	16.2	
150		6.4	15.1	
200		7.2	14.3	
250		7.6	13.9	
	5.65	19.97	7.20	14.32 v
300		6.4	13.6	
350		6.1	13.9	
375		4.9	15.2	
400		4.6	15.4	
425		5.5	14.5	
450		5.4	14.6	
500		5.0	15.0	

550.	19.97	5.1	14.9
600.	~~West~~ Line 27th	4.9	15.1
Center Line So 27th		5.2	14.8
B.M.		2.23	17.74
13' Point of on So 27th + Pierce			

B. M. 194.12 Small nail on N.E. cor. of Chicken fence

194.00 Top of Manhole

191.46
6.345
197.805 H.I.

9.825
187.980

9.25
5.65

Bottom of Sewer	198.06 / 8.06	188.00	10.06
10'	190.00 / 8.995	188.25	9.81
15'	198.995 / 4.875 / 194.12		
20		188.50	9.56
30		188.75	9.31
40		189.00	9.06
50		189.25	8.81
60		189.50	8.56
70		189.75	8.31
80		190.00	8.06
90		190.25	8.745 / 7.81
100		190.50	8.495
110		190.75	7.245
120		191.00	7.995
130		191.25	7.745
140		191.50	7.495
150		191.75	7.245
160		192.00	6.995

197.805
8.923
8.575

87.98
88.5

187.98
188.23
188.35
188.48
188.73
188.98
189.23

197.805
194
3.805

194.12
8.38
202.50 H.I.
4.74
197.76
12.53
212.29 H.I.
200.65 B.M.

201.00
9.29

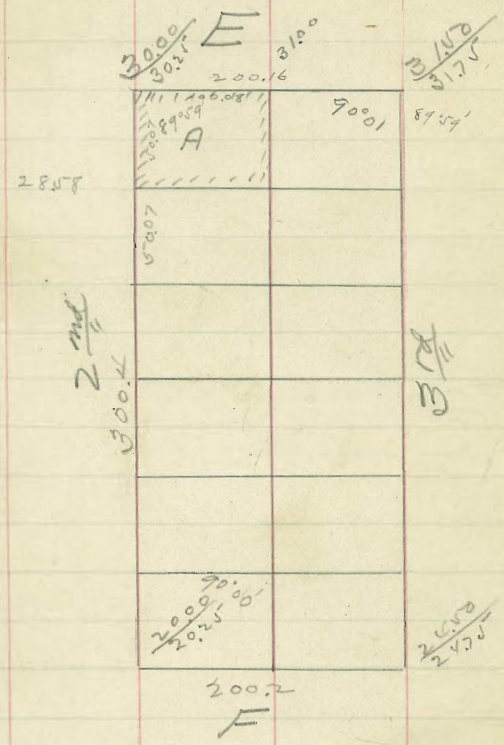
206.65
211.62 H.I.

3+00 = 195.50 Tree 60' west of end of sewer.

+20	196.00 =	6.5	450 =	199.25 =	12.37
+30		6.25	460	199.50	12.12
+40		6.00	4+70		
+50	196.75	5.75	+80	200. =	11.62
+60	197.00	5.50	+90	200.25 =	11.37
+70	197.25	5.25	500	200.50	11.12
+80		5.00	5+10	200.75	10.87
+90	197.75	4.75	5+20	201.00	10.62
400	198.00	12.29 / 4.50			
4+10		12.04			
+20	198.50	11.79			
+30	198.75	11.54			
+40	199.00	11.29			

Hutchison 9/24/04.

8/23/14 { Hutchison
Torrance
Evans.



4)110
1.67
5
8.35
20.25
28.60

30.25
1.67
28.58

34.565
1.03
35.595 H.

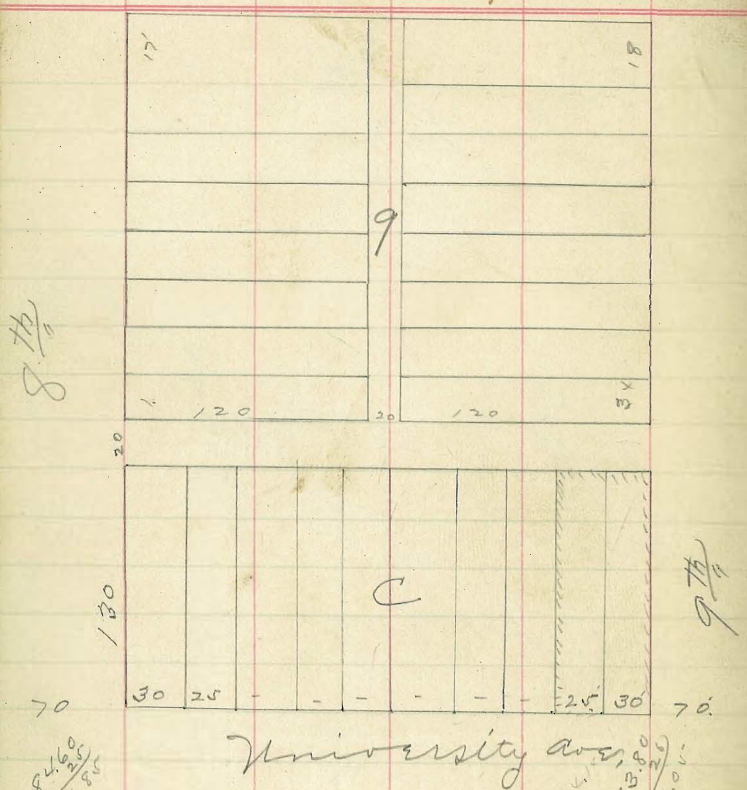
31.00
4.595
.75
5.345

30.25
5.345
1.67
7.015

28.58
7.015

8/25/04 { Hutchison
Torrance
Evans

Grant.



284.60
25
284.85

283.80
26
284.05

17
25
85
34
425
75
4.40

3.75
84.4 Cb

284.05
4.10

284.16 B.m.
3.99
288.15 H.I.

84.85
84.05
260) .800 (.3
78 .30
20 .090

84.14
4.01

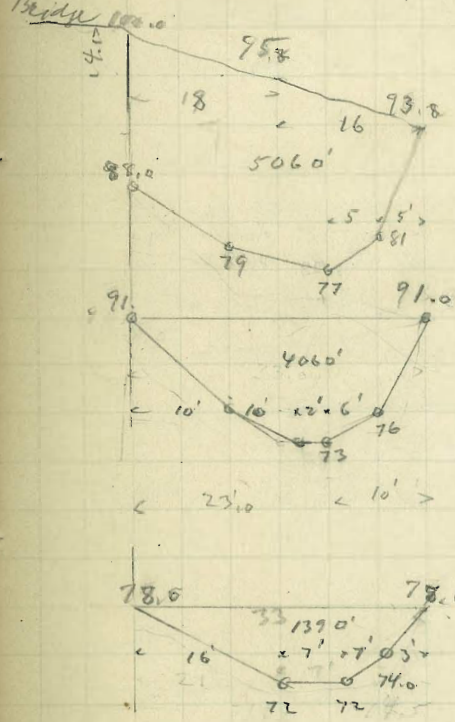
84.05
3.99
88.04

84.155
3.90
88.055

Measurement of dirt washed away from B st. Bridge - Sept 1-04
Park
Davis } Sept. 2/04

1.2
3.2
6.7

200 cyd. refilling



270 cyd
+16

201

+36

10.5
482.5
300
782.5

+40

Sept, 19th 1904

d'Heme court

Checking of Side-Walks. #

8th. W, side, bet'n H + I.
South 2' of S.W. return
entire block not in

E. side, bet'n H. + I
1st. 100' So. of H is in
125' " " above not in
1st. 75' No. of I is in

E.W. side bet'n I + J.
S.E. return not in
whole block " "

W.E. side, bet'n I J.
1st. 100' So. of I is in
Bal. of Block is not in

S.W - N.W. - S.E - N.E. returns of
8th + J, are not in -

8th. st., West side bet'n J + K
entire block, not in

East side, bet'n I and J ? J-K
1st. 50 ft. So. not in
2d. 50 " is in
next 150 not in
1st. 50' No. of K. is in.

