

963

F.B. 963

LEVEL BOOK

373

KEUFFEL & ESSER CO.

DRAWING MATERIALS

AND

SURVEYING INSTRUMENTS.

NEW YORK.

CHICAGO.

SAN FRANCISCO.

ST. LOUIS.

TABLES FOR EXCAVATIONS AND EMBANKMENTS.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 18 FEET WIDE. SIDE SLOPES 1 TO 1.

FOR SINGLE TRACK EXCAVATION.

"Copyright, 1895, by Keuffel & Esser Co."

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

Calculated by Julien A. Hall, M. Am. Soc. C. E.

1 10

Arctic

70.17

35'N

-10	96	60.6
EL	9.8	60.4
C	10.0	60.2
1/4	10.5	59.7
1/2	11.2	59.0
3/4	11.8	58.6
C	12.6	57.6
WL	14.2	56.0
+20	16.6	53.6

PLOTTED

60'N

-15	12.9	57.3
WL	11.8	58.4
C	11.3	58.9
1/4	10.9	59.3
1/2	10.5	59.7
3/4	9.4	60.8
C	9.1	61.1
EL	9.0	61.2
+10	8.4	61.8

70.17

85'N

-10	66	63.6
EL	7.2	63.0
C	7.2	63.0
1/4	6.8	62.6
1/2	7.0	63.2
3/4	8.1	62.1
C	8.3	61.9
WL	8.2	62.0
+10	8.6	61.6

110'N

WL	30	67.2
C	1.9	68.3
1/4	1.4	68.8
1/2	1.6	68.6
3/4	1.8	68.4
C	1.5	68.7
EL	0.5	69.7
T.P.	0.15	70.02

12.36

82.38

Arctic

82-38

135'N

EL	55	76.9
C	66	75.8
1/4	76	74.8
1/2	80	74.4
3/4	90	73.4
C	98	72.6
WL	10.8	71.6

PLOTTED

160'N

WL	82	74.2
C	73	74.9
1/4	63	75.9
1/2	52	77.2
3/4	45	77.9
C	34	79.0
EL	27	79.7

82-38

185'N

EL	-0.3	82.7
C	0.5	81.9
1/4	1.4	81.0
1/2	2.1	80.3
3/4	3.3	79.1
C	4.6	77.8
WL	6.0	76.4
T.P.	0.15	82.23

11.98 94.21

210'N

WL	15.3	78.9
C	14.1	80.1
1/4	12.6	81.6
1/2	11.4	82.8
3/4	11.1	83.1
C	10.1	84.5
EL	9.5	84.7

Arctic

94.21

Z35°N

EL	6.9	87.3
C	8.0	86.2
1/4	8.7	86.5
1/2	9.4	84.8
3/4	10.4	87.8
C	11.5	82.7
WL	13.0	81.2

PLOTTED

Z60°N

WL	10.5	87.7
C	9.1	85.1
1/4	8.2	86.0
1/2	7.2	87.0
3/4	6.8	87.4
C	6.0	88.2
EL	4.5	89.7

94.21

Z85°N

EL	2.7	91.8
C	4.0	90.2
1/4	5.2	89.0
1/2	6.3	87.9
3/4	7.1	87.1
C	7.9	86.3
WL	8.5	85.7

310°N = SL McKee St

WL	8.1	86.1
C	6.5	87.7
1/4	5.3	88.9
1/2	4.2	90.0
3/4	2.5	91.7
C	1.5	92.7
EL	0.8	93.4

T.P. M.H. Cover & M^s KeeSee X Sacs of M^s Kee for Intersection

9.52 101.36

2.37

91.84

Where is it?

Arctic.

101.36

NL M^E Kee

EL	3.9	97.5
C	5.2	96.2
1/4	6.3	95.1
1/2	7.8	93.6
3/4	9.2	92.2
C	10.8	90.6
NL	12.5	88.9
PLOTTED		
25' N		
-10	13.8	87.6
NL	12.4	89.0
C	10.3	91.1
1/4	8.6	92.8
1/2	6.3	95.1
3/4	5.5	95.9
C	4.5	96.9
EL	3.1	98.2

101.36

50' N

6

EL	3.2	98.2
C	5.1	96.2
1/4	6.1	95.3
1/2	7.4	94.0
3/4	8.8	92.6
C	10.4	91.0
NL	12.1	89.3
1/10	14.0	87.4
75' N		
-10	15.2	86.2
NL	13.3	88.1
C	11.7	89.7
1/4	10.3	91.1
1/2	8.6	92.8
3/4	7.0	94.6
C	5.7	95.7
EL	3.6	97.8

Arctic

101.36

100' N.

EL	4.7	96.7
C	6.7	94.7
1/4	7.3	94.1
1/4	8.8	92.6
1/4	11.1	90.3
C	12.8	88.6
WL	14.3	87.1
+10	15.4	86.0

PLOTTED

125' N.

-10	14.8	86.6
WL	14.1	87.3
C	12.7	88.7
1/4	11.1	90.3
1/4	9.7	91.7
1/4	7.9	93.5
C	6.7	94.7
EL	4.8	96.6

101.36

150' N.

7

EL	4.0	97.6
C	6.0	95.4
1/4	7.2	94.2
1/4	8.7	92.7
1/4	10.8	90.6
C	11.8	89.6
WL	13.1	88.3
+10	14.4	87.0

175' N.

-10	13.7	87.7
WL	12.9	88.5
C	11.0	90.4
1/4	9.3	92.1
1/4	7.9	93.5
1/4	6.2	95.2
C	5.0	96.4
EL	3.6	97.8

Arctic

101.36

200'N

EL	30	980
C	46	968
1/4	57	957
1/4	73	941
1/4	86	928
C	107	907
WL	116	898
+10	124	890
PLOTTED		
225'N		
-10	124	890
WL	118	896
C	101	913
1/4	90	924
1/4	77	937
1/4	62	952
C	49	965
EL	33	981

101.36

250'N

8

EL	36	978
C	51	963
1/4	62	952
1/4	75	939
1/4	88	926
C	95	919
WL	108	906
275'N		
-10	101	913
WL	89	925
C	81	933
1/4	72	942
1/4	65	949
1/4	53	961
C	41	973
EL	28	986

