

FIELD NOTES # 57

IVY LANE 28

IVY LANE 28

ST
499 1/2

F.B. 499 1/2

IND

187.00 Elev
25 - 10' H-

20' South of H line

MICROFILMED
DEC 11 1964

Lappin Eng-

Stat	Rod	Grade	Sever	cut	A	B
0.0	12.40	170.80	167.00	3.80		
25	11.94	171.26	167.33	3.93	+20.5	+22.5
50	10.92	172.28	167.66	4.62	+46.0	+39.0
75	10.09	173.11	168.90	5.11		
1+00	8.74	174.46	168.33	6.13	0+97.5	0+95.5
25	7.71	175.49	168.66	6.83		
50	6.77	176.43	169.00	7.43	1+50	1+48
75	5.88	177.82	169.33	8.49		
2+00	4.38	178.82	169.66	9.16	0 175.25	2+05
+7.86	4.33	178.87	169.76	9.11		
+15.72	4.29	178.91	169.87	9.04		
+23.58	4.58	178.62	169.97	8.65		
+31.44	4.50	178.70	170.07	8.63		2+32
+39.30	4.28	178.92	170.17	8.75		
+47.16	4.74	178.46	170.28	8.18		
+55.02	4.46	178.74	170.38	8.36		
+62.88	4.42	178.78	170.48	8.30		
+70.54	4.94	178.26	170.59	7.67		
+78.40	5.04	178.16	170.69	7.47		2+78
3+08	3.61	179.59	171.02	8.57		
+28	3.79	179.41	171.35	8.06		3+30

25th to Oct 25th 1897
25th St sewer

177.10 B.M.
6.10
183.20

From stat. 0 to stat. 8+78, grade = 1.32%

T. P. & West line 25th street - B. C.

E. C. center 25th E. C.

180.29
 179.50
 .79
 9.48

Stat	Rod	Ground Elev	Sewer Grade	Cut	L	R
+58	2.35	180.85	171.68	9.17		
+78	2.91	180.29	172.00	8.29		
4+18	2.38 (186.78)	180.87	172.49	8.38		
4+58	6.11	180.67	172.94	7.73		
+88	6.11	180.67	173.23	7.44		
5+08	5.85	180.98	173.52	7.41		
+93	5.45	181.33	173.82	7.51		
+58	5.21	181.67	174.11	7.46		
+88	4.96	181.82	174.40	7.42		
6+08	4.53	182.25	174.69	7.56		
+88	4.55	182.23	174.98	7.25		
+58	4.28	182.50	175.27	7.23		
+88	3.96	182.82	175.57	7.25		
7+08	3.86	182.92	175.86	7.06		
+88	3.48	183.30	176.15	7.15		
+58	3.20	183.58	176.44	7.14		
+98	2.69	184.09	176.91	7.18		
8+38	2.14 (190.56)	184.64	177.38	7.26		
+63	5.64	184.92	177.67	7.25		
+88	5.27	185.29	177.96	7.33		
9+13	5.10	185.46	178.26	7.20		

25th St sewer

183.20 2
 3.88
 180.87
 5.91

486.78
 274
 1846.4
 592
 1995.6

S line F
 Center
 N line F

From S. 3 + 78 to park line
 the grade of sewer is 1.17%

177.10
 6.88
 180.98
 3.69
 180.29

S line Est
 Center
 N line Est

31 179.50
 3+83

4+58

5+08

5+57

5+83

6+08

6+57

7+08

183.50

8
725
72

19373
640
18733
25 St Sewer
19050
316
18740
633
19373
3

Stat	Prod	Forward Elev	Sewer grade	cut	W	E
+38	5.07	185.49	178.55	6.94		
+63	4.88	185.68	178.84	6.84	9+64	
+88	4.60	185.96	179.13	6.83		9+87
10+13	4.50	185.96	179.42	6.54		
+38	4.45	186.11	179.72	6.39		10+38
+63	4.20	186.36	180.00	6.36		
+88	3.89	186.67	180.30	6.37		10+87
11+13	3.60	186.96	180.59	6.37		
+38	3.16	187.40	180.88	6.52	187.00	S. line of
11+78	6.09	187.64	181.36	6.28		Center
12+18	5.46	188.27	181.88	6.44	12+14	W. line of
+43	5.41	188.32	182.12	6.20		
+68	5.22	188.51	182.41	6.10	12+65	
+93	4.82	188.91	182.71	6.20		
13+18	4.69	189.04	183.00	6.04	13+16	
+43	4.58	189.15	183.29	5.86	13+41	
+68	4.27	189.46	183.58	5.88	13+67	
+93	4.14	189.59	183.87	5.72		
14+18	3.70	190.00	184.17	5.86	14+18	
+43	3.55	190.18	184.46	5.72		
+68	3.33	190.40	184.75	5.65	14+68	

S. line of
Center
W. line of

1598
1798

25th St Sewer

1978
98
2076

4

Grade

Stat	Rad	Elev	Sewer Grade	cut Cut
+93	2.85	190.88	185.04	5.84
15+18	2.74	190.99	185.34	5.65
+58	2.01	191.72	185.81	5.91
+98	1.72	192.01	186.27	5.74
16+23	4.43	192.26	186.56	5.70
+48	4.20	192.49	186.85	5.64
+73	4.03	192.66	187.15	5.51
+98	3.84	192.85	187.44	5.41
17+23	3.46	193.23	187.73	5.50
+48	3.11	193.58	188.02	5.56
+73	2.71	193.98	188.31	5.67
+98	2.49	194.20	188.61	5.59
18+23	2.25	194.44	188.90	5.54
+48	2.01	194.68	189.19	5.49
+73	1.72	194.97	189.48	5.49
+98	6.46	195.28	189.77	5.51
19+38	5.82	195.92	190.24	5.68
+78	5.22	196.52	190.71	5.81
20+03	4.92	196.82	191.01	5.81
20+28	4.62	197.12	191.30	5.82
+53	4.30	197.44	191.59	5.85
+78	3.94	197.80	191.89	5.91

191.00
15+23

S line C st
Center
N line C st

17+38 17+36 6" 4/5

196.00
19+03

S line B st
Center
N line B st

19+66

20+26

20+76

193.73
2.27
191.46
5.23
196.67
1.72
194.97
6.77
201.74

min elev must be on 25th St

2024
~~1978~~
 150
 2138

1978
 149
 2127

1978
 149
 21

2471
 1978
 543

25th Street Sewer 28
33
64
5

2103
 1978
 120
 15

2471
 1168
 1353

					L	R
21+03	3.60	198.14	192.18	5.96	21+03	
+28	3.21	198.53	192.47	6.06	21+28	
+53	2.78	198.96	192.76	6.20		
+78	2.35	199.39	193.06	6.33	21+67	
22+03	1.92	199.82	193.35	6.47		
	(206.97)					
+28	6.92	200.05	193.64	6.41	22+28	
+53	6.63	200.34	193.93	6.41		
+78	6.30	200.67	194.22	6.45	201.00	
23+18	6.02	200.95	194.69	6.26		
+58	5.40	201.57	195.17	6.40	(4") 28+46	28+44
+83	5.05	201.92	195.46	6.46		
24+08	4.72	202.25	195.75	6.50		
+33	4.57	202.40	196.05	6.35	24+40	24+42
+58	4.10	202.87	196.34	6.53		
+62					end of pipe	
+71			196.50		203.00	