9th. st.
West side bet'n J + K.
entire block not in
east side.
1st. 100' No. of K is in.
2d. 50' " " K " " .
Bal. not in.

S.W. - N. - W. + S.E. returns not in
W. side bet'n I + J. is not in
E " " " " is all in

9/09/04

9th. st. S.W. return 9th + I. is not in.
East side bet'n H + I. is all in
W. " " " " " " " " ✓

10th. st.
E side + W. side bet'n H. + I. all in. ✓

S.E. return 10th + I. not in
E. side bet'n I + J. entire block not in.
W. " " " 1st. 100 So. of I
is in, next 50 ft. So. not in
bal. all in ✓

S.E. + N.E. returns 10th of J. not in
E. side bet'n J + K. entire block not in
W. " " " " 1st. 150' So. of
J is in bal. not in
E. 3d. 50 ft. So. of J is in. ✓

9/19/04

11th. st. E. side bet'n J + K. all in
W. " " " " not in ✓

S.W. - N.W. + N.E. return 11th + J
not in.
nothing in on either west or east side
of 11th. bet'n I. + J. ✓

S.W. return 11th. + J. I. not in

E side bet'n H. + I. - 3d. 50' No. of ?
I is not in.
W. side bet'n H + I. -
1st. 50' No. of I is in
2d. 3d. + 4th. 50' No. of I not in
1st. 100' So. of H. is in. ✓

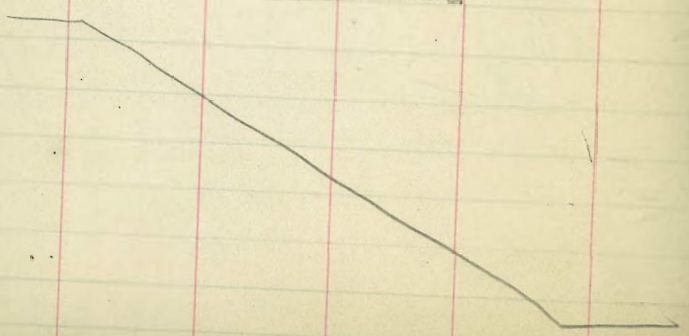
9/19/04.

13th, nothing done bet'n No. line of B and
So. line line of I.
Returns at 13th & I, all in'

13th, bet'n H. & I.
W. side, nothing in
E. " 1st. 100' So. of H. not in.

All in from No. line of H. to
So. line of Park.
except return at S.E. corn 13 & A
& 1st. 100' S. of A. on east side

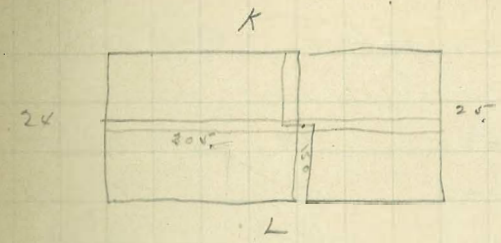
Lots A-B. Block 1 Stormo add.



Levels in Center of Alley of Block bet 24th & 25th from Center South to L St

	H.I.		
Intersection of Alley	73.90	8.2	65.7
50' So. of Intersection		9.4	64.5
100		10.1	63.8
150 ||| No Line of "L" St.		10.0	63.9
Center of L St.		9.9	64.0

9/22/04 { Hutchison, Torrance, Evans



Levels on Center of Alley from 24th to 26th bet K + L st

	6.05	73.90	1	67.85
Center of 24th			2.0	71.9
East Line of 24th			2.9	71.0
50' East of 24th			5.1	68.8
100 "			5.4	68.5
150 "			6.3	67.6
200			6.7	67.2
250			6.8	67.1
297 "			6.2	67.7
300 "			8.2	65.7
305			8.2	65.7
	8.59	76.39	6.10	67.80
310			8.6	67.8
350			8.1	68.6
400			7.3	69.1
450			6.4	70.0
500			5.5	70.9
550			4.8	71.6
600 West Line of 25th			5.4	71.0
Center of 25th			5.7	70.7

9/22/04 { Hutchison, Torrance, Evans } 71.66

East Line of 25th		76.39	5.4	71.0
" " " " "			4.1	72.3
50' East of 25th			3.0	73.4
100			2.0	74.4
150			1.2	75.2
	5.57	80.71	1.25	75.14
200			5.3	75.4
250			5.2	75.5
300			5.6	75.1
350			5.4	75.3
400			6.0	74.7
450			6.0	74.7
500			6.0	74.7
550			5.2	75.5
560 West Line of 26th			6.7	74.0
Center of " "			6.5	74.2

Levels Center of Alley bet "L" + "M" from 24th to 26th

	0.19	68.04		67.85
Center of 24th			8.5	59.5
East Line of 24th			9.0	59.0
50' East of 24th			8.4	59.6
100' " " "			8.5	59.5
150' " " "			8.3	59.7
200'			8.0	60.0
	7.30	67.46	7.88	60.16
250			6.9	61.6
300			6.7	60.8
350			6.8	60.7
400			6.2	61.3
450			5.8	61.7
500			5.5	62.0
550			5.4	62.1
600 ‖ West Line of 25th			4.3	63.2
" " " " "			5.3	62.1
Center of 25th			5.3	62.2
East Line of 25th			4.3	63.2
" " " " "			1.5	66.0

7.42
63.70 9/27/14 Hutchison
10.57 E.T.

50' East of 25th		67.46	1.0	66.5
100' " " "			0.6	66.9
	7.30	74.27 10.30	0.49	66.97
150			5.9	68.4
200			4.9	69.4
250			4.5	69.8
300			4.7	69.6
350			4.7	69.6
400			4.7	69.6
450			5.0	69.3
500			5.6	68.7
550			6.1	68.2
560 ‖ West Line of 26th			5.9	68.4
Center of 26th			6.2	68.1

Levels on Center of Alley
bet M + N. from 26th to 24th

9/22/04 { Hutchinson
T.E.

	4.57	64.43		59.86
West Line of 26th			4.0	60.4
10' West of " "			4.2	60.2
60' "			4.3	60.1
110' "			4.2	60.2
160'			5.2	59.2
210			7.4	57.0
260			8.2	56.2
310			7.6	56.8
	7.16	63.60	7.99	56.44
360			5.3	58.3
410			4.4	59.2
460			4.5	59.1
510			4.5	59.1
560 || East Line of 25th			4.5	59.1
" " " " "			7.6	56.0
Center of 25th			7.4	56.2
West Line of 25th			7.2	56.4
" " "			6.7	56.9
50' West of 25th			6.5	57.1

100' West of 25th		63.60	7.1	56.5
150' " " "			7.8	55.8
	2.22	58.34	7.48	56.12
200			3.5	54.8
250			4.0	54.3
300			4.2	54.1
350			4.5	53.8
400			6.2	52.1
450			7.4	50.9
500			8.4	49.9
550			8.9	49.4
600 = East Line of 24th			7.8	50.5
			9.40	48.94

Levels Center of Alley
150' East of and Parallel to 25th Street
from K to 110' So of N.