Arctic

101.36

310 N = SL. M^s Nealey 80 } 94.1 WWS
13 1/4.

EL	1.2	100.2
C	2.4	99.0
1/4	3.6	97.8
1/2	4.7	96.7
3/4	5.6	95.8 ^e
C	6.4	95.0
WL	7.5	93.9
T.P.	59.5	95.41

PIOTTED

11.27 106.68

S. Corb M^s Nealey.

WL	12.8	93.9
C	11.5	95.2
1/4	10.6	96.1
1/2	9.3	97.6
3/4	7.7	99.0
C	6.5	100.2
EL	5.6	101.7

106.68

9

S 1/4 M^s Nealey

EL	5.0	101.7
C	6.6	100.1
1/4	7.5	99.2
1/2	8.6	98.1
3/4	9.8	96.9
C	11.1	95.6
WL	12.2	94.5

1/2 M^s Nealey

WL	12.4	94.3
C	10.5	96.2
1/4	9.3	97.4
1/2	8.3	98.4
3/4	6.7	100.0
C	5.5	101.2
EL	3.9	102.8

Arctic

106.68

N¹/₄ M^s Nealey

EL	3.3	103.6
C	4.8	101.9
¹ / ₄	5.6	101.1
±	7.3	99.6
¹ / ₄	8.8	97.9
C	10.3	96.6
WL	12.2	94.5

PLOTTED

N. Corb M^s Nealey

WL	12.4	94.3
C	10.4	96.3
¹ / ₄	8.8	97.9
±	7.4	99.3
¹ / ₄	5.8	100.9
C	4.4	102.3
EL	2.7	104.0

106.68

HL M^s Nealey

10

EL	2.7	106.0
C	4.3	102.6
¹ / ₄	5.7	101.0
±	7.7	99.0
¹ / ₄	7.5	97.2
C	10.7	96.0
WL	12.4	94.3

25' N.

-10	14.9	91.8
WL	13.0	93.7
C	11.1	95.6
¹ / ₄	9.5	97.2
±	7.9	98.8
¹ / ₄	6.2	100.5
C	4.7	102.0
EL	3.1	103.6

Arctic

10668

50'N

EL	3.7	103.0
C	5.2	101.5
1/4	6.3	100.4
1/2	7.7	99.0
3/4	9.4	97.3
C	11.0	95.7
WL	13.0	93.7
+10	15.0	91.7
75'N		
-10	15.8	90.9
WL	14.2	92.5
C	12.0	94.0
1/4	10.2	96.5
1/2	8.5	98.2
3/4	7.1	99.6
C	5.7	101.0
EL	4.2	102.5

PLOTTED

10668

100'N

11

EL	5.8	100.9
C	7.5	99.2
1/4	9.0	97.7
1/2	10.6	96.1
3/4	12.3	94.4
T.P.	13.06	93.62
497 98.59		
C	6.4	92.2
WL	8.1	90.5
+15	10.3	88.3
125'N		
-15	12.3	86.3
WL	10.2	88.4
C	8.4	90.2
1/4	7.3	91.3
1/2	5.6	92.0
3/4	4.1	94.5
C	2.4	96.2
EL	1.3	98.2

Arctic

98.59

150' N.

EL	5.8	92.8
C	6.3	92.3
1/4	6.7	91.9
1/2	9.0	89.6
3/4	9.8	88.8
C	10.4	88.2
WL	11.9	86.7
+20	14.7	83.9
T.P.	12.73	85.86

PLOTTED

3.98 89.84

181.8 N = Int of EL with P.L.

-20	10.0	79.8
WL	7.6	82.2
C	6.2	82.6
1/4	5.3	84.5
1/2	4.1	85.7
3/4	2.9	86.9
C	2.0	87.8
EL	0.5	89.0

89.84

98.59

200' N.

12

EL	4.0	85.8
1/2	7.1	82.7
WL	9.5	80.3
+20	12.0	77.8

225' N.

-20	13.6	76.2
WL	10.5	79.3
1/2	8.4	81.4
EL	6.5	83.3

250' N.

EL	8.9 10.1	80.9 79.7
1/2	11.7	78.1
WL	13.1	76.7
+20	15.5	74.3

255' N.

EL	9.4	80.4
1/2	12.2	77.6
WL	14.1	75.7
+20	10.0	74.8

89.84 Arctic
~~98.57~~

275' N.

WL	3.3	86.5
±	4.0	85.8
EL	5.0	84.8
TP	0.15	89.69 98.47

12.49 102.18
~~110.93~~

300' N. SL Store on WL

PLOTTED

EL	7.2	95.0
±	7.1	95.1
WL	7.0	95.2

18' N. of SL Store - Int. W. with PL

WL	0.7	101.5 95.41
TP	6.77	104.16

5.48 100.89

TP MH ± McKee & Arctic 9.05 91.84 91.84

M^{rs} Kee Cross Sections
 EL Calif. to end Middletown
 60' Wide - 10' WKS - 10 1/4'

BM NW. Cal & Moore R.R. spk. 53.99

12.84 66.83

EL. California

SL 9.8 57.0

C 10.1 56.7

1/4 10.0 56.8

E 9.6 57.2

1/4 **PICTED** 9.7 57.1

1 C 9.5 57.3

NL 8.8 58.0

3.5' E. J.

NL 5.3 61.5

C 5.5 61.3

1/4 5.6 61.2

E 5.7 61.1

1/4 5.6 61.2

C 5.2 61.6

SL 5.1 61.7

1/2 mile
 West
 Evans
 Devire

66.83

60' E.

14

SL 13 65.5

C 16 65.2

1/4 1.8 65.0

E 2.5 64.7

1/4 2.3 64.5

C 2.4 64.4

NL 2.3 64.5

T.P. 1.46 65.39

13.11 78.48

85' E.