206.97
 4.91
 202.06 on top
 21.03
 1978
 125

201.74
 192
 1998.2
 71.5
 20697
 3.90
 203.07 on top

113
 380
 50
 548

S line @ st
 Center
 W line @ st
 Park line

Grad stakes at 4 man N-25th St
 Grad stakes N of line 25th - Park line

10.99
125
97 ✓

6

H /
4.22 207.29

203.07 BM

4.42 202.87

4.32 202.97

10.99 196.30

9.74 197.55

9.74 197.55

9.49 197.80

9.24

Lower lip of Pipe at Flush tank

Walnut Ave Sewer

288.61
Walnut Ave Sewer Jan 13th 1898
Lapps

Stat	Red	El.	Sewer Grade	Cut	
0+0	10.86	279.89	276.00	3.89	
25	10.45	279.80	275.90	3.90	
50	10.05	280.20	275.80	4.40	
75	9.43	280.85	275.70	5.15	+72 4' 4" North
1+00	8.81	281.48	275.60	5.86	+74-6' 1" South
25	8.22	282.03	275.50	6.53	
50	8.00	282.20			
50	7.80	282.42	275.39	7.03	
75	7.46	282.79	275.29	7.50	+78 4' 4" South
2+00	6.98	283.27	275.19	8.08	
25	6.30	283.95	275.09	8.86	
50	5.96	284.29	274.99	9.30	
75	5.58	284.67	274.89	9.78	+75 4' 4" South
80		284.74	274.87	9.87	
3+00	5.30	284.95	274.79	10.16	① = 287.50
25	5.03	285.22	274.70	10.52	
50	4.77	285.48	274.59	10.89	+51 6' 4" North
75	4.53	285.72	274.49	11.23	+53 6' 4" South
4+00	4.40	285.85	274.39	11.46	
25	4.14	286.11	274.29	11.82	
50	3.93	286.32	274.18	12.14	
75	3.66	286.59	274.08	12.51	+72 1' 1" North

Flush tank
280.00

50+0 = West line 2nd Horton
speker set 4' South of Center
283.86 BM
6.59
290.25
285.41
146
283.96
5.99
289.95

West line 3rd in Lower Grade

52+80 = West line 3rd in Horton

Walnut Ave Sewer

Stat	Rod	El	Sewer Grade	Cut	
5+00	3.48	286.78	273.98	12.78	
25	3.82	286.94	273.88	13.06	
50	3.10 (291.15)	287.15	273.78	13.37	+55 4" y Sewer
75	3.92	287.23	273.68	13.55	
6+00	4.40	286.75	273.58	13.17	
25	4.57	286.58	273.47	13.11	
40	4.76	286.44	273.42	13.02	+46-6" y Sewer
50	4.84	286.41	273.37	13.04	
75	5.33	285.82	273.27	12.55	+82 6" y Sewer
7+00	5.52	285.63	273.17	12.46	+19,6" y Sewer
25	5.78	285.43	273.07	12.36	
50	5.74	285.41	272.97	12.44	+48 4" y Sewer
75	6.10	285.05	272.87	12.18	
8+00	6.87	284.78	272.77	12.01	
B.C. 25	6.64	284.51	272.67	11.84	
45	6.38	284.52	272.63	11.89	+42 4" y Sewer
55	6.47	284.43	272.59	11.84	
65	6.50	284.40	272.55	11.85	
75	4.95 (288.92)	283.97	272.51	11.46	
9+09	4.47	284.45	272.37	12.08	

75
34
109

290.90
2.34

288.56

289.95
2.98
286.97
3.98
290.90
6.92
284.40
4.52
288.56

491.15
2.58
288.57 on B.M. Cur 4 do

8

290.26
3.10
287.15
4.00
291.15

East line 4th in Arlow

West line 5th street

Grade of Sewer 0.405' = 100' = .004055 ft

Elbow sewer at S line Walnut - 272.22

Stat	Rod	El.	Sewer Grade	Cut
		(287.89)		
0+0	3.48	284.41	272.22	12.19'
25	3.53	284.36	272.31	12.05'
50	3.73	284.16	272.40	11.76'
800	3.96	283.94	272.51	11.43'
1+00	4.07	283.82	272.58	11.24'
25	4.16	283.73	272.67	11.06'
50	4.46	283.43	272.76	10.67'
75	4.66	283.29	272.85	10.44'
2+00	4.79	283.10	272.94	10.16'
25	4.99	282.90	273.03	9.87'
50	5.15	282.74	273.12	9.62'
75	5.40	282.49	273.21	9.28'
3+00	5.60	282.29	273.30	8.99'
25	5.78	282.11	273.39	8.72'
50	5.92	281.97	273.48	8.49'
750	6.03	281.86	273.57	8.29'
4+00	6.29	281.50	273.66	7.94'
25	6.52	281.37	273.75	7.62'
		(284.51)		
50	3.34	281.17	273.84	7.33'
75	3.53	280.99	273.93	7.06'
5+00	3.74	280.77	274.03	6.74'

manhole
 284.00
 +88.45

+26.34
 +15.45

+77.74
 +20.15

+25.54
 6' East

manhole
 281.75

5th Street Extension Jan 13, 1898

Spikes set 4 ft West - 4' South of
 Center of street

0+0 = South line Walnut

288.61 B.M.
 1.96
 290.57
 6.21
 284.36
 3.53
 287.89
 6.52
 281.37
 3.14
 284.51

North line Walnut

Grade of sewer = 0.3614' per 100 ft

5th Street Extension

Stat	Prod	El.	Low Grade	Cut
25	3.89	280.62	274.11	6.51
50	4.03	280.48	274.21	6.27
75	4.39	280.12	274.30	5.82
6+00	4.39	280.12	274.39	5.73
25	4.55	279.96	274.49	5.47
50	4.79	279.72	274.57	5.15
T.P. 70	4.98	279.53	274.64	4.89
76.28	4.96	279.55	274.66	4.89
82.56	4.94	279.57	274.68	4.89
88.85	5.00	279.51	274.71	4.80
95.13	5.09	279.42	274.73	4.69
7+01.41	5.17	279.34	274.75	4.59
07.69	5.05	279.46	274.78	4.68
13.98	4.93	279.58	274.80	4.78
20.26	4.79	279.72	274.82	4.90
26.54	4.65	279.86	274.84	5.02
32.83	EC 4.60	279.97	274.86	5.05
50	4.17	280.34	274.92	5.42
75	3.23	281.28	275.02	6.26
8+00	2.68	281.83	275.11	6.72
25	1.91	282.60	275.20	7.40
		(287.98)		
50	5.00	282.98	275.29	7.69

284.51
 282.60
 5.38
 287.98

T.P.

(80' diam circ 251.32) chord low line 6.283'
 (72' diam circ 226.19) chord on spikes 5.655'
 B.C. 40' Radia deflection Ang 4° 30'

Total length of Curve
 62.88 ft

Grade of Curve = 0.3614 ft per 100 ft

manhole
 E.C. 280.00

Center Brookes and West line 5th st

7+91 1/2 South

5th St Extension

25
17.8
42.8

Sta	Rad	Elev	Sewer Grade	cut
0	75	4.64	283.34	275.38 7.96'
2	9+00	3.74	284.24	275.47 8.77'
6	25	3.70	284.28	275.56 8.72'
7	50	3.74	284.24	275.65 8.59'
14	75	3.98	284.00	275.74 8.26'
17	10+00	4.04	283.94	275.83 8.11'
18	10+17.8	4.23	283.75	275.89 7.86'
19	50	4.69	283.29	276.00 7.29'
2	75	5.22	282.76	276.10 6.66'
4	11+00	4.98	283.00	276.19 6.81'
+	25	5.90	282.08	276.28 5.80'
+1	50	5.47	282.51	276.37 6.14'
+2	75	6.07	281.91	276.46 5.45'
+3	25			
+4	B.C. 12+00	5.10	282.88	276.55 6.33'
+5	04.74	5.82	282.16	276.57 5.59'
+6	9.42	6.34	281.64	276.58 5.06'
+7	14.13	6.68	281.30	276.66 4.70'
+8	18.85	6.61	281.37	276.62 4.75'
+9	23.56	6.47	281.51	276.63 4.88'
3	28.27	5.52	282.46	276.65 5.81'
	33.00			

manhole
283.50

East line of 4th St

Grade of Sewer 0.3614' per 100 ft

B.C.