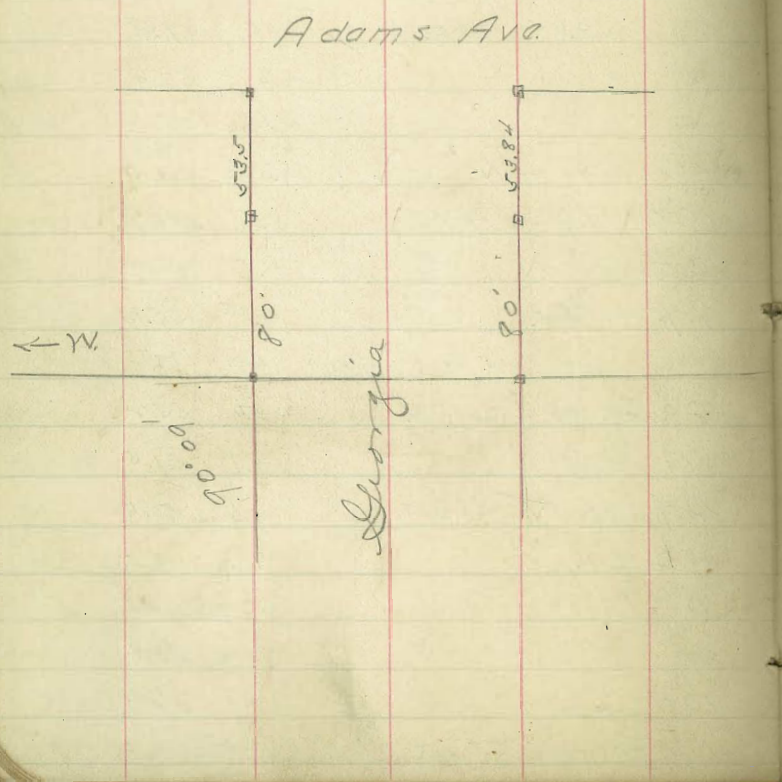
9/22/04 { Hutchison, Torrance, Evans

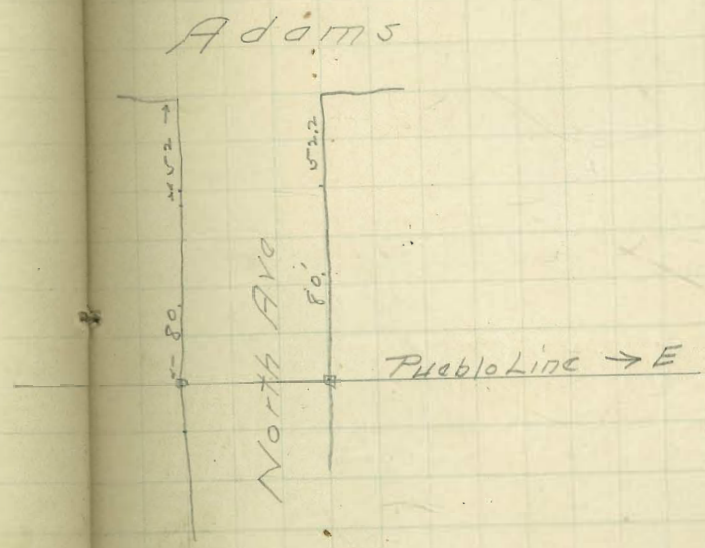
	12.04	78.43		66.39
			3.30	75.13
So Line of K.			+1.0	79.4
50' So of K.			-0.2	78.2
100' " " "			1.3	77.1
150'			3.2	75.2
200'			4.6	73.8
250			6.2	72.2
300' = No side of "L"			7.3	71.1
" " " " "			9.4	69.0
Center of "L"			10.0	68.4
So Side of "L"			10.8	67.6
" " " "			9.3	69.1
50' So of "L"			8.6	69.8
100			9.1	69.3
150			10.1	68.3
	1.64	69.93	10.14	68.29
200			2.2	67.7
250			3.3	66.6
300 = No line of "M"			4.9	65.0

Center of "M"	69.93		6.2	67.7
So Line of "M"			6.6	66.3
50' So of "			8.1	61.8
100 " "			9.4	60.5
150			10.7	59.2
	0.65	60.23	10.35	59.58
200' "			2.6	57.6
250			4.6	55.6
290			6.4	53.8
300 = No line of "N"			8.3	51.9
15' No of Center of "N"			8.5	51.7
Center of "N"			4.5	55.7
Top of Rail			4.35	55.9
" " " 15' So of Center of N.			4.17	56.0
20' So. of Center of N.			5.0	55.2
27' " " " " "			8.7	51.5
So Line of "N" Street			9.6	50.6
10' So of N.			11.4	48.8
20' " " "			7.7	52.5
50' " " "			6.4	53.8
100'			3.8	56.4
110' So of N Street			3.5	56.7