NL 10.6 67.9

C 10.5 68.0

1/4 9.5 69.0

E 9.3 69.2

1/4 9.5 69.0

C 9.7 68.8

SL 9.5 69.0

M^E Kee

7850

110'E

SL	5.9	726
C	5.5	720
1/4	4.9	726
£	4.7	728
1/4	4.6	729
C	5.0	725
NL	5.5	720

PLOTTED

135'E

NL	0.3	782
C	0.0	785
1/4	0.1	780
£	0.9	776
1/4	1.5	770
C	2.3	762
SL	2.6	759
T.P.	0.30	78.20

12.48 90.68

90.68

160'E

SL	11.1	79.6
C	10.8	79.9
1/4	10.0	80.7
£	9.6	81.1
1/4	8.6	82.1
C	8.5	82.2
NL	8.1	82.6

185'E

NL	4.9	84.8
C	5.2	85.5
1/4	5.5	85.2
£	6.3	84.4
1/4	6.7	84.0
C	7.0	82.7
SL	7.4	82.3

15

M^s Kee

9068

210'E = WL Arctic 55'W. 10'WKS. 8 3/4' L's

SL	4.6	86.1
C	4.1	86.6
1/4	3.6	87.1
£	2.6	88.1
1/4	2.0	88.7
C	1.9	88.8
NL	1.9	88.8

PLOTTED

W. Corb Arctic

NL	0.1	90.6
C	0.3	90.4
1/4	0.6	90.1
£	1.0	89.7
1/4	2.0	88.7
C	2.9	86.8
SL	3.0	87.7
T.P.	1.98	88.70

1200 100.70

NH Cover £. M^s Kee B Arctic 8.86 91.84 91.84

10070

16

W 1/4 Arctic

SL	11.8	88.9
C	11.2	89.5
1/4	10.0	90.7
£	8.9	90.8
1/4	8.5	92.2
C	8.6	92.1
NL	8.6	92.1

£ Arctic

NL	7.5	93.2
C	7.4	92.3
1/4	7.4	92.3
£	8.0	92.7
1/4	8.7	92.0
C	10.1	90.6
SL	10.7	90.0

M^s Kee

100.70

E. 1/4 Arctic

SL	9.0	91.7
C	8.1	92.6
1/4	7.3	93.4
£	6.4	94.3
1/4	6.5	94.2
C	6.3	94.6
NL	5.6	95.1

PLOTTED

E. Corb Arctic

NL	4.5	96.2
C	5.4	95.3
1/4	5.9	94.8
£	6.1	94.6
1/4	6.8	93.9
C	7.4	93.3
SL	8.0	92.7

100.70

FL Arctic

SL	7.3	93.4
C	5.8	94.9
1/4	5.0	95.7
£	4.6	96.1
1/4	4.2	96.5
C	3.7	97.0
NL	3.2	97.5

NL

124.3

112.38

35 E. of Arctic

NL	9.2	103.2
C	10.2	102.2
1/4	10.9	101.5
£	12.1	100.3
1/4	13.1	99.3
C	14.0	98.4
SL	15.0	97.4

17

M^c Kee

112.38

60'E

SL	122	100.2
C	112	101.5
1/4	105	101.9
£	9.0	102.4
1/4	8.0	103.4
C	7.3	105.1
NL	64	106.0

PLOTTED

85'E

NL	32	109.2
C	44	108.0
1/4	52	107.2
£	6.6	105.8
1/4	7.5	104.9
C	8.4	104.0
SL	9.5	102.9

112.38

110'E

SL	6.1	106.3
C	46	107.8
1/4	34	109.0
£	33	109.1
1/4	19	110.5
C	09	111.5
NL	02	112.2
TP	043	111.95

12.71 124.66

135'E

NL	9.3	115.4
C	9.9	114.8
1/4	10.7	114.0
£	11.6	113.1
1/4	12.4	112.3
C	12.9	111.8
SL	14.2	110.5

18

M^S K₂

12466

160'E

SL	10.6	114.1
C	9.6	115.1
1/4	9.5	115.2
1/2	8.2	116.5
1/4	7.5	117.2
C	6.7	118.0
NL	6.1	118.6

PLOTTED

185'E

NL	2.8	121.9
C	3.8	120.9
1/4	4.1	120.6
1/2	5.1	119.6
1/4	6.2	118.5
C	7.5	117.2
SL	7.8	116.9

12466

210'E = WL Indiq. st.

SL	5.8	118.9
C	4.5	120.2
1/4	3.4	121.3
1/2	2.7	122.0
1/4	1.8	122.9
C	0.8	123.9
NL	0.1	124.6
TR	0.54	124.12

464 128.76

21.7'E of WL Indiq. Inf NL with PL

NL	1.6	127.2
C	2.0	126.8
1/4	3.3	125.5
1/2	4.2	124.6
1/4	5.3	123.5
C	6.0	122.8
SL	7.2	121.6

19

M^c Kee

20

12876

21° E. on NL & 39° E on SL = P.L. end Middleton

SL	3.8	125.0
C	3.5	125.7
1/4	3.1	125.7
1/2	2.5	126.7
1/4	2.3	126.5
C	1.8	127.0
NL	1.6	127.2

PLOTTED

T.P. 1289 115.87

T.P. 1.20 117.07 1220 104.87

0.06 104.93

M.H. & M^c Kee & Arctic 13.12 91.81 91.84

OK

2/24/15 West

Evans
Devine

310.65

3/4

11.5 299.2

cb

11.4 299.3

S

11.2 299.5

75' E

1"

-20

23.8 286.9

S

15.0 295.7

+8

10.7 300.0

cb

10.4 300.3

1/4

10.1 300.6

C

9.6 301.1

1/4

10.1 300.6

cb

10.3 300.4

N

8.5 302.2

100' E

N

7.9 302.8

+7

9.3 301.4

cb

8.4 302.2

1/4

7.9 302.8

C

9.4 301.3

1/4

9.6 301.1

+8

10.4 300.3

310.7

cb

S

+25

+35

-30

-25

-15

S

cb

1/4

+7

C

1/4

cb

N

N

cb

1/4

311.9 TYLER ST
1542

23

14.7 296.0

23.7 287.0

33.2 277.5

35.0 275.7

125' E

30.8 279.9

33.9 276.8

33.1 277.6

27.6 283.1

21.0 289.7

12.8 297.9

8.9 301.8

8.8 301.9

8.1 302.6

7.8 302.9

7.5 302.2

145' E

7.2 302.5

7.5 303.2

7.6 302.1

310.65

3107

TYLER ST.

24

+6	8.2	302.5
C	11.4	299.3
1/4	19.1	291.6
cb	25.5	285.2
S	31.9	278.8
+15	27.4	283.3
175' E		
S	same slope 23.8	286.9
cb	27.8	282.9
+5	29.3	281.4
1/4	26.3	284.4
C	15.2	295.5
+9	9.5	301.2
1/4	7.9	304.8
cb	6.7	306.0
N	8.6	304.1
200' E		
-10	11.1	299.6
N	10.5	300.2
+6	9.1	301.6

cb	5.8	304.9
1/4	6.1	306.6
+10	8.3	302.4
C	12.4	298.3
1/4	20.4	290.3
cb	21.5	289.2
S	16.2 same slope	294.5
225' E		
S	9.8	300.9
cb	11.8	298.9
1/4	6.3	304.4
C	4.7	306.0
1/4	4.3	306.4
+9	4.5	306.2
cb	6.3	304.4
N	13.6	295.1
+15	16.0	294.7
+30	10.9	299.8
250' E		
-25	15.1	295.6

310.65

S			
-15	16.1	794.6	
N	11.5	799.2	
cb	6.3	706.6	
+5	2.5	708.2	
1/4	2.1	708.6	
C	1.8	708.9	
1/4	2.2	708.5	
+10	2.2	708.5	
cb	3.9	706.8	
S	5.8	706.9	
+10	5.6	705.1	
	295' E		
S	3.4	707.3	
cb	2.4	708.3	
+4	3.5	707.2	
+5	1.0	709.7	
1/4	1.2	709.5	
C	1.4	709.3	
1/4	1.1	709.6	
cb	1.7	709.0	
N	2.1	708.6	
+5	4.6	706.1	