30' Radius

6"

5th St Elevation

22
12

Stat	Road	Elev.	Sewer Grade	Sewer grade		
37.71	5.80	282.18	276.68	5.50'		
42.40	5.82	282.16	276.70	5.46'		
EC 47.12	6.87	281.11	276.72	4.39'		
		(281.41)				
	72	5.89	280.52	276.81	3.71'	
1	+97	6.11	280.30	276.90	3.40'	
	134	22	6.28	280.13	276.99	3.14'
	+47	6.40	280.01	277.08	2.93'	
	+72	6.50	279.91	277.17	2.74'	
2	+97	6.68	279.73	277.26	2.47'	
	144	22	6.66	279.75	277.35	2.40'
	+47	6.65	279.76	277.44	2.32'	
+	+72	6.29	280.12	277.53	2.59'	
+	+97	6.10	280.28	277.62	2.66'	
+	154	22	6.33	280.08	277.71	2.37'
+	+47	6.11	280.30	277.80	2.50'	
+			280.03		3.14'	
+	+72	6.30	280.11	277.89	2.22'	
+	+97	6.15	280.26	277.98	2.28'	
+			(287.03)			
+	164	22	6.32	280.71	278.07	2.64'
+	+47	5.76	281.27	278.16	3.11'	
+	+72	5.23	281.50	278.25	3.55'	
+	+97	4.40	282.63	278.34	4.29'	
+	174	22	3.98	283.05	278.43	4.62'

Manhole
①
EC
286.75'

Manhole
①
281.87

287.98
1.68
286.30
6.62
292.92
3.00
287.87
4.81
292.18
288.61
3.57

Cur Walnut - 4th

12

284.53
8.56
281.08

Curve 30 Radii
Center line Alley, North Side Brooks.
Length of chord on line sewer = 4.712'
" " " " Spikes = 5.34'
Def ang = 4° 30' 10 deflections

4.94
5.04
5.24
5.21
5.21
4.84
4.69
4.59
4.66
4.90
4.71
4.25
3.69
3.10
2.33
1.91

Grade of sewer = 2.3614' per 100 ft

284.22
2.19
286.41
6.16
280.26
6.27
287.03

the pole N.E. on Brooks Ave - 4th St

5th Extension

285.43
55.
282.68

Stat	Prod	Elon	Seuro grade	cut	Check Prod
+47	4.25	282.78	278.52	4.26'	2.18
+72	4.74	282.29	278.61	3.68'	2.67
+97	5.02	282.01	278.70	3.31'	2.95 (284.93)
18+22	4.59	282.44	278.79	3.65'	6.01
+47	3.69	283.34	278.88	4.46'	5.10
+77	4.46	282.57	278.99	3.58'	5.88
19+07	4.39	282.64	279.10	3.54'	5.80
+32	4.24	282.79	279.19	3.60'	5.65
+57	3.59	283.14	279.28	3.86'	5.29
+82	3.74	283.29	279.37	3.92'	5.15
20+07	3.69	283.34	279.46	3.88'	5.10
+32	3.58	283.45	279.55	3.90'	4.99
+57	3.83	283.20	279.64	3.56'	5.25
+82	3.43	283.60	279.73	3.87'	4.84
21+07	3.90	283.13	279.82	3.31'	5.31
+32	3.51	283.52	279.91	3.61'	4.94
+57	3.62	283.41	280.00	3.41'	5.04
+82	6.22	283.66	280.09	3.57'	4.79
22+07	6.22	283.66	280.18	3.48'	4.78
+32	6.07	283.81	280.27	3.54'	4.63
+57	5.85	284.03	280.36	3.67'	4.42
+82	5.71	284.17	280.45	3.72'	4.28

Mantle
283.00

Mantle
284.75

South 5.10 Thornton
Center 5.88
North 5.80 Thornton

Grade of surface = 0.3 in per 100 ft

282.05
362
283.47
6.47
289.88

check level
285.43
6.01
282.42
2.67
284.93

5th of Extension

25 67
 2 80
 26 47

Stat	Red	Elev	Grade	Cut
23+07	5.70	284.18	280.54	3.64'
+32	5.38	284.50	280.63	3.87'
+57	5.02	284.86	280.72	4.14'
+82	5.05	284.83	280.81	4.02'
24+07	4.35	285.53	280.90	4.63'
+32	4.35	285.55	280.99	4.56'
+57	3.49	286.39	281.08	5.31'
+82	3.00	286.88	281.17	5.71'
25+07	2.91	286.97	281.27	5.70'
+37	3.10	287.78	281.37	6.41'
+67	2.05	287.83	281.49	6.34'
+92	4.94	288.34	281.58	6.76'
26+17	4.83	288.45	281.67	6.78'
+42	4.57	288.69	281.76	6.93'
+67	4.84	288.44	281.85	6.59'
+92	5.14	288.14	281.94	6.20'
27+17	4.88	288.40	282.03	6.37'
+42	5.24	288.04	282.12	5.92'
+67	5.05	288.23	282.21	6.02'
+92	4.99	288.29	282.30	5.99'
28+17	5.12	288.16	282.39	5.77'
+42	5.43	287.85	282.48	5.37'

Chick
 Rod

4.27
3.95
3.58
(288.48)
7.09
6.39
6.37
5.54
5.05
4.95
4.15
4.09
3.57
3.57
3.47
3.79
(291.90)
3.33
3.68
3.51
3.44
3.57
3.38

Chick level
291.72
3.33
288.39
3.51
291.90
7.09
284.81
3.62
288.43

289.55
2.05
287.50
5.16
293.28

Mantle
 286.75

South 4.95 Robinson

North 4.09 Robinson

Grade of level = 0.3614' = 100 ft

Mantle
 287.00

5th Extension

Stat	Prod	Elv.	Seam Grade	Out
+67	5.75	287.53	282.57	4.96'
+72	5.80	287.48	282.66	4.82'
29+17	6.36	286.92	282.75	4.17'
	(291.23)			
+42	5.90	287.32	282.84	4.48'
+67	4.65	286.67	282.93	3.74'
+83	4.56	286.66	283.00	3.66'

Flush
287.00

Since 5.07
(291.72)

286.66
4.74
291.40
5.72
2846.8 pgs
Anvil North Side
Woodsens house

291.22
397
287.25 on Woodsons Porch

chuck
Prod

chuck level
289.8813m
448
294.81
704
287.27
446
291.72

4.23
4.25
4.82
4.41
5.07

sety Ave.