P.L. 1111

9/24/04 { Hutchison / Torrance / Evans

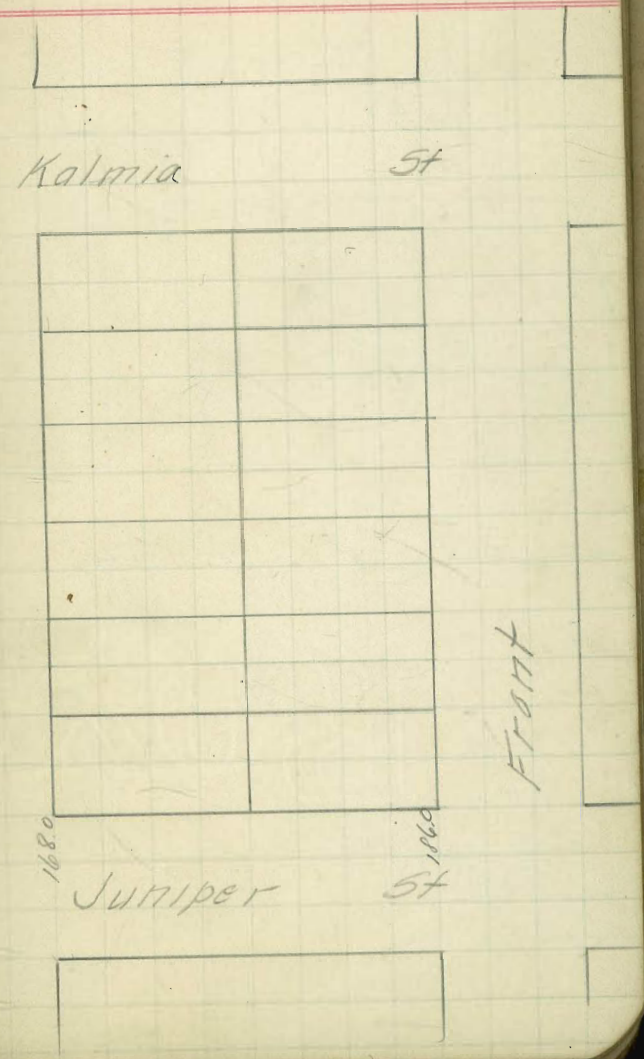



Adams
North Ave
Pueblo Line → E
80
52.2
80
52.2

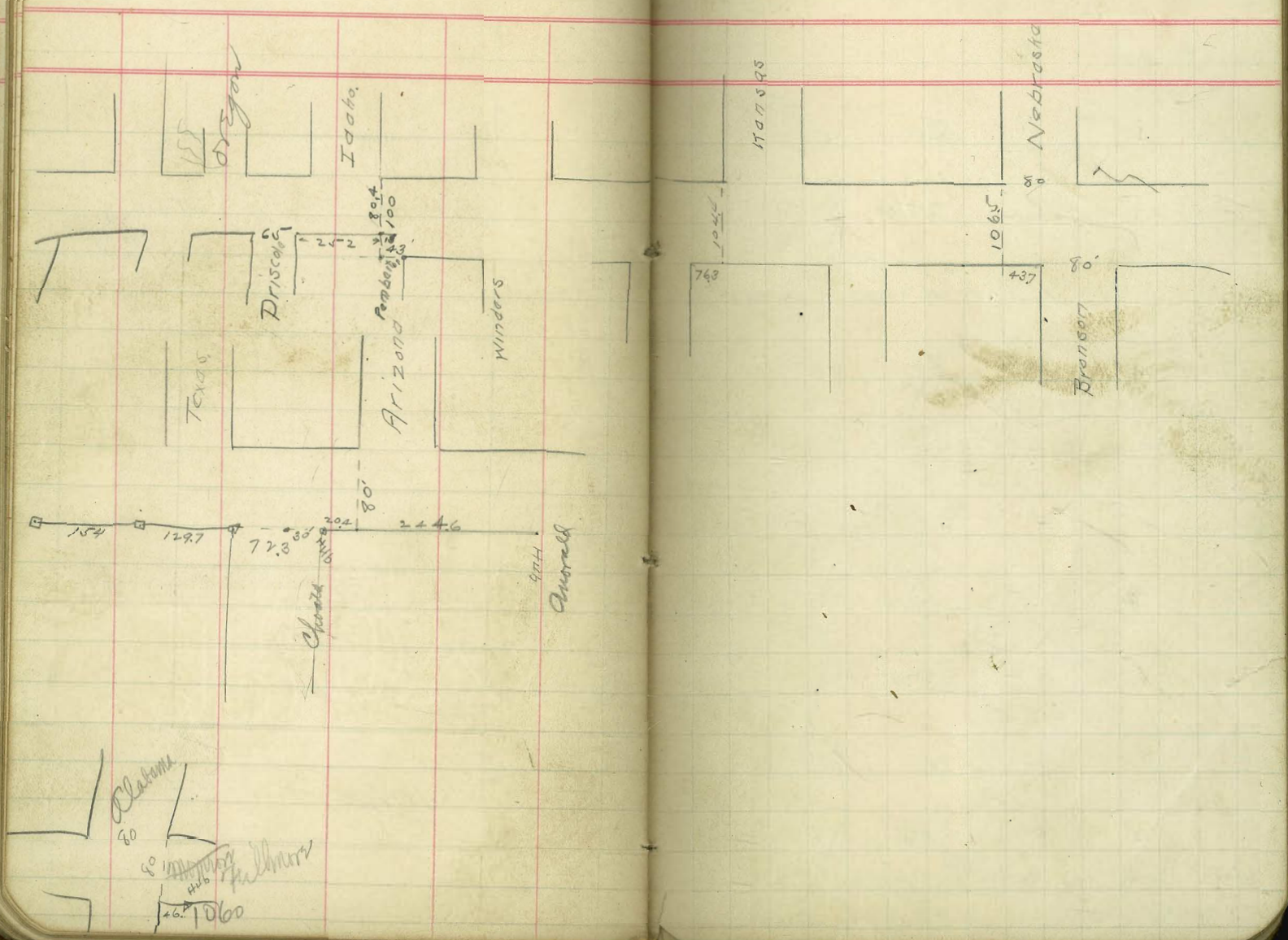
9/29/54 { d'Hemecourt
Davis

186.0
3.75
4 189.75
4.88
184.87
177
7.87

168
186
2 | 354
177



380
120
500

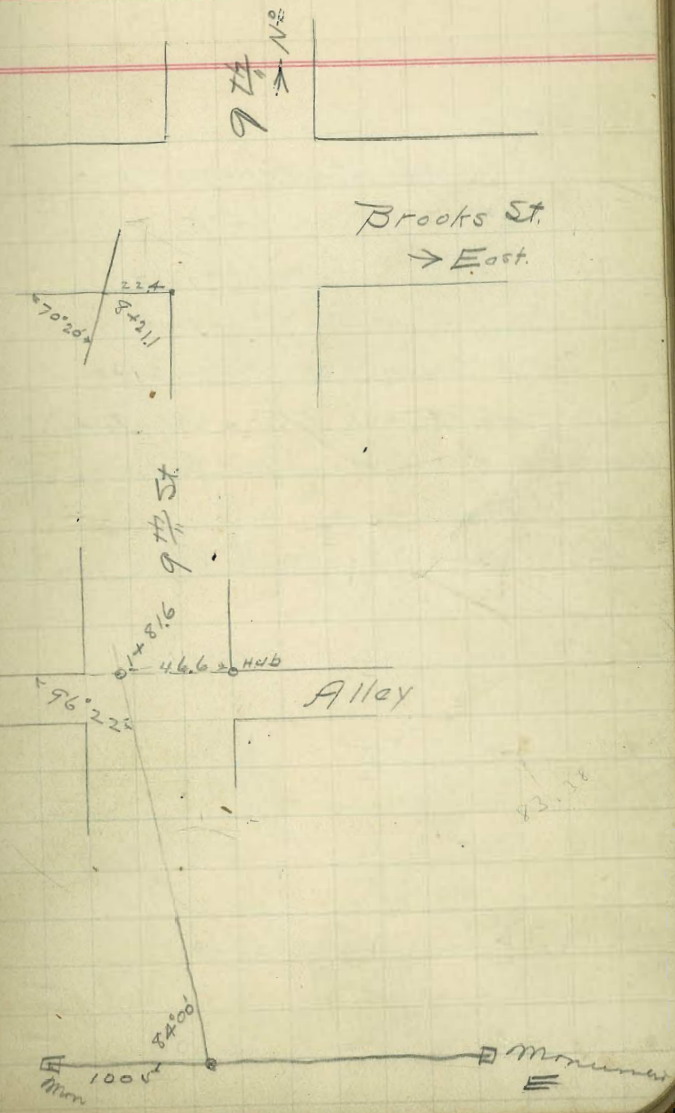

Oregon
Idaho
Kansas
Nebraska
Driscoll
Pembroke
Texas
Arizona
Winders
Bronson
Chester
Amorald
Alabama
Fillmore
80
80'
80'
80'
80'
80'
65
252
43
80.4
100
104.5
106.5
76.3
43.7
154
129.7
72.3
30
20.4
244.6
46
1060

9th St. Cañon Road — Oct 18/94.

North Line of Park to Univers Ave.

21+50	△	R	27°00		
21+00	△	R	30°00	N 1°00' W	✓
20+20	△	L	28°00	N 31°00' W	✓
16+70	△	L	16°00	N 3°00' W	✓
15+50	△	R	28°00	N 13°00 E	✓
11+65	△	L	40°00	N 15°00' W	✓
10+40	△	R	24°00'	N 25°00 E	✓
8+85	△	L	19°00	N 1°00 E	✓
7+00	△	R	33°00	N 20°00' E	✓
5+00	△	L	7°00	N 13°00' W	✓
0	△	R	84°00	N 6°00' W	

0 = Point on N° Line of Park, 1005' East of Monument.



10/19/04 Hutchinson

Notes.