310.7

TYLER ST

25

290.44' E = SEC C

N	0.8	709.9
cb	0.9	709.8
1/4	1.0	709.7
C	1.0	709.7
1/4	1.6	709.1
cb	1.9	708.8
S	2.6	708.1

SEC D = N L Cleveland

S	0.4	710.3
cb	0.9	709.8
1/4	1.4	709.3
C	1.0	709.7
1/4	1.0	709.7
cb	0.9	709.8
N	0.8	709.9

SURVEY OF IMPROVEMENTS ON
TORRENCE ST. bet
WELLBORN & ANDREWS STS



27
NE Torrence
& Wellborn

4/9/15
Gregory
Shoemaker
Moore

LEVELS OVER ALLEY
BETWEEN BUSH & SUTTER FROM
THE ~~W. L.~~ EAGLE ST. TO THE PUEBLO
LINE WEST OF GOLDFINCH.

ALLEY 20' WIDE. LINES OF ALLEY DETERMINED
BY MEASURING 140' NO. FROM SUTTER AT EAGLE
AND HALFWAY BETWEEN BUSH & SUTTER AT
GOLDFINCH.

B.R.
NE SUTTER
& GOLDFINCH

150' W.

29

B.M.	5.68	262.67	256.99	N	6.9	255.9
				C	6.7	256.1
				S	6.8	256.0

W. L. EAGLE ST

200' W.

S		5.2	257.6			
+3		5.2	257.6	S	6.5	256.3
+4		5.8	257.0	C	6.5	256.3
C		6.0	256.8	N	6.3	256.5

250' W.

+7		5.9	256.9			
+8		5.3	257.5	N	6.5	256.2
N		5.3	257.5	C	6.5	256.3
				+7	6.8	256.0
	50' W.			S	6.2	256.6

300' W.

N		5.7	257.1			
C		6.3	256.5	S	5.5	257.3
S		5.4	257.4	C	5.7	257.1
	100' W.			N	5.6	257.1

350' W.

S		6.1	256.7			
C		6.4	256.4	N	4.9	257.8
N		6.4	256.4	C	4.7	258.1
	150' W.			S	3.8	259.0

462.67

400' W. of EAGLE

S	2.8	260.0
+3	3.9	258.9
C	4.2	258.6
+7	4.0	258.8
+8	3.3	259.5
N	3.4	259.3

450' W

N	3.0	259.8
+3	3.8	259.0
C	3.6	259.1
+7	3.5	259.3
S	2.0	260.8

480' W. = E.L. GOLDFINCH ST

S	3.1	259.4
+1	4.1	258.4
C	4.5	258.3
+8	4.3	258.5
	3.7	259.1
N	2.3	260.5

475

475

W.L. GOLDFINCH ST

30

N	4.2	258.6
C	3.8	259.0
S	4.3	258.5

4" WEST

S	1.2	261.6
C	1.3	261.5
+9	1.7	261.1
N	0.7	262.1

50' WEST

N	1.4	261.4
C	1.4	261.4
S	1.6	261.2

100' WEST

S	3.0	259.8
C	2.9	259.9
N	2.6	260.2

150' WEST

N	2.8	260.0
C	3.1	259.7
S	3.2	259.6

262.67

200' WEST

S 3.2 259.6

C 2.6 260.2

N 2.5 260.3

250' WEST

N 2.4 260.4

C 2.6 260.2

S 3.0 259.8

CHAINED DIS=286.7' WEST = PUEBLO LINE

S 2.0 260.8

C 2.0 260.8

N 1.8 261.0

BM NE Goldfinch & Bush - Plug. 260.00

TP 3.70 263.70 7.48 256.22

5.67 261.89

50' E of NW Eagle = EL Eagle

SL 5.1 256.8

E Alley. 5.3 256.6

NL 5.3 256.6

EAGLE

ST

31

256.99 NE Sutter & Goldfinch
260.00
266.99170
267.09
3.80
263.29120
258.49
4.20
262.69
6.90
269.59

20'

143

Elev. of (Door)
Floor 257.59

Garage

Garage

Elev. 255.89

2.0
2.0
1.0No door
to AlleyDoor
to
AlleyElev. of
Floor
257.59

Elev. 258.99

Gate to yard

Elev 261.09

Garage

20'

GOLDFINCH

ST

261.89

25'E of EL Eagle

NL	5.6	256.3
E	5.9	256.0
SL	5.6	256.3

50'E

SL	8.9	253.0
E	8.6	253.3
NL	8.5	253.4

75'E

NL	12.9	249.0
E	13.0	248.9
SL	13.3	248.6

West
Otter
Moore

5/29/15.

32

C.M.L. Dove

Gas Pipe Plug & Tank
Pueblo Line

50'

20'

41.1'E

20'

Alley

Eagle Street

4/10/15

Gregory
Shawwater
Moore

SURVEY OF IMPROVEMENTS
IN ALLEY IN BLOCK C
CULLEN'S ARLINGTON HEIGHTS

33

ELM

ST.

122.56'

20'

122.56'

104 ST

102.0'

23'

20'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

12'

BLOCK

16'

Chicken house

Out house
2' more off
in alley

Alley

Alley

Line

West

Line

East

Line

Alley

15' hub for
104 ST IN
SHAWWATER
MOORE

old 1" x 2" hub
2' x 2" hub

118.57' line

20'

122.56'

122.56'

122.56'

122.56'

122.56'

122.56'

122.56'

122.56'

122.56'

122.56'

122.56'

122.56'

122.56'

122.56'

122.56'

122.56'

122.56'

122.56'

122.56'

122.56'

122.56'

122.56'

X. Sect. Maple from East line
80' street 14' walls & 13' quarters.

H.F. Rock Elev.

9.71 58.41 48.70

J.P. mm. center State & Maple 493 53.48

East line State

No. line 4.0 54.4

4.5 53.9

4.5 53.9

C

4.7 53.7

4.9 53.5

5.0 53.4

No. line

4.9 53.5

25' E

No. line

5.7 52.7

5.6 52.8

5.3 53.1

C

5.0 53.4

4.8 53.6

4.5 53.9

No. line

4.0 54.4

State to west line

Union

Shields

April 23/15

34

80' E

No. line

12.5 45.9

13.0 45.4

13.4 45.0

13.6 44.8

12.8 45.6

7.2 51.2

6.3 52.1

100' E

No. line

4.6 53.8

4.2 54.2

4.9 53.5

5.7 52.7

7.1 51.3

4.8 53.6

5.1 53.3

8.4 50.0

6+8'

No. line

58.41

35

110' E

150' E

no. line

3.1 55.3 20. 1/4

1.2 57.2

2.4 56.0

2.2 56.2

3.4 55.0 20. line

2.6 55.8

C

1.9 56.5 50' 20. slope

5.1 53.3

4.3 54.1 100' 20. slope.