293.28
6.36
286.92
4.30
291.22
3.70
287.52
6.58
294.10
4.21
289.89

3.66
75
3.91
486.66
4.89
291.55
291.55
8.70
8.55
282.85

Grade of Sewer = 0.3614' = 100 ft

Extension of Walnut Ave

Sewer up the alley Bet 2nd & 3rd 16
Jan 26 1898

Stat	Prod	Elev	Rem Grade	Cut
+ .25			(286.55)	
0+0	3.65	282.90	279.00	
25	3.57	282.98	278.85	
50	3.66	282.89	278.58	
75	3.89	282.66	278.54	
1+00	4.05	282.50	278.20	
25	4.23	282.32	278.20	
50	4.63	281.82	278.20	
75	4.92	281.63	278.20	
2+00	5.47	281.08	278.20	
25	5.31	281.24	278.20	
50	5.20	281.35	278.20	
75	5.57	280.98	278.20	
3+00	5.22	281.33	278.20	
25	5.49	281.06	278.20	
50	5.78	280.77	278.20	
75	5.49	279.92	278.20	
4+00	5.64	279.72	278.20	
13.C.25	6.37	279.04	278.20	
+31.28	6.48	278.93	278.20	
+37.56	7.54	277.87	278.20	
+43.84	6.90	278.51	278.20	
+50.12	6.50	278.91	278.20	

See Page 18

(279.39)
279.38
6.03
285.41
288.36 B.M
3.36
286.72
7.34
279.38
7.17
286.55

Grade = 0.611 per 100'

B.C 54+25 North line Walnut
Curve 40' Radii
Chord on curve 6.28'

Stat-	Rod	Elv.	Sewer Grade	Cut-
-------	-----	------	----------------	------

3	+50.4	6.21	279.20	
---	-------	------	--------	--

	+62.70	5.88	279.93	
--	--------	------	--------	--

EC	+69.00	No Stat-		
----	--------	----------	--	--

	+75.24	5.71	279.70	
--	--------	------	--------	--

	+81.52	5.67	279.74	
--	--------	------	--------	--

13	+87.80	5.60	279.81	275.85
----	--------	------	--------	--------

See page 18

EC

this stat is 40' East of Center line of alley

Walnut Ave Extension

up the alley bet 2nd & 3rd

18

Jan 26 1898

279.
280.
5.7

Station	Prod	Elev	Curve Grade	Cut
		(285.15)		
31 0+0	5.00	283.10	279.00	4.10
		(286.55)		
4 +25	3.15	282.90	278.85	4.05
EC 4 50	3.57	282.98	278.69	4.29
75	3.66	282.89	278.54	4.36
7 +100	3.89	282.66	278.39	4.27
13 25	4.05	282.50	278.23	4.27
50	4.23	282.32	278.08	4.24
7 75	4.63	281.92	277.93	3.99
7 2+00	4.92	281.63	277.77	3.86
14 25	5.47	281.08	277.62	3.46
50	5.31	281.24	277.47	3.77
7 75	5.20	281.35	277.38	4.02
7 3+00	5.57	280.98	277.17	3.81
5 25	5.22	281.33	277.02	4.31
7 50	5.49	281.06	276.87	4.19
7 75	5.78	280.77	276.71	4.06
		(285.41)		
4 +100	5.49	279.92	276.56	3.36
16 25	5.64	279.77	276.41	3.36
3 850	6.37	279.04	276.26	2.78
+ 56.28	6.48	278.98	276.22	2.71
62.56	7.54	277.87	276.18	1.69
68.84	6.90	278.51	276.15	2.36

282.90
5.20
288.10
5.05
283.10
283.36 18 m
336
286.72
7.34
279.38
2.17
286.55

Grade per 100' = 0.608

4.50
1.49
3.01

manhole
⊙

B.C. Curve 40' Radius North line Walnut,
Chord on Curve 6.28'
Total length of Curve 62.8 ft

Walnut Air Extension

Stat	Prod	Elev	Low Grade	Cut.
31	+75.12	6.50	278.91 (285.41)	276.11 2.80
4	81.40	6.21	279.20	276.07 3.13
EC 4	87.70	5.88	279.53	276.03 3.50
	93.96	no st		275.99 3.74
7	+540.24	5.71	279.70	275.96 3.74
13	+06.52	5.67	279.74	275.92 3.82
	+12.80	5.60	279.81	275.88 3.93

Extension of Sewer up the

alley Bet 4th & 5th from Brooks 20

Sta	Stat	Prod	Elev	Sewer Grade	Cut		Preliminary	Stat	Y.S
			(285.54)				(285.90)		
37	0+0 R.C.	5.31	283.23	275.56	7.47	0+0 is 4" main sewer 120' West of West line of 5 th (Curve 18.5' Radius)	84.30 4.60	North line Brooks	B.S.M 284.22 4.68 288.90
42	+10	4.76	283.79	275.61	8.18		283.70 5.20	50	4.4
EC 4	+20	5.31	283.23	275.67	7.56	(Point set 2) West Center	282.30 6.30	1+00	284.76 2.96 292.72
	+30 EC	4.80	283.74	275.72	8.02		282.00 6.90	50	
	+41.5	4.28	284.26	275.78	8.48	7.5' line Brooks 3' Center line of alley	281.40 7.50	2+00	B.S. F.S. 4.68 4.14
134	+66.5	4.40	284.14	275.91	8.23		280.90 8.50	50	7.96 3.82
	+91.5	4.91	283.63	276.04	7.59		280.60 8.50	3+00	5.44 4.43
	+116.5	5.48	283.06	276.17	6.89		281.20 7.70	50	18.08 12.39
	+141.5	5.77	282.77	276.31	6.46		281.20 7.70	4+00	5.69
144	+166.5	6.46	282.08	276.44	5.64		281.50 7.40	50	
	+191.5	6.65	281.89	276.57	5.32		282.20 6.70	5+00	
	+216.5	6.64	281.90	276.70	5.20	Manhole	284.00 4.90	50	
							283.80 8.90	6+00	Shin Thornton
							285.50 6.90	50	
							284.70 8.60	0+0	W
							285.30 7.40	50	
							286.30 6.40	1+00	
							286.50 6.20	50	
							286.90 5.50	2+00	
							287.20 6.50	50	
							287.50 5.20	3+00	
							288.00 4.70	50	

chk J.M.S. May 12th 1898

284.22
4.32
288.54

Sewer Grade 4.53=100

Extension of Sewer up the alley

Bet 4th & 5th Sts from Brooks. 21
to University Ave

Stat	Stat	Prod	Elev	Sewer Grade	Cut-			
37.						288.40	4+00	
42						4.30		
EC4						288.70	5+00	
						4.50		
						288.70	5+00	
						3.80		
						289.00	6+00	S. line Roberts
						3.70		
13+						288.80	30	C
	26'	South	N line	Invert		3.90		
						288.90	0+00	N
						3.80		
						288.90	0+00	
						3.10		
						288.70	1+00	
						3.60		
14+						289.20	50	
						5.10		
						289.70	2+00	
						1.60		
						289.60	50	
						4.70		
						289.40	3+00	
						4.90		
15+						290.40	50	
						3.90		
						288.90	4+16	S. line University
						5.40		

292.72
~~288.90~~
 15.44
 294.94
 4.48
 289.91 on 137M
 284.22
 5.68

on 137M
at University

Extension of Sewer up the alley

Bet of the 5th St. from Burkes. 22

Stat

Stat	Rod	Elev	Sewer grade	Cut
------	-----	------	----------------	-----

37.7

42

EC 47

+

134

+

+

+

44+

+

+

+

15

+

+

+

16

Monday 21st Feb. 1898

Stat	+	HI	-	Elev		
	8.35	199.81		191.46		B.M. Elev M
37.7			0.93	198.88		
42	10.12	209.00				
EC 47			13.0	196.00	195.00	1.0
	+50		11.7	197.3	95.3	2.0
134	1		10.4	198.6	95.7	2.9
	+50		8.2	200.8	96.1	4.7
	2		5.2	203.8	96.4	7.4
	+50		4.6	204.4	96.7	7.7
144	3		5.4	203.6	97.0	6.6
	+50		7.2	201.8	97.4	4.4
	4		9.7	199.3	97.7	1.6
	+40		11.1	197.9	198.00	0.0
			13.8	195.2	.10	38.3
						3.8

Edge of bank west line 25th and alleyWest line 25th and alley0
101

Feb. 23rd 1898

306
282
24

56.25
55.33
111.58
55.79

59.32
59.7
53.35
3.85

56.56
3.85
52.65

Stat

37.7

42.