3' x 8' Culvert at 1+90

2' x 2' " " 6+75

Channel Change 50' at 17+50

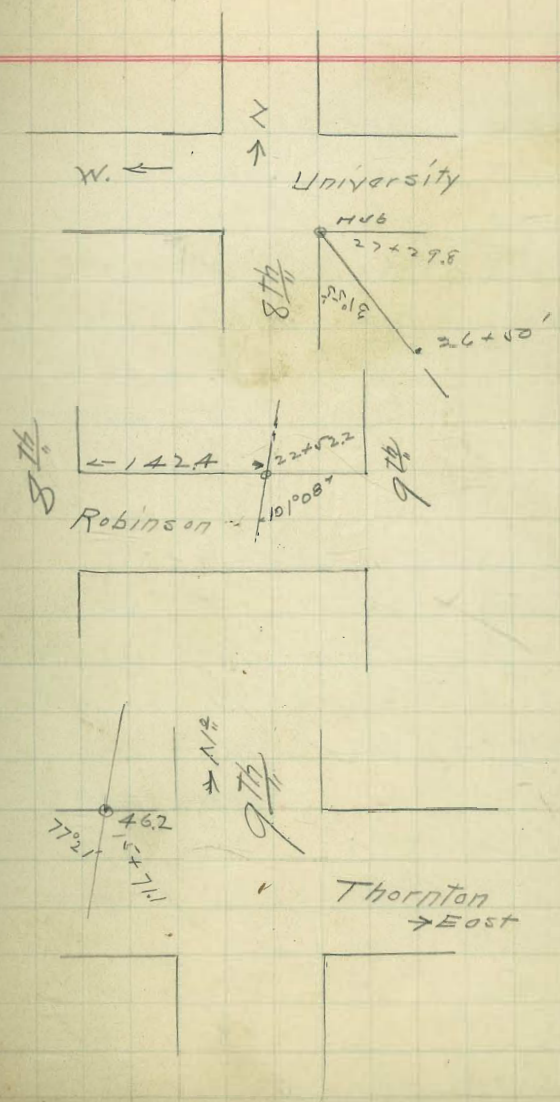
" " 50' " 19+00

2' x 2' Culvert at Station 21+00

Line from 26+50 to 27+29.8 to be Changed so as to be 20' at right angles to the S.E. Cor. of 8th & University

27+29.8 Hub S.E. Cor of 8th & University

26+50	Δ	L	13°51'	
25+50	Δ	R	13°00	✓
24+75	Δ	L	18°00'	✓
23+00	Δ	L	24°00'	✓
22+00	Δ	L	14°30'	✓



9th Street Canon Road

North Line of Park to Univ Ave

10/18/04

	4.52	195.80		191.28	
0			12.2	183.6	
+50			10.7	185.1	
1			9.2	186.6	
+50			8.0	187.8	
+75			8.3	187.5	
+80			11.5	184.3	Mag
+90			9.1	186.7	
2			8.1	187.7	
+50			6.1	189.7	
3			4.9	190.9	
+50			1.9	193.9	
4			0.6	195.2	
	11.80	205.21	2.39	193.41	
+50			9.2	196.0	
5			9.1	196.1	
+50			7.8	197.4	
6			7.1	198.1	
+50			7.6	197.6	
+80			8.8	196.4	
7			6.0	199.2	
+50			4.0	201.2	

8+00		205.21	1.9	203.3
8+10			1.0	204.2
	11.89	216.89	0.21	205.00
+25			11.0	205.9
+50			10.6	206.3
+85			10.4	206.5
9			9.9	207.0
+50			9.4	207.5
10			9.1	207.8
+50			8.3	208.6
+70			7.0	209.9
11			6.3	210.6
+50			5.5	211.4
+65			5.7	211.2
12			3.6	213.3
	11.54	227.99	0.45	216.45
+20			14.8	213.2
+50			16.0	212.0
13			14.1	213.9
14			9.8	218.2
+50			7.3	220.7
15			6.8	221.2

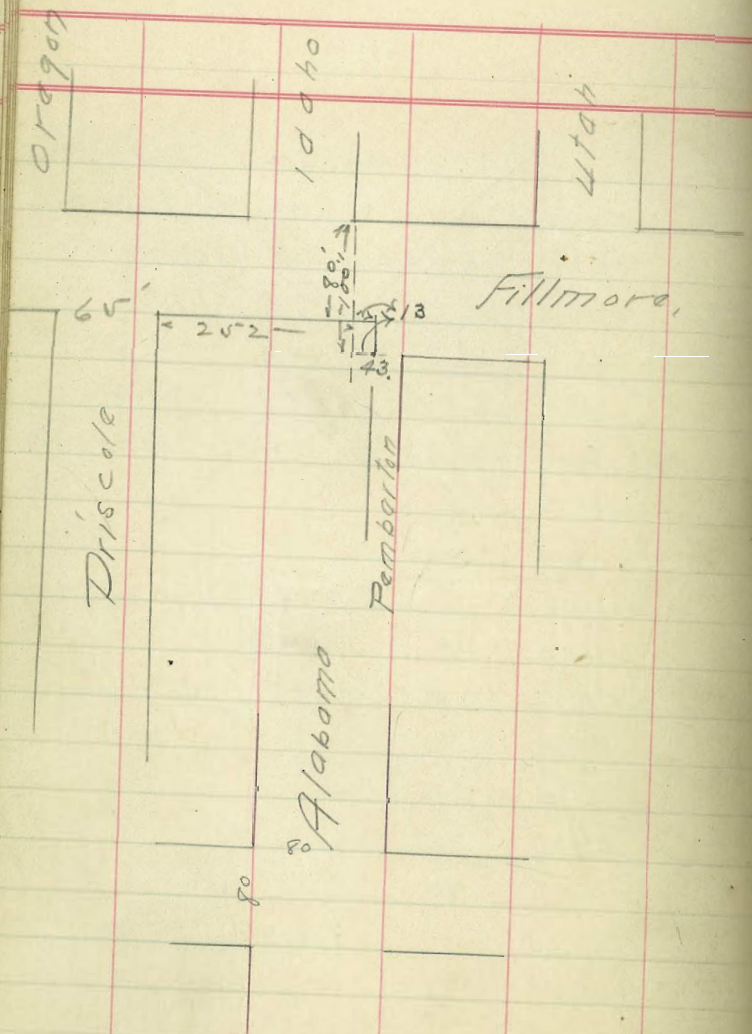
+50		277.99	6.6	221.4	
+70			8.0	220.0	
16			5.3	222.7	
+50			2.3	225.7	
+70			1.5	226.5	
17			1.1	226.9	
	10.58	237.82	0.75	227.24	
+15			11.9	225.9	
+35			16.4	221.4	
+50			14.0	223.8	
+65			15.5	222.3	
18			8.2	229.6	
+50			4.3	233.5	
+80			4.6	233.2	
+85			10.1	227.7	
19			9.0	228.8	
+15			9.8	228.0	
+25			8.1	229.7	
+50			3.1	234.7	
+75			0.7	237.6	
20			0.5	237.8	2-10