3.5 54.9

4.2 54.2

175' E

20. line

4.6 53.8 75' 20. pass slope

2.9 55.5

125' E

50' " " slope.

3.0 55.4

20. line

4.2 54.2 27' " " "

2.7 55.7

3.2 55.2 16' " " "

2.3 56.1

2.8 55.6 20. line

2.3 56.1

C

1.4 57.0

1.5 56.9

0.9 57.5 20. 1/4

0.9 57.5

0.9 57.5 J.P. high turn

0.61 57.80

no. line

1.1 57.3

J.P.	0.90	H.I. 46.44	12.87	45.54	J.P.	12.95	H.I. 70.75	57.80
20' no. slope	48' East	7. Plate	8.3	38.1	150' E	State street		
No. line			8.5	37.9			11.5	59.3
			9.3	37.1			11.2	59.6
			9.4	37.0			9.8	61.0
C			9.6	36.8	1/4 + 9		9.2	61.6
C + 2'			6.0	40.4			12.2	58.6
			6.4	40.0		175' E		
			6.5	39.9	C		2.6	68.2
No. line			6.0	40.4			2.5	68.3
"	56' E.						3.7	67.1
25' no. slope.			11.5	34.9	no, line		7.8	63.0
No. line			10.3	36.1	15' no. slope.		10.5	60.3
			10.0	36.4	200' E (west line ruin)			
			8.7	37.7	15' no. slope.		7.5	63.3
C			7.6	38.8	no, line		3.0	67.7
			6.4	40.0	J.P.	12.65	H.I. 82.27	1.13 69.62
			6.0	40.4			11.8	70.5
No. line			4.9	41.5			11.0	71.3
					C		10.2	72.1

82.27 H.I.

So 1/4

10.0 72.3

8.0 74.3

So. line

6.9 75.4

X sect. Union Street from
No. line Maple to No. line Laurel

37

75' Street 12' sidewalk 1275' quarters.

No. line Maple
82.27

J.P.
W line

14.6 67.7

13.2 69.1

14.3 68.0

14.9 67.4

14.5 67.8

16.0 66.3

16.0 66.3

E line

no. cb.

E line

12.4 69.9

11.5 70.8

10.5 71.8

10.2 72.1

11.0 71.3

12.9 69.4

11.8 70.5

W line

no 1/4.

W, line

11.0 71.3

10.4 71.9

8.3 74.0

C

6.5 75.8

6.6 75.7

8.6 73.7

E line

8.5 73.8

center

E line

4.8 77.5

5.6 76.7

5.8 76.5

C

max.

5.73 76.54

6.9 75.4

9.9 72.4

W line

10.2 72.1

no 1/4

W, line

10.0 72.3

8.4 73.9

7.4 74.9

C

4.7 77.6

4.5 77.8

3.4 78.9

E line

3.0 79.3

no cb.

E line

1.0 81.3

1.5 80.8

2.9 79.4

C

4.6 77.7

4.8 77.5

6.0 76.3

W line

8.0 74.3

82.27

Little line maple.

W. line 6.9 75.4

4.6 77.7

3.7 78.6

C 2.9 79.4

1.9 80.4

0.6 81.7

E line -0.5 82.8

16' 20.

W line 10.2 72.1

3.4 78.9

W 1/4 2.5 79.8

27' 20.

W 1/4 0.7 81.6

2.5 79.8

White 3.6 78.7

White

J.P.

12.18 ^{HT.} 93.72 0.73 81.54

16' 20. maple.

10.1 83.6

10.7 83.0

11.1 82.6

12.7 81.0

27' 20.

12.1 81.6

10.6 83.1

9.9 83.8

8.8 84.9

50' 20.

E line 4.5 89.2

5.4 88.3

7.0 86.7

6.9 86.8

9.1 84.6

9.4 84.3

9.1 84.6

White

93.72

75' 20.

White

7.5 86.2

6.5 87.2

5.6 88.1

C

4.1 89.6

3.1 90.6

1.4 92.3

J.P.
Elise

11.93

105.40

0.25

93.47

11.3 94.1

100' 20.

Elise

8.3 97.1

9.5 95.9

11.0 94.4

C

13.6 91.8

12.3 93.1

12.6 92.8

White

16.0 89.4

40

125' 20.

White

13.3 92.1

12.3 93.1

11.6 93.8

C

9.3 96.1

6.9 98.5

3.5 101.9

Elise

2.0 103.4

150' 20.

White

9.1 96.3

8.2 97.2

6.0 99.4

C

4.2 101.2

E 1/4

2.1 103.3

J.P.

12.47

H.I.

117.63

0.24 105.16

Elise

12.4 105.2

9.9 107.7

117.63

175' SO.

E line

3.1 114.5

W. line

6.5 111.1

W. cb.

9.1 108.5

JP.

C

11.8 105.8

13.4 104.2

E. cb.

15.9 101.7

E line

15.8 101.8

18.4 99.2

cb + 7.
W line

200' SO.

W. line

15.5 102.1

12.6 105.0

10.3 107.3

C

6.3 111.3

E 1/4

3.5 114.1

225' SO.

C

0.4 117.2

3.8 113.8

7.3 110.3

W line

11.0 106.6

117.63

41

250' SO.

7.5 110.1

4.6 113.0

HI.

10.70 127.63 0.70 116.93

200' South Maple.

10.5 117.1

6.0 121.6

225' SO.

E line

1.5 126.1

5.6 122.0

E 1/4

6.5 121.1

250' SO.

11.0 116.6

7.7 119.9

5.0 122.6

3.0 124.6

1.0 126.6

E line

127.63

275' 20.

Elm
+8'0.1 127.5
4.1 123.5
5.0 122.6

5.5 122.1

C

6.2 121.4

7.5 120.1

9.3 118.3

White

13.7 113.9

291' 20.

White
+6'12.1 115.5
9.3 118.3
8.4 119.2

7.2 120.4

C

6.1 121.5

6.0 121.6

cl. +9'
Elm5.3 122.3
3.8 123.8
0.0 127.6

42

300' 40. (no line Laurel)

Elm

4.9 122.7

gutter

ciment emb. 5.58 122.05
6.1 121.5
6.2 121.4

C

6.3 121.3

gutter

7.1 120.5
8.7 118.9
7.70 119.93

White

7.6 120.0

X sect. alley from East
bet. C and Broadway.