EC 47

7

+

13+

+

+

+

14+

+

+

+

15

+

+

+

16

Sta	+	H.I.	-	El. B.	13 M	
	2.76	63.02			60.26	134.10
			6.75	56.27		
			6.80	56.72		
			8.1	54.92		
			10.0	53.02		
					53.54	
	5.78	59.32				
			6.87	52.45		
			6.67	52.65		
			2.82	56.50		
	Manhole cover	3.18		56.14		
			3.07	56.25	3.60	37/4"
			3.70	55.62	5.17	3.2"
				52.45		
				3.17		

at Flush tank North side 60' N.
 " wall where sewer connection (property)
 " Flush tank South side (19' S of Prop)
 " 42' south of Flush tank

57
56.25
113.25
56.62
55.66
112.28
56.14

56.00
55.33
111.33
55.66

22nd St. Sewer

Stat

	3.61	144.60			140.99			
37.7	0		5.07	139.53	135.7	3.83	Prop. line	Surface
42.1	0		8.00	136.60			"	Ditch
50.47	+50		5.73	138.87	135.6	3.27		Sur.
	+50		8.57	136.03				Dit
	1+00		5.99	138.61	135.5	3.1		Sur.
134	1+00		9.19	135.41				Ditch
	2+50		6.37	138.21				Sur.

Lowering the Sewer on 13th Street, Bet E & G St May 1898

Sheet, Bet E & G St May 1898

Stat	Prod	Ele. (Viced)	Sewer Grade	Cut	
0+0	5.49	53.50	53.69	48.24	5.26'
25	5.10	53.89	53.41	48.51	5.38'
50	4.73	54.26	53.14	48.78	5.48'
75	4.43	54.56	52.87	49.05	5.51'
1+00	3.96	55.03	52.60	49.33	5.70
25	3.65	55.34	52.30	49.60	5.74
50	3.40	55.59	52.05	49.87	5.72
75	2.92	56.07	51.78	50.15	5.92
2+00	2.75	56.24	51.50	50.42	5.82
25	2.52	56.47	51.23	50.69	5.78
50	2.29	56.70	50.96	50.96	5.74
75	6.79	56.52	50.89	51.23	5.29
3+00	6.60	56.71	50.72	51.50	5.21
25	6.34	56.97	50.15	51.78	5.19
50	6.28	57.03	49.87	52.05	4.98
75	6.13	57.18	49.60	52.30	4.88
4+00	5.99	57.32	49.33	52.60	4.72
25	5.62	57.69	49.05	52.87	4.82
50	5.48	57.88	48.78	53.14	4.69
75	5.24	58.07	48.51	53.41	4.66
5+00	5.00	58.31	48.24	53.69	4.62

Correct column in above

Stat 0+0 = 80 ft north of the North line of G Street, & connect with the old sewer

53.54189m ^{ev 81} ST
 5.46
 58.99
 2.29
 56.70
 6.61
 63.31
 56.2
 60.29

Grade 1.09' to 100'

Spikes set 3' North of Center

55+00 is 100 ft South of South line East

Sewer West on Robinson Ave, to alley Bet 2nd & 3rd, then up alley to University Ave.
 June 18-98

Stat	Rod	Elev.	Sewer Grade	Cut
		(292.53)		
0+0	4.70	287.80	281.87	
50	5.30	287.20		
1+00	6.60	285.90		
50	7.60	284.90		
2+00	8.70	283.80		
50	9.60	282.90		
3+00	10.80	281.70		
		(281.93)		
+54	6.20	280.70		
4+00	6.30	280.60		
50	5.20	281.70		
5+00	5.60	281.80		
50	5.70	281.20		
6+00	5.20	281.70		
50	4.70	282.20		
7+00	4.70	282.20		
50	4.90	282.00		
	4.10	282.80		

50+0 is Center Robinson & Alley Bet 3rd & 4th

West on Robinson Ave

288.88 B.M.
 9.65
 292.53
 10.50
 281.63
 5.00
 286.93

turn Woods into alley Bet 2nd & 3rd

Alley Bet 2nd & 3rd

South line University

Sewer East from 5th St.

St. on Dry Lane

Stak	Red	Elev.	Sewer Grade	Out	North	South
07.3	1.63	288.79	282.00	6.79	284.69	B.M.
04.0	2.95	287.47	281.11	6.36	290.42	on Walnut ave. H.I.
+26	4.58	285.84	280.31	5.53		
+50	7.00	283.42	279.49	3.93		
+75	9.34	281.08	278.67	2.41	0+75	0+73 4"Y
1+00	10.64	279.78	277.85	1.93		
+25	11.10	279.32	277.03	2.29	1+26	1+24 4"Y
+50	10.26	280.16	276.22	3.94		
+75	9.10	281.32	275.40	5.92		
+89.5	8.25	282.37	274.90	7.47		
2+04.5	8.34	281.99	274.41	7.58		
+14.5	8.22	282.20	274.08	8.12		
+24.5	8.03	282.39	273.76	8.63		
+34.5	7.93	282.49	273.44	9.05		
+43.5	7.74	282.68	273.12	9.56		

Center of 6th St.
West Side 6th St.
0+02 y 6" North 0+00 y 6" South

East Line of 5th St.
= B.C. R=25'

= E.C.

Extension of the sewer up the

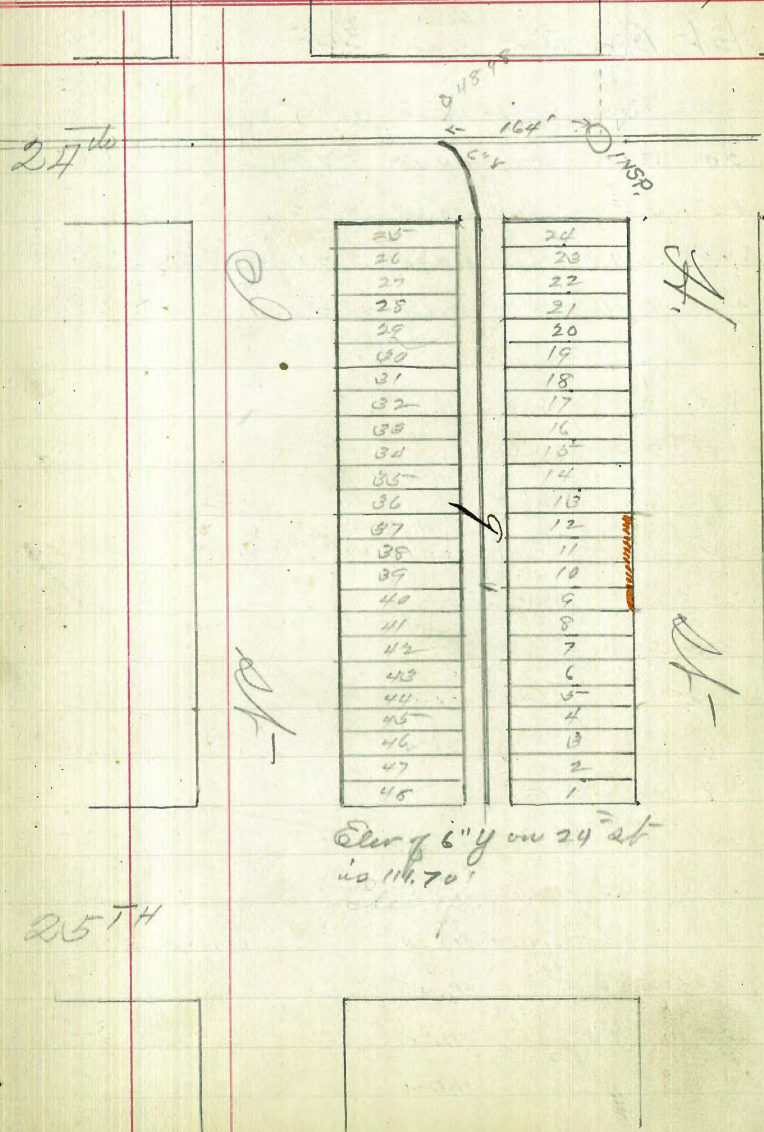
alley in Bks 9 Kimbaco add ²⁹
Oct 19-1898