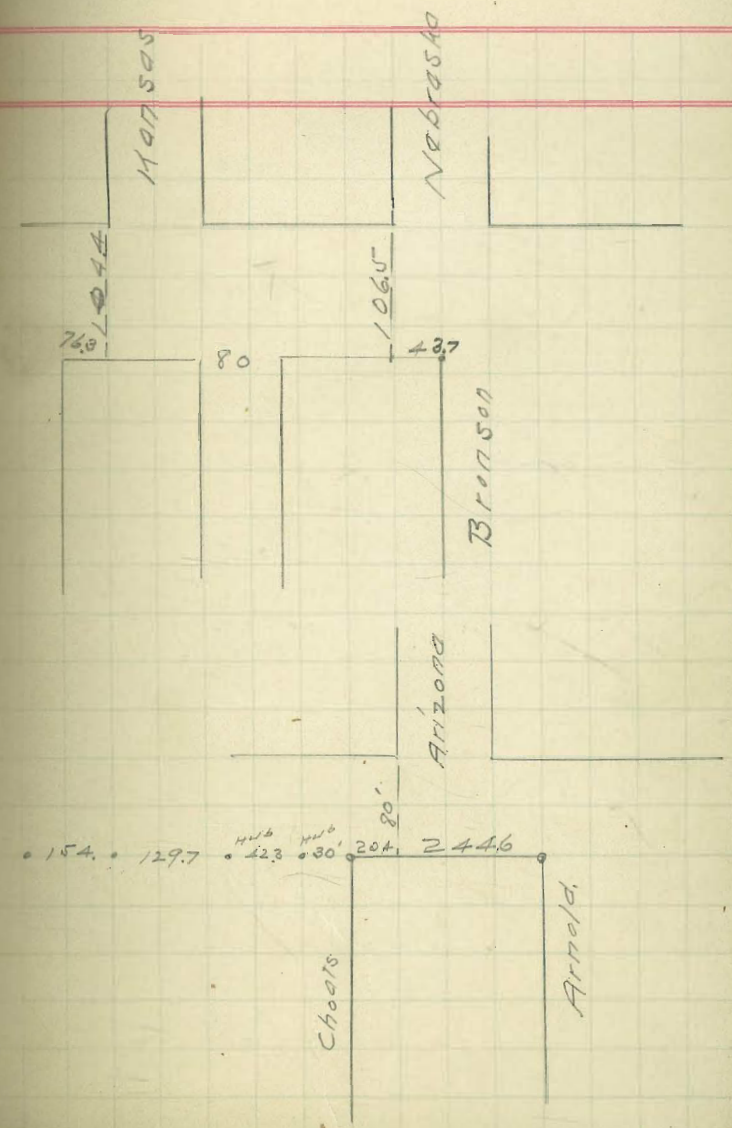
+15		237.82	0.3	237	
+50			3.2		
+55			4.6		
B.M.	8.72	245.93	0.61	237.21	
+20			8.7	37.2	2-10
+50			8.3	37.6	4-10
+70			6.8	39.1	
21			9.7	36.2	35-10
+05			10.3	35.6	
+50			0.5	45.4	25-10
	12.84	257.64	0.13	245.80	
22			8.2	50.4	
+50			8.2	50.4	
23			1.7	56.9	
	11.79	269.44	0.99	257.65	
+15			11.2	58.2	
+25			12.0	57.4	
+50			11.2	58.2	
24			8.5	60.9	
+50			3.9	65.5	
+80			0.6	68.8	

10/19/04 Hutchison.

		269.44			
	11.86	281.02	0.28	269.16	
+95			12.5	68.5	
25			14.0	67.0	
+25			12.0	69.0	
+50			12.6	68.4	
~~26~~ 75			10.4	70.6	
26			7.0	74.0	
+50			1.4	79.6	
	12.59	249.80		237.21	
22			0.6	249.2	3-10
	12.45	262.07	0.18	249.62	
+50			9.0	53.1	3.5-10
23			6.4	55.7	3-10
+50			2.4	59.7	3-10
+75			0.9	61.2	
	12.58	273.91	0.74	261.33	
24			12.0	61.9	2-10
+50			7.8	66.1	3.5-10
+75			5.0	68.9	
+85			3.6	70.3	

25		273.91	3.2	270.7	4:10 slope
+50			1.7	72.2	3:10
	12.79	284.26	2.44	271.47	
26			8.6	75.7	4:10
+50			4.7	79.6	1-10
27			2.9	81.3	
+29.8	S.E. Cor of 8th & W		1.85	282.41	00:25


Oregon
Idaho
Utah
Fillmore
65'
252
80'
13
43.
Driscole
Pemberton
Alabama
80
80


Kansas
Nebraska
1044
1065
76.3
80
43.7
Bronson
Arizona
80'
154.
129.7
42.3
30'
204
244.6
Choats
Arnold

101,90	100,00
12 70	
89,20	95,0
1 30	
90,50	90,0
13,20	85,0
77,30	80,0
0 20	75
77,50	70.
12 20	
65 30	65.
0'20	60,0
65,50 ft	

"A"

53
29
82

9th Street + Robinson Ave
Canon Road 1/22/05 Hutchison Evans Lewis

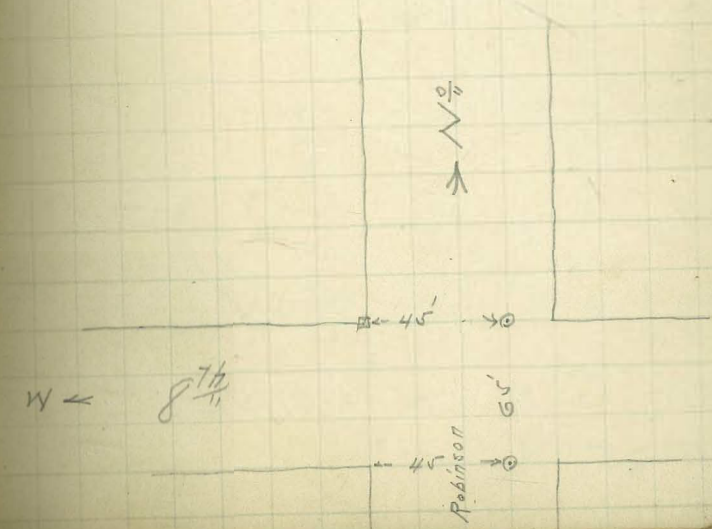
66

7+36.5 = 20+16. of Canon Line See Page 59'

7+36.5	△	R	20°37'	S61°23'W to Stat 16+70 of Ln
6+40	△	L	53°00	S82°00W
3+95	△	R	68°00	S29°00'W
3+50'	△	R	85°00	S39°00'E
3+25		14°		
3+00	△	R	28°00	N56°00E
2+00	△	L	15°00'	N28°00E
1+45	△	L	32°00	N43°00'E
1+15	△	L	15°00	N75°00E

0+65 Point on East Line of 8th 15' No of So Line of Robinson
N90°00E

0 = Point on West Line of 8th - 15' No of So Line of Robinson



11+74	No line at Thornton,				
10+00	△ R	15°00	S8°00'W		
7+50	△ R	70°00	S7°00E		
6+15	△ L	54°00	S27°00'E		
5+00	△ R	17°30'	S27°00'W.		
3+95	△ R.	53°30'	S14°30'W.		
3+95A = 3+95B					

"A"

	2,70	285.11		282,41	
0			11.1		
0+02			7,8		
0+65			8.7		
	4,29	276.91	12,49	272,62	
0+85			1,3		Down 4:10, 5:10
1+15			5,3		
+45			6,9		5:10
1+80			11,3		
	1,27	265.43	12,75	264,16 ~~272.36~~	
2			3,1		4:10
2+50			6,4		3.6:10
+65			7.0		
	1,21	255.92	10,72	254.71	
3			4.1		3.6:10
+25			9.5		2:10
+30			10.9		2x2 Box
+50			8.1		1.3:10
+85			13.0		2x3 Box
+95			10.1		2.5:10

4+50		255,92	12,4		2:10.
	1.8.21	245.88	11,86	244.06	
+80			6.8		3x3 Box
5+00			4,5		
+25			3.7		
+50			4,7		3:10.
6			5,7		4:10
+40			7,7		1,6:10
+70			10,8		2x2 Box
7			9,3		1.5:10 Down 4:10
7+36,5			8.4		
			8,64	237.24	

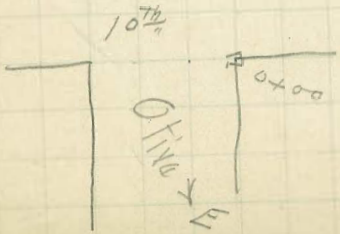
"B" Line

3+95		245.85	00		
4+50			40.5		2/10
5			2.4		3/10
+50			5.4		5/10
6			4.9		4/10
+65			5.3		
+50			4.5		3/10
7			8.2		3/10
+50			10.4		3/10
+70			13.5		
+75			10.9		
8			8.4		2,6/10
	0.11	238.00	7.96	237.89	
+50			00		3/10
9			2.9		4/10
+50			1.7		Down 6/10
10			2.4		2/10
+50			8.5		2/10
11			11.8		3/10
+50			5.9		5/10