9.37 ^{H.I.} 204.33 194.96

East line 30th

no line

9.5 194.8

S. line

9.7 194.6

13' east

no line

14.6 189.7

no line

14.6 189.7

50' east

no line

8.4 195.9

no line

8.4 195.9

75' E

no line

4.6 199.7

no line

4.6 199.7

100' E

no line

1.7 202.6

no line

2.0 202.3

line 30th to west line 31st
20' alley

BM. J.P.

5.46 ^{H.I.} 208.42 1.37 202.96

100' E

no line

4.4 204.0

no line

3.8 204.6

200' E

no line

3.8 204.6

no line

4.8 203.6

250' E

no line

3.9 204.5

no line

2.9 205.5

300' E

no line

2.9 205.5

no line

3.5 204.9

350' E

no line

5.2 203.2

no line

5.2 203.2

400' E

no line

11.5 196.9

no line

12.5 195.9

171.31

44

J.P.

0.35 ^{H.I.} 196.14 12.63 195.79

425' E

So. line

3.0 193.1

So. line

12.7 158.6

no. line

1.5 194.6

no. line

10.7 160.6

J.P.

0.38 ^{H.I.} 158.91 12.78 158.53

450' E

575' E

no. line

5.9 190.2

no. line

10.2 148.7

So. line

6.7 189.4

So. line

9.8 149.1

475' E

586' E

So. line

13.1 183.0

So. line

16.0 142.9

no. line

11.4 184.7

Center
no. line19.0 139.9
18.3 140.6

J.P.

0.54 ^{H.I.} 183.82 12.86 183.28

500' E

593' E

no. line

5.8 178.0

no. line

16.1 142.8

So. line

7.5 176.3

So. line

19.2 139.7

J.P.

0.52 ^{H.I.} 171.31 13.03 170.79

525' E

600' E (West line 31st pt.)

no. line

15.4 143.5

no. line

13.6 145.3

no. line

1.0 170.3

So. line

2.8 168.5

X sect. ^{edgmont} Cedar street from Cedar
 Pueblo line (no line so far.)

street Bridge to 100' north of

45

10' walks 10' quarters.

I.P. 4.14 220.06 ^{HI} 215.72

B.M. plug in wall of Cedar Street Bridge NE cor.

sect. A B

Point A 4.5 215.6

3.0 15.1

6.6 13.5

7.4 12.7

8.9 11.2

10.0 10.1

Point B. 11.2 8.9

No. line Cedar.

W. line 14.9 105.2

11.9 8.2

9.2 10.9

C 6.6 13.5

4.4 15.7

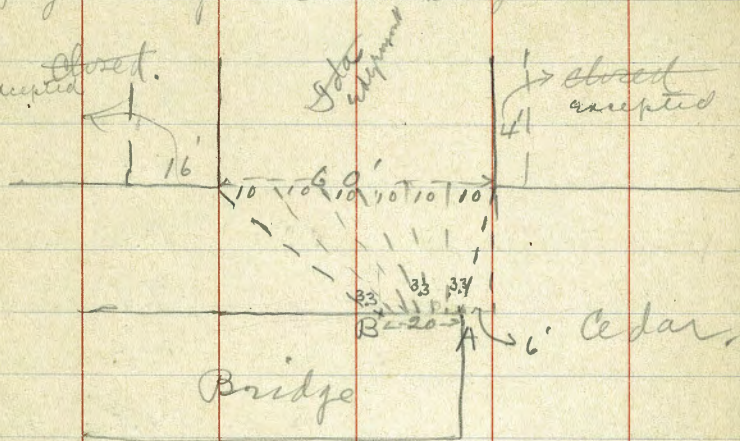
2.1 18.0

1.7 18.4

3.6 216.5

ob + s
 E. line

closed.
 inserted



Edgemont

220.06

1' no. cedar.

E line

0.2 219.9

1.8 18.3

4.1 16.0

C

6.4 13.7

9.0 11.1

11.7 8.4

White

14.8 05.3

25' no.

White

10.7 9.4

7.5 12.6

4.8 15.3

C

2.2 17.9

50' no.

White

7.6 212.5

w. ob.

4.0 16.1

T.P.

E 1/4

E line

E line

C

W 1/4

White

C

E 1/4

White

w. ob.

220.06

46

H.I. ✓

12.88 230.47 2.47 217.59

25' no. cedar

10.3 20.2

7.6 22.9

4.6 25.9

50' no.

0.5 30.0

3.0 27.5

5.6 24.9

8.3 22.2

11.3 19.2

75' no.

14.3 16.2

10.4 20.1

7.6 22.9

5.1 25.4

2.7 27.8

100' no.

10.8 19.7

7.6 22.9

	230.47	Edgemont
J.P.	9.74	237.58 2,63 227.84
	75'	no. cedar
E cb		7.0 230.6
E line		5.2 32.4
	100'	no.
E line		4.1 33.5
		5.1 32.5
		7.0 30.6
C		9.0 28.6
W 1/4		11.6 22.6.0
	125'	no.
W line		15.5 22.1
		12.2 25.4
		9.2 28.4
C		6.8 30.8
		5.2 32.4
E cb.		4.0 33.6

	237.58	47
	150'	no.
E cb.		2.6 235.0
		3.1 34.5
C		4.3 33.3
		7.0 30.6
		9.4 28.2
W line		12.6 25.0
	179.4	no. line to park
		10.2 27.4
		7.2 30.4
	5.89	H.I. 1 241.24 2.23 235.35
	125'	no. cedar
E line		5.8 35.4
	150'	no.
E line		4.9 36.3

241.24

Edgemont

179.4 no. (no. line 20 park)

W 1/4

8.6 232.6

C

7.0 34.2

5.9 35.3

5.1 36.1

E line

4.33 36.9

25' no. pine block line

E line

4.2 37.0

4.7 36.5

5.3 35.9

C

6.2 35.0

7.3 33.9

8.7 32.5

W line

11.3 29.9

241.24

48

50' no.

W line

10.1 231.1

8.3 32.9

7.0 34.2

C

6.2 35.0

5.3 35.9

4.9 36.3

4.4 36.8

E line

75' no.

E line

4.8 36.4

5.3 35.9

5.8 35.4

6.4 34.8

C

7.2 34.0

8.3 32.9

W line

10.0 31.2

241.24

Edgemont

100' no. of no. line to park.

white

10.7 230.5

8.3 32.9

7.9 33.3

7.5 33.7

6.9 34.3

6.6 34.6

6.1 35.1

Elms

Slope levels

J.P.

0.52

H.I. ✓
228.89

12.87 228.31

200' no. of no. line to park

white

10.1 218.2

20' w. slope.

14.0 214.9

J.P.

0.83

H.I. ✓
216.69

13.03 215.86

250' no.

white

9.9 206.8

20' w. slope.