Stat	Rod	Elev.	Run made	Cut
0+0	(148.13) 4.31	143.82		
25	4.30	143.83		
50	4.52	143.61		
75	5.18	142.95		
1+00	6.20 (141.85)	141.93		
25	0.66	141.22		
50	1.89	139.99		
75	2.43	139.45		
2+00	3.17	138.71		
25	4.65	137.23	131.50	5.73
50	6.03 (135.28)	135.85	129.54	6.01
75	0.47	134.81	128.15	6.63
3+00	2.07	133.21	126.51	6.70
25	3.20	132.08	124.85	7.23
50	5.19 (127.93)	130.09	123.19	6.90
75	0.15	127.78	121.52	6.26
4+00	2.36	125.57	119.86	5.71
25	4.17	123.76	118.20	5.56
50	5.22	122.71	117.45	5.26
75	5.96 (121.35)	121.97	116.70	5.27
5+00	0.95	120.40	115.95	4.45

0+0 WEST LINE
25' OF

Slopes of 3' inside of Center Valley

BREAK GRADE



Elev of 6" y on 24" at
is 116.70'

Stat	Rod	Elev	See grade	Cut	
25-	1.70	119.65	115.20	4.45-	
50	3.11	118.24	114.45	3.79	
75-	3.41	117.94	113.65	4.29	
6+00	4.74	116.61	112.90	3.71	East line 24' cut
+	6.36	114.99	111.64	3.35-	

point in 24' cut lower at 6" g. -

111.47 B.M. Cur 24' J
 9.88
 121.35 H.1
 0.96
 120.40
 7.63
 127.93 H.1
 0.15
 127.78

127.78
 7.50
 135.28
 0.47
 134.81
 7.07
 141.88
 0.66
 141.22
 6.91
 148.13

Change of Sewer off of 3rd to side hill
in Bek 247 ^{Horton}

Stat	Rod	Elev.	Sewer Grade	Cut
		(169.87)		
0+0	0.95	168.92	164.30	4' 7 1/2"
20	1.19	168.68	164.06	" "
40	1.43	168.44	163.82	" "
60	1.67	168.20	163.58	" "
80	1.91	167.96	163.34	" "
1+00	2.15	167.72	163.10	" "
20	2.39	167.48	162.86	" "
40	2.63	167.24	162.62	" "
60	2.87	167.00	162.38	" "
80	3.11	166.76	162.14	" "
2+00	3.35	166.52	161.90	" "
20	3.59	166.28	161.66	" "
40	3.83	166.04	161.42	" "
60	4.07	165.80	161.18	" "
80	4.31	165.56	160.94	" "
3+00	4.55	165.32	160.70	" "
20	4.79	165.08	160.46	" "
40	5.03	164.84	160.22	" "
60	5.27	164.60	159.98	" "
80	5.51	164.36	159.74	" "
4+00	5.75	164.12	159.50	" "

Change of Sewer off of 3rd to side
hill in Bek 247 ^{Horton} 31

Nov 11-98

Stat 0+0 is 23.5 feet South of South
line of Day St, on 3rd -
assumed Elev of Stat 0+0 is 164.30
at grade line of pipe

4.95	set stakes 4 ft	164.30
4.00	above sewer grade	5.57
		169.87
.95		
.24	Grade of Sewer	
1.19		
1.24	24" to each 20 ft fall	
1.43		
1.24		
1.67		4.07
1.24		.24
1.91		4.31
1.24		.24
1.91		4.55
1.24		.24
2.39		4.79
.24		.24
2.63		5.03
.24		.24
2.87		5.27
.24		.24
3.11		5.51
.24		.24
3.35		5.75
.24		.24
3.59		5.99
.24		.24
3.83		
.24		
4.07		

5+00 on Hawthorn is 30 feet East of East line of
second st

English ward sewer

Stat	Red Elev	Lev. grade	Cut
0+0	6.91	64.65	
25	6.99	64.57	
50	6.61	64.95	
75	6.70	64.86	
1+00	6.53	65.03	
1+30	5.78	65.78	62.00 3.78
0+0	5.58	65.98	61.89 4.09
25	5.35	66.21	61.78 4.43
50	5.90	65.66	61.67 3.99
75	6.03	65.53	61.56 3.97
1+00	6.84	64.72	61.46 3.26
25	6.79	64.77	61.35 3.42
50	6.15	65.41	61.24 4.17
75	5.88	65.68	61.14 4.54
2+00	6.44	65.12	61.03 4.09
25	6.91	64.65	60.93 3.72
50	6.49	65.07	60.82 4.25
75	7.03	64.53	60.72 3.81
3+00	3.90	64.64	60.61 4.03
25	3.76	64.78	60.51 4.27
50	3.92	64.62	60.40 4.22
75	3.78	64.76	60.30 4.46

9-04212

Jan 12-1899 32

marcy
 50+0 is on Union 100' East of East line
 of 27th St.
 From 50+0 to vault
 at N. E. Cor School grounds
 110ft. Elev of ground 67.76

65.47	B.M.
6.09	
71.56	
7.03	
64.53	
4.01	
68.54	

East line 27th
 Centre 27th
 West line 27th

Cor. of Union Ave

8th Hand Sewer Elevation

93
77.4
15.1

77.4
15.4
92.8

33

Stat	Prod	Elev	Low grade	Cut
4+00	4.00	64.54	60.19	4.35
+25	4.15	64.39	60.09	4.30
50	5.00	63.54	59.98	3.56
77.4 Δ	4.99	63.55	59.87	3.68
+73	5.10	63.44	59.80	3.64
5+18	5.30	63.24	59.69	3.55
+43	5.14	63.40	59.59	3.81
+68	5.01	63.53	59.48	4.05
+93	4.64	63.90	59.38	4.52
6+18	4.45	64.09	59.27	4.82
+43	4.16	64.38	59.17	5.21
+68	4.01	64.53	59.06	5.47
+93	3.91	64.63	58.96	5.67
7+18	3.65	64.89	58.85	6.04
+43	4.65	63.89	58.75	5.14
+68	5.06	63.48	58.64	4.84
+93	5.37	63.17	58.54	4.64
8+18	6.97	63.25	58.43	4.82
+43	6.85	63.37	58.33	5.04
+68	6.67	63.55	58.22	5.33
+93	6.64	63.58	58.11	5.47
9+18	6.50	63.72	58.01	5.71

68.54
5.37
63.17
7.05
70.22

Δ angle point on Union Alley

Stat	Prod	Elev	Rewr grade	Cut
+43	6.00	64.22	57.90	6.32
+68	5.56	64.66	57.80	6.86
	4.55	65.67	57.67	8.00
0+0	4.53	65.69	57.55	8.14
25	4.55	65.67	57.44	8.23
50	4.31	65.91	57.33	8.58
75	4.24	65.98	57.23	8.75
1+00	4.14	66.08	57.12	8.96
	4.17	66.05	57.02	9.03
	3.93	66.29	56.91	9.38
	3.77	66.45	56.81	9.64
2+00	3.69	66.53	56.70	9.83
	3.45	66.77 (73.71)	56.60	10.17
	3.78	67.93	56.49	11.44
	4.69	69.02	56.39	12.63
3+00	3.81	69.80	56.28	13.52
	3.24	70.47	56.17	14.30
	3.24	70.47	56.07	14.40
	3.13	70.58	55.96	14.62
4+00	3.19	70.52	55.86	14.66
	3.69	70.02	55.75	14.27

70.22
 3.45
 East line South 26" $\frac{66.77}{69.4}$
 Center $\frac{73.71}{73.71}$
 West line South 26"