1474	238.0	7.6
N.W. Cor. of 9th + Thornton.		16.4

"C" 6+15.6

5+14 C = 6+00 A				
5+14	Δ R	76°51		to 3+95 A line
4+83 C = 6+10 "B" line				
3+65	Δ R	21°08'		
3+35	Δ R	34°00'		
1+10	Δ L	19°00	S77°00W	
0+00	Δ R	6°00	N84°00W	
0+00 = M.E. Cor of 10th & Olive				M90°W



"C"

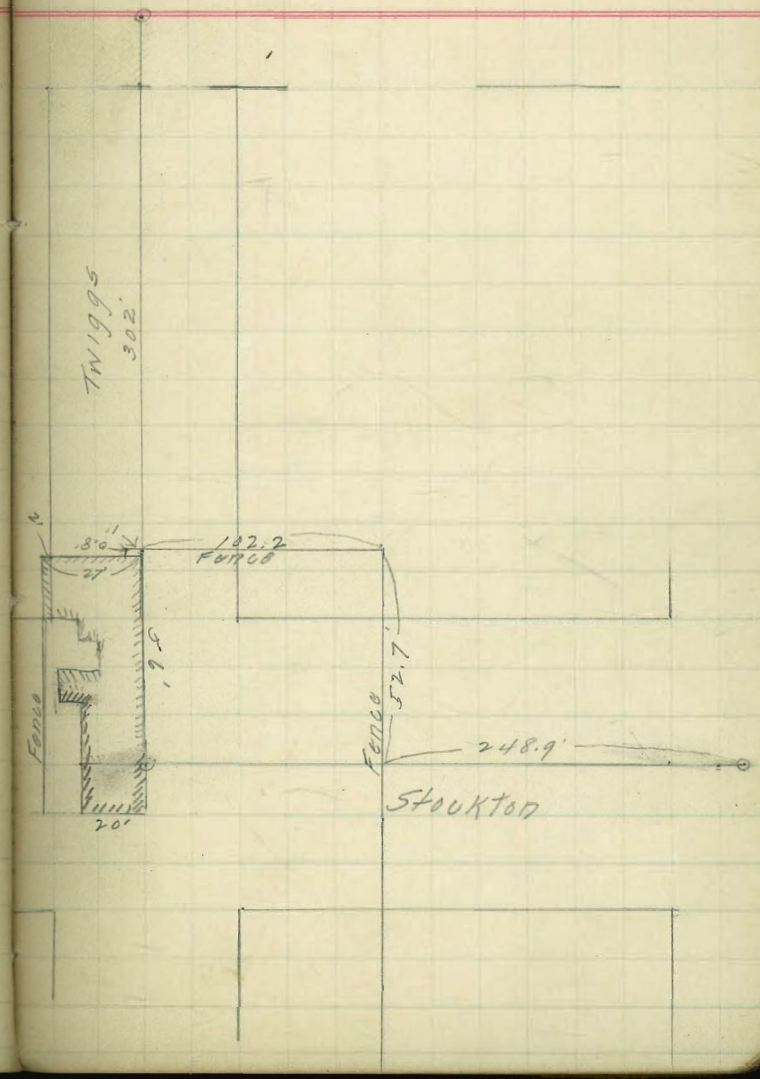
1/22/05

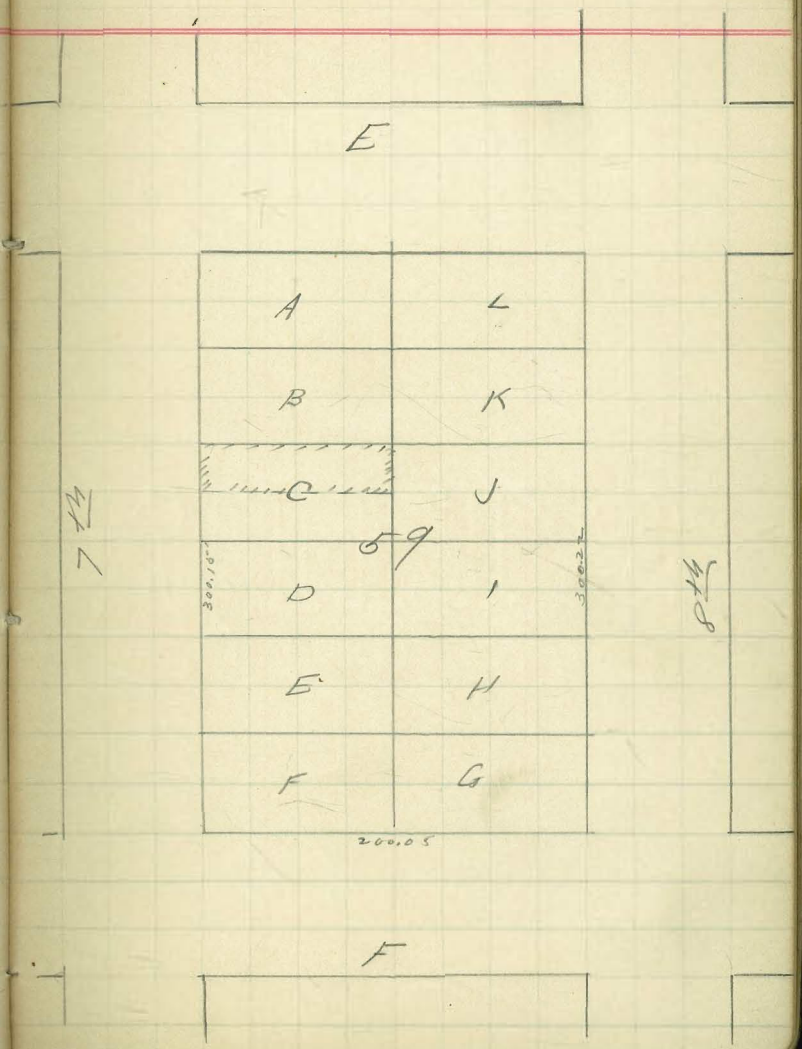
Hutchison
Evans
Lewis

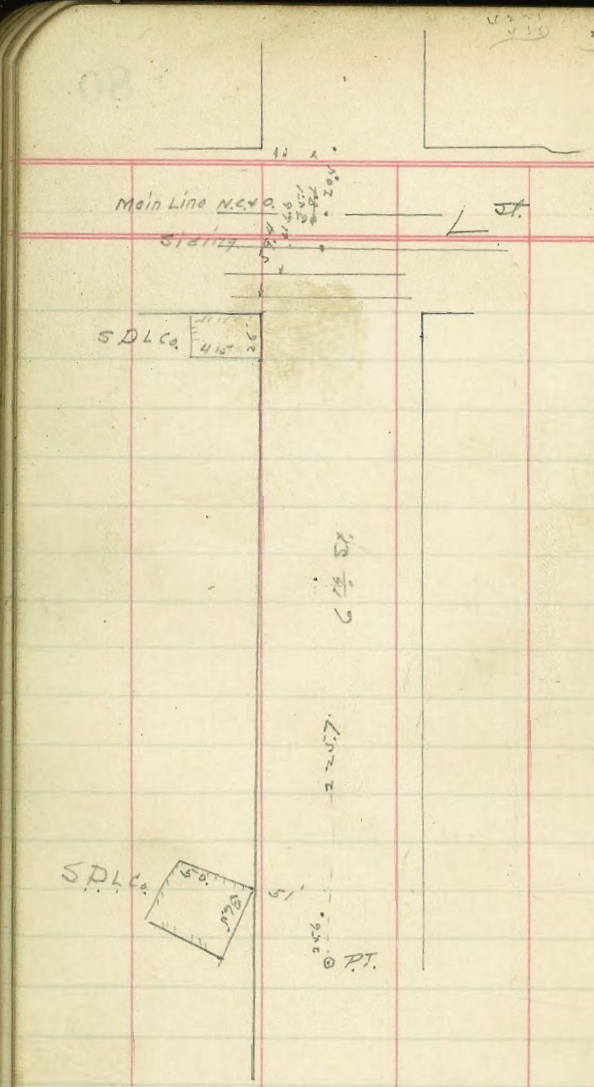
	11.60	248.81		237.21	
5+14			9.1		
5+00			13.00		Truck
4+83			7.7		
4+50			2.6		3:10
	12.87	261.34	0.34	248.47	
4			11.2		4:10
3+65			6.5		5:10
3+35			4.0		4:10
	11.04	271.98	0.40	260.94	
3+00			9.5		4:10
2+50			5.7		4:10
2+10			2.2		
2+00			2.2		3:10
	12.63	284.06	0.55	271.43	
1+75			13.2		
1+50			4.2		00:10
1+00			3.6		
0			1.6		