16.0 200.7

216.69

49

J.P.

0.07

H.I. ✓

203.76

13.00

203.69

300' no. of no. line of to park.

white

9.7 194.1

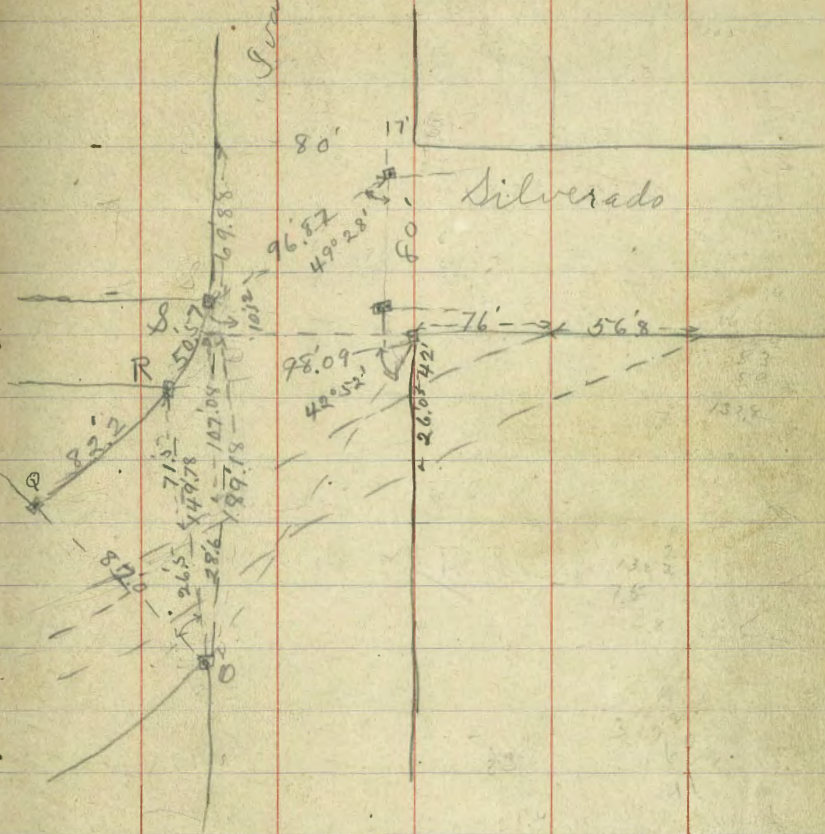
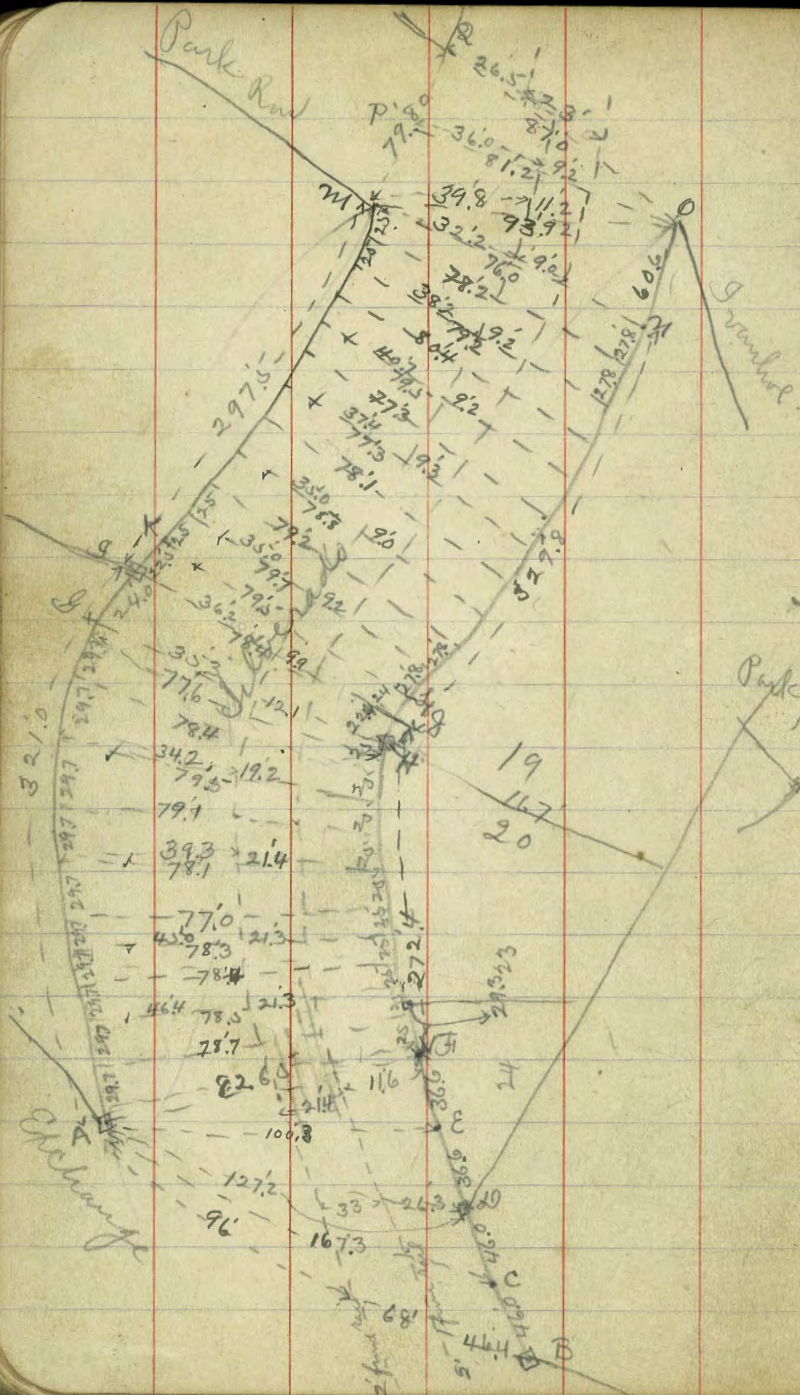
30' w. slope.

16.5 187.3

Leah
Evans
Shaw



July 1/5 Build
 Evan 52
 Shaw.