Check bet 23-24-25 35

67.31 on point East line 825
 2.06
 69.37
 6.46
 62.91
 2.53
 65.44

73.71
 6.40
 67.31
 1.94
 69.25
 6.88
 62.37
 2.89
 65.31

Stat	Rod	Elev.	Sev grade	Cut	
	3.65	70.06	55.65	14.41	
	3.80	69.91	55.54	14.37	
5+00	4.77	68.94	55.44	13.50	
	5.07	68.64	55.33	13.31	
	5.57	68.14	55.23	12.91	
	6.05	67.66	55.12	12.54	
6+00	6.40	67.31 (69.25)	55.02	12.29	
30	2.94	66.31	54.89	11.42	
0+0	3.16	66.09	54.76	11.33	
25	5.16	64.09	54.66	9.43	
50	5.39	63.86	54.55	9.31	
75	5.53	63.72	54.45	9.27	
1+00	5.52	63.73	54.34	9.39	
25	5.44	63.81	54.24	9.57	
50	5.15	64.10	54.13	9.97	
75	4.60	64.75	54.03	10.72	
2+00	4.99	64.26	53.92	10.34	
25	5.82	63.43	53.82	9.62	
50	6.33	62.92 (65.31)	53.71	9.21	
75	3.39	61.92	53.60	8.32	
3+00	4.56	60.75	53.50	7.25	break.

Check

Rod (69.37)

2.06

E line S. 25° E

Center

3.28

5.29

5.51

5.66

5.65

5.57

5.29

4.62

5.10

5.93

6.46

5.53

4.70

66.09

64.08

63.86

63.71

63.72

63.80

64.08

64.75

64.27

63.44

62.91
(65.44)

61.91

60.74

On line S. 25° E

Stat	Rad	Elev	Quin grade	Cut
25	5.66	59.65	52.93	6.72
50	6.49	58.82	52.35	6.47
75	1.75	(59.25)	51.77	5.73
4+00	2.75	56.50	51.19	5.31
+25	3.78	55.47	50.61	4.86
+50	4.81	54.44	50.03	4.41
75	6.13	53.12	49.45	3.67
5+00	6.75	52.50	48.87	3.63
25	6.56	52.69	48.29	4.40
50	6.46	52.79	47.71	5.08
75	6.74	52.51	47.13	5.38
6+00	6.73	52.52	46.55	5.97
30	7.12	52.13	45.86	6.27
0+0	3.40	57.10	45.16	5.94
25	3.00	50.50	44.58	5.92
50	3.52	49.98	44.00	5.98
75	3.65	49.85	43.85	6.00
1+00	4.00	49.50	43.70	5.80
25	4.60	48.90	43.54	5.36
50	4.97	48.53	43.38	5.15
75	4.96	48.54	43.22	5.32
2+00	5.21	48.29	43.06	5.23

RANGE

Break

Click	Rad
5.80	59.64
6.63	58.81
3.25	(60.75)
4.27	57.50
5.30	56.48
6.32	55.40
4.28	54.43
4.90	(57.38)
4.72	53.10
4.62	52.48
4.90	52.48
4.89	52.48
5.29	52.48
6.33	52.48
3.07	(53.50)
3.58	50.43
3.71	49.92
4.06	47.79
4.66	47.44
5.03	48.84
5.02	48.47
5.02	48.48

Check
 65.45
 6.63
 58.81
 1.94
 60.75
 6.32
 57.38
 54.43
 2.95
 57.38
 6.33
 51.05
 2.46
 53.51
 1
 65.31
 7.80
 57.51
 1.74
 59.25
 7.12
 52.13
 1.37
 53.50

6.24
 6.24
 5.24
 5.24

~~635~~
~~40~~
~~235~~

Stat	Red	Elev	Down grade	Cut
25	5.00	48.50	42.90	5.60
50	5.31	48.19	42.74	5.45
75	5.08	48.42	42.58	5.84
3+00	5.52	47.98	42.42	5.56
25	6.10	47.40	42.26	5.14
50	6.23	47.27	42.10	5.17
75	6.15	47.35	41.94	5.41
4+00	6.42	47.08	41.78	5.30
25	2.72	46.75	41.63	5.12
50	3.03	46.44	41.47	4.97
75	3.64	45.83	41.31	4.52
5+00	4.12	45.35	41.15	4.20
25	4.54	44.93	40.99	3.94
50	4.93	44.54	40.83	3.71
75	4.97	44.50	40.67	3.83
6+00	4.90	44.57	40.51	4.06
	5.20	44.27	40.31	3.96
	4.71	44.76	40.11	4.65
	5.55	43.92	39.95	3.97
	5.80	43.67	39.79	3.88
	5.67	43.80	39.64	4.16

Stuck	Red-
5.28	48.22
5.06	48.44
5.37	48.13
5.14	48.36
5.58	47.92
6.17	47.33
6.31	47.19
6.22	47.28
2.64	47.00
2.97	46.67
3.28	46.36
3.89	45.75
4.37	45.27
4.79	44.85
5.17	44.47
5.22	44.52
5.14	44.50

Stuck
53.50
6.22
47.28
2.36
49.64

53.50
6.42
47.08
2.39
49.47

= E line 23rd

E line S 23rd

Center

St. line S 23rd

Stat	Prod	Elev	Seam grade	Cut
1+00	5.46	44.01	39.48	4.53
	5.02	44.45	39.32	5.13
	5.65	43.82	39.16	4.66
	5.51	43.96	39.00	4.96
2+00	5.20	44.27	38.84	5.43
	4.50	44.97	38.68	6.29
	4.79	45.20	38.52	6.68
	4.32	45.67	38.36	7.31
3+00	4.00	45.99	38.20	7.79
	3.80	46.19	38.04	8.15
	3.70	46.29	37.88	8.41
	3.70	46.29	37.70	8.56
4+00	3.36	46.63	37.57	9.06
	4.65	45.84	37.41	7.98
	5.32	44.67	37.25	7.42
	5.75	44.24	37.09	7.15
5+00	6.00	43.99	36.93	7.06
	6.20	43.79	36.77	7.02
	6.32	43.67	36.61	7.06
	6.23	43.76	36.45	7.31
6+00	6.75	43.24	36.29	6.95

49.47
 450
 4497
 502
 4999

East line S22nd

Stat	Rd	Elev	Sum grade	cut
	7.20	42.79	36.10	6.69
0+0	6.28	43.71 46.39	35.91	7.80
	3.25	43.14	35.75	7.39
	3.84	42.55	35.59	6.96
	4.22	42.17	35.43	6.74
1+00	4.61	41.78	35.27	6.51
	4.96	41.43	35.11	6.32
	5.06	41.33	34.95	6.38
	5.33	41.06	34.80	6.26
2+00	5.13	41.26	34.64	6.62
	5.58	40.81	34.48	6.32
	5.80	40.59	34.32	6.27
	5.89	40.50	34.16	6.34
3+00	5.98	40.41	34.00	6.41
	5.89	40.50	33.25	7.25
	6.00	40.39	32.50	7.89
	6.15	40.24	31.75	8.49
4+00	6.35	40.04	31.00	9.04
	7.11	39.28 (39.33)	30.25	9.03
	1.17	38.16	29.50	8.66
	2.37	36.96	28.75	8.21