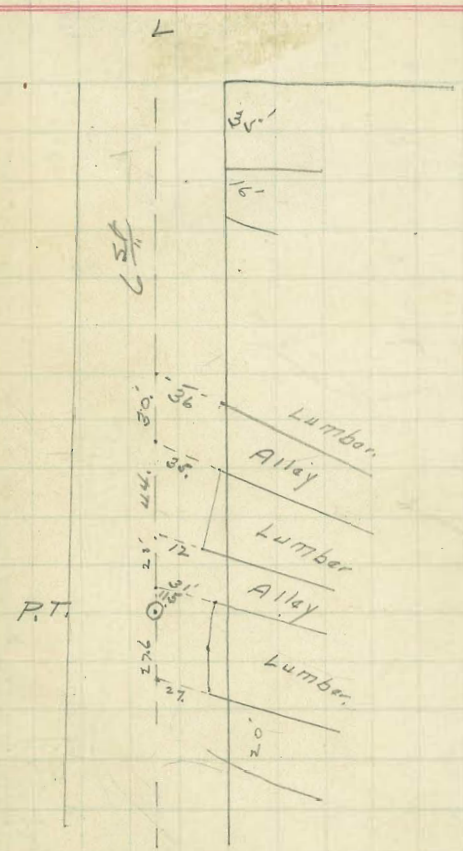
6/28/05 { Davis, Brooks, Haslam

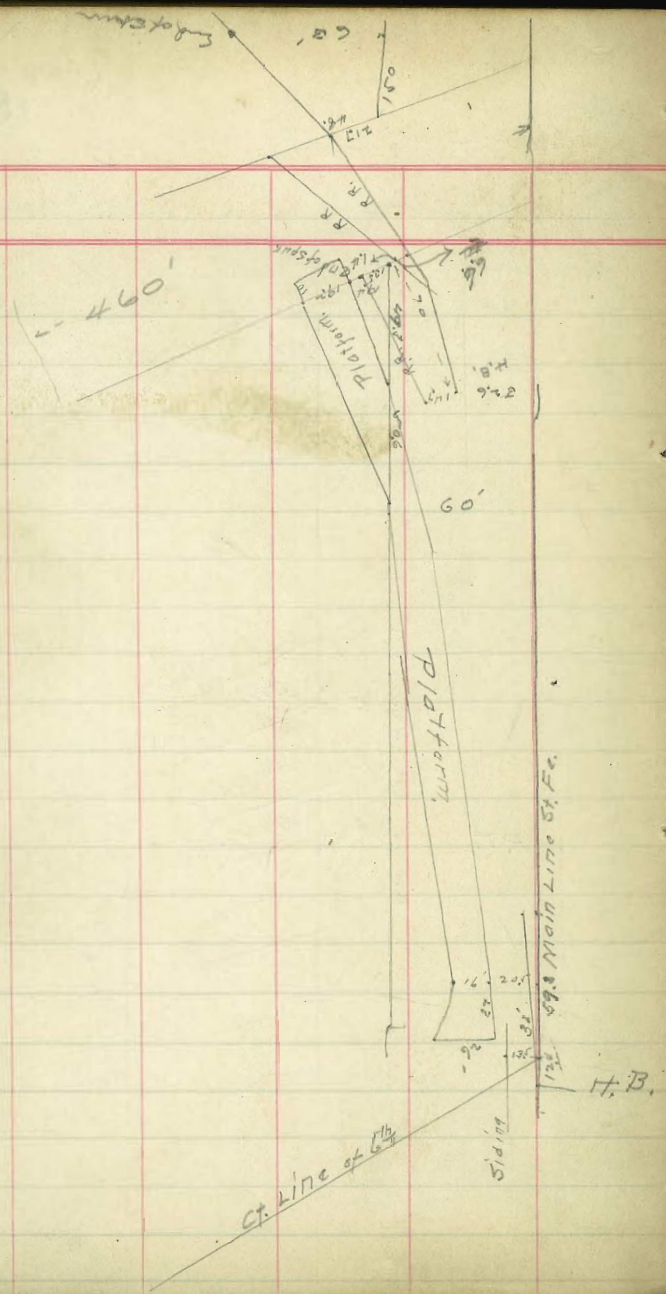
Survey to determine Location of Houses in Twiggs & Stockton Old Town.




E
A
L
B
K
C
J
59
D
I
E
H
F
G
300.15
300.22
200.05
7th
8th
F


Main Line N.C.&O.
Siding
S.P.L.Co.
S.P.L.Co.
P.T.


Lumber
Alley
Lumber
Alley
Lumber
P.T.


460'
60'
Platform
Platform
Main Line St. Fe.
H.B.
Siding
Ct. Line of 6th

△ 56° 22'

56° Curv

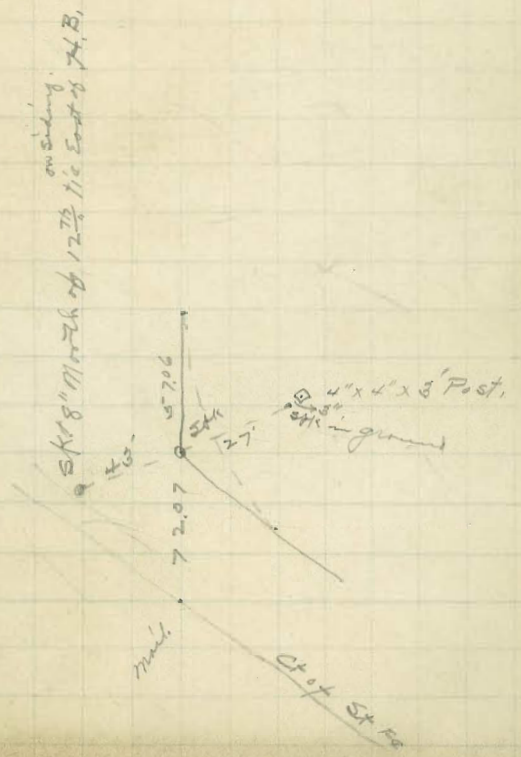
28'
12°
7°

St = 57.06'

R = 106.5

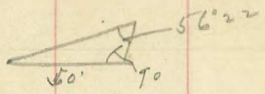
L = 100.6.

92° 03'
4 19
96 22



460) 700 (1.52
460
2400
2300
1000

56°22'
3338
.00



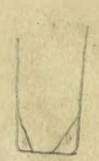
56°22'

.55388) 60.000 (108.3
55388
461700
443104
180960
166164
14796

56 22
2911 33°38

.8326) 60.000 (7206
57282
17180
16652
52800

Ste



Return to City Engineers Office
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