Center S 22-0
H-line S 22-0

49.99
6.28
43.71
3.68
46.39
7.51
39.28
0.05
39.53

2

Break

Stat	Prod	Elv	Low grade	Cut
5+00	3.23	36.10	28.00	8.10
	2.83	36.50	27.25	9.25
	3.65	35.68	26.50	9.18
	7.70	31.63	25.75	5.88
6+00	11.68	27.65	25.00	2.65
		(28.81)		
	6.60	22.27	24.72	-2.51
0+0	9.11	19.70	24.44	-4.74
		(20.63)		
+25	4.59	16.04	24.20	-8.16
+50	3.24	15.39	23.96	-8.57
+75	5.02	15.61	23.73	-8.12
1+00	skip			
+25	6.85	13.78	23.26	-9.48
+50	6.75	13.88	23.02	-9.14
+75	7.28	13.35	22.78	-9.43
2+00	7.40	13.23	22.55	-9.32
+25	7.48	13.15	22.31	-9.16
+50	7.67	12.96	22.07	-9.11
+75	7.93	12.70	21.84	-9.14
3+00	7.70	12.93	21.60	-8.67
		(21.60)		
+25	8.34	13.26	21.37	-8.11
+50	8.38	13.22	21.13	-7.91

Elm 21st

Center

W. Elm 21st

39.33
11.68
27.65
11.6
2881
911
1970
0.93
2063
538
1525
6.35
2160

top of Everharts Barn roof 10' above this station

top Barn roof 9 ft above this station

turn out of alley, west to Center line 17th st

Stat	Red	Elev	Revised grade	Cut
+75	8.33	13.27	20.90	-7.63
4+00 P.C.	8.99	12.69	20.66	-7.97
+25	9.97	11.63	20.42	-8.79
+50	7.07	14.53	20.19	-5.66
4+75 E.C.	6.23	15.37	19.95	-4.58
5+00	5.37	16.23	19.72	-3.49
+25	3.45	18.15	19.46	-1.33
+50	0.81	20.79	19.24	1.55
+75	9.57	19.98	19.01	0.97
6+00	10.00	19.55	18.77	0.78
6+31	1.71	27.84	18.48	9.36

East line 17th St

21.60
0.81
20.79
8.76
29.55

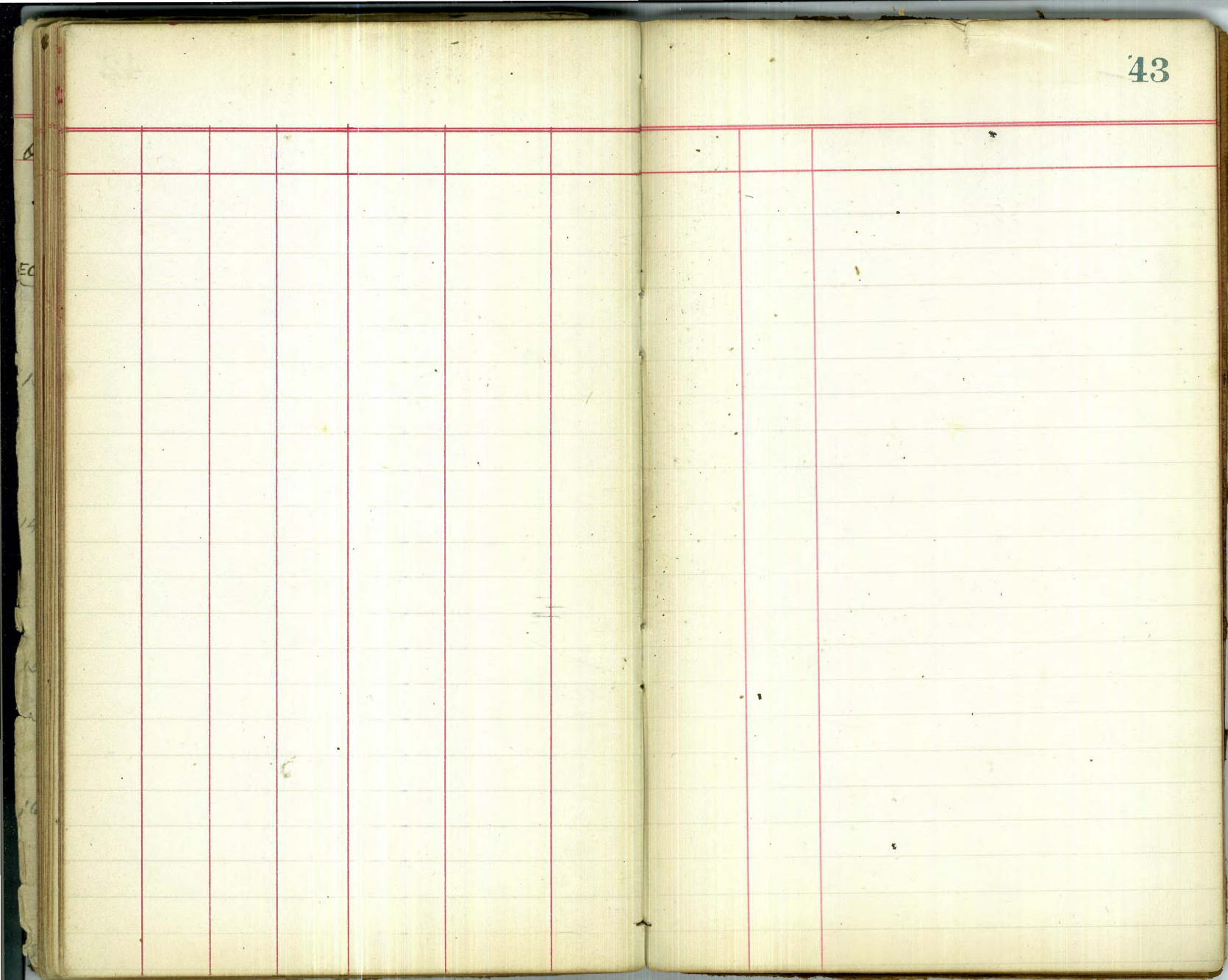
Center line 17th

S line W. St.

29.55
9.60
19.95 - elev top RR Rials

W line West & Center line 17th

20.79
0.99
21.78
8.81
check 29.55 on 10 m. C. W. 16. Logan



4.95

375
20

46

599

95

404



1 1/4

L = 14.5

3/4

f

9.74

4.95

20 | 4.79 | 24

40

79

86

400

20 | 4.80 | 24
40
80

4.79

599

95

504

35.80

25
25
Jan 3

272.22
272.49

284.36
272.49

284.16
272.50

11.87
130.0
1.13

111.66
13.00
1.34

78.76 B.N.
9.09
87.85
0.58
87.27
7.47
94.74

94.74
2.74
92.00

8.84
85.90

272.22
27
272.49

7.59
6.89
7.0
12
84

8.23
7.59
6.4
1.2
1.28
6.4
7.68

280
2
570
140
710

240
840
710
130

99.5
82.0
17.5
2.91

47

09.5
81.0

191.5
87.3
1.46

80.75
1.45

220
80
200
500

10.29
83
92.20

47

164

211

Walnut Ave Sewer

Washole E line 4 to Horton

H line 3rd "

Flush Tanks West line 2 out Horton

279.39

7.06

(286.39)

Stat Rod Elev

00 7.00
50 6.40
1400 5.00
50 4.80
2400 5.00
50 4.10
3400 3.60
50 3.50
4400 3.10
50 3.30
5400

Alley

8.23

7.59

6.4

1.2

1.28

6.4

7.68

53
147
200

17 N of South line

37 N of S line to pump
30 " " " " " "

20 East of west line
26 " " " " " "

92
114
119
5738
633
5105
5738
489
5249

135
73
1423
1131
295
5738
529
5309

700
503
197
700
466
234

100
870
1125
70
1825

285
70
355
2
153
11
166

170

570
96
480
600
240
840
200
440
4964
514
4450
420
63

28480
28500
57080
28515
450
63
513
900 = 100
900 = 100

900 = 100
900 = 100
900 = 100

600
240
840
2

1040
140
9080
8491
291
8782
291
90713
291
93611

135
75
1425
70
125
821

600
240
840
157

dy
Rn