107.08
 189.19
 28.6
 135.68

SILVERADO

53

126.10

12.99 H.I. 126.10 NW cor. P.M. B.M. + cor. 113.11

Sect. A D

Sect. A B

No. 7	8.2	117.9	No. line	6.4	119.7
no cb	7.6	118.5	No. cb.	5.9	120.2
46.45 2' no. rail	7.1	119.0	2' no. rail	5.7	120.4
68' 2' so. rail	5.2	120.9	2' so. rail	4.3	121.9
So 1/4	4.5	121.6	C	4.2	
cb	3.1	123.0		3.4	
So. line	1.6	124.5	No. line	2.6	

Sect. A C

So. line	1.6	124.5	No. line	1.6	
	2.8	123.3		2.4	
So 1/4	4.1	122.0		3.0	
2' so. rail	4.6	121.5	C	3.7	
2' no. line	6.5	119.6	2' so. rail	4.0	122.1
no. cb	6.8	119.3	2' no. rail	5.1	121.0
no. line	7.7	118.4	No. cb.	5.0	

Sect. A E

			No. line	1.6	
				2.4	
				3.0	
			C	3.7	
			2' so. rail	4.0	122.1
			2' no. rail	5.1	121.0
			No. cb.	5.0	
			No. line	5.7	

126.10

Sect. A.F.

no line	4.8	121.3
2' ¹¹⁶ no. rail	4.4	121.7
2' ²¹⁴ no. rail	3.6	122.5
C	3.2	122.9
	2.7	123.4
	2.4	123.7
so line	1.6	124.5

25' west sect A.F.

so line	1.1	125.0
	1.7	124.4
	2.5	123.6
C	2.9	123.2
3' no rail	3.1	123.0
2' no rail	3.8	122.3
no line	4.1	122.0

54.

50' west

no line	3.9	122.2
2' no rail	3.3	122.8
2' no. "	2.7	123.4
C	2.2	123.9
	1.8	124.3
	1.0	125.1
so line	0.3	125.8

J.P.

6.08 ^{H.I.} 130 HC 1.72 124.38

75' west

so line	4.0	126.5
	4.8	125.7
	5.5	125.0
C	6.2	124.3
2' no rail	6.6	123.9
2' no. "	7.2	123.3
no line	7.4	123.1

130.5 148

100' west

No. line	7.2	123.3
2' no. rail	6.9	123.6
2' no. "	6.1	124.4
C	5.6	124.9
	4.9	125.6
	4.1	126.4
so. line	3.3	127.2

125' west

so. line	2.7	127.8
	3.0	
	4.2	
C	5.0	
2' so. rail	5.7	
2' no. " (+ no. cb.)	6.5	
No. line	6.9	

130.5

55

150' west

No. line	6.7	
cb.	5.9	
2' no. rail	5.9	124.6
2' so. rail (+ center)	5.1	125.0
so 1/4	3.5	
	2.8	
so line	1.8	

175' west

so line	0.9	
	2.0	
	3.1	
2' so. rail	4.4	
2' no. "	5.4	
cb.	5.8	
No. line	6.4	

130.46

200' west

No. line

6.1

5.1

2' no rail

5.0

125.5

1/4

2' so. rail

4.1

126.4

2' no. rail

so 1/4

2.9

2' so. rail

1.9

1/4

so. line

0.4

J.P.

5.61

H.I.

131.60

4.47

125.99

so. line

225' west

so. line

1.6

2.3

1/4

3.5

2' so. rail

4.8

2' no. "

5.8

1/4

5.7

5.9

no. line

7.2

131.6

56

250' west (sect 8 H)

no. line

7.3

124.3

5.8

5.6

5.4

126.2

5.0

126.6

3.5

2.3

1.3

130.3

sect 8 g.

so. line

1.2

2.1

1/4

4.2

2' so. rail

5.2

126.4

2' no. rail

5.6

126.

1/4

5.9

6.5

no. line

7.5

131.6

sect K L

no. line

7.9

6.9

1/4

5.9

2' no rail

5.7

125.9

2' no "

5.2

126.5

1/4

4.1

2.4

no. line

0.9

25' west. sect. K L

no. line

1.2

2.7

1/4

3.8

2' no rail

5.2

126.4

2' no. "

5.7

125.9

1/4

5.8

7.2

no. line

8.0

131.6

57

50' west

no. line

8.2

7.4

1/4

6.2

2' no rail

5.8

2' no. "

5.5

1/4

3.7

2.4

no. line

0.9

75' west

no. line

0.9

2.4

1/4

3.9

2' no rail

5.5

126.1

2' no. "

6.0

125.0

1/4

6.3

7.6

no. line

8.0

131.6

100' west

no. line

8.8

7.7

 $\frac{1}{4}$

6.8

2' no. rail

6.1

2' so. "

5.7

 $\frac{1}{4}$

3.9

2.7

so. line

1.2

125' west

so. line

2.1

3.6

 $\frac{1}{4}$

4.3

2' so. rail

6.0

125.6

2' no. rail

6.2

125.5

 $\frac{1}{4}$

6.7

7.7

no. line

9.3

58

150' west

no. line

9.3

8.0

 $\frac{1}{4}$

6.6

2' no. rail

6.5

2' so. "

6.0

C

5.7

4.5

3.6

2.1

so. line

J.P.

8.61 ^{H.I.} 130.71

9.50

122.10

175' west

so. line

0.9

2.5

3.5

5.0

5.2

125.5

5.7

125.0

6.0

7.7

8.7

no. line

130.7

200' west.

no. line	8.8	
	7.6	
	6.2	
2' no. rail	5.9	124.8
2' no. " "	5.4	125.3
C	5.4	
	4.2	
	2.7	
so. line	1.1	
225' west		
so. line	1.6	
	2.9	
1/4	4.1	
2' so. rail	5.6	125.1
2' no. " "	5.9	124.8
1/4	6.4	
	7.2	
no. line	9.0	

250' west

no. line	8.8	
	7.9	
1/4	6.9	
2' no. rail	6.1	
2' no. " "	5.8	
1/4	4.3	
	3.0	
so. line	1.8	
275' west (sect m m)		
so. line	2.5	
	3.0	
1/4	5.1	
2' so. rail	6.1	124.6
2' no. " "	6.3	124.4
1/4	6.8	
	7.9	
no. line	8.8	

130.7

sect O.M.

no. line	7.7	
	7.1	
$\frac{1}{4}$	6.6	
2' no. rail	6.7	124.0
2' so. rail	6.5	124.2
$\frac{1}{4}$	5.5	
	3.8	
so. line	2.5	

sect O.P.

so. line	4.3	
	5.3	
$\frac{1}{4}$	6.1	
2' so. rail	6.9	123.8
2' no. rail	7.0	123.7
$\frac{1}{4}$	6.1	
	7.0	
no. line	7.7	

130.71

60

sect O.Q.

no. line	7.7	
	6.8	
$\frac{1}{4}$	6.6	
2' no. rail	7.6	123.1
2' so. rail for single track	7.4	
$\frac{1}{4}$ 2' west	5.0	
2' so. rail for double track	7.2	
2' west	4.2	126.5
cl.	7.2	
	3.5	
so. line	3.05	127.66

J.P.

1.94

H.J.

129.60

sect O.R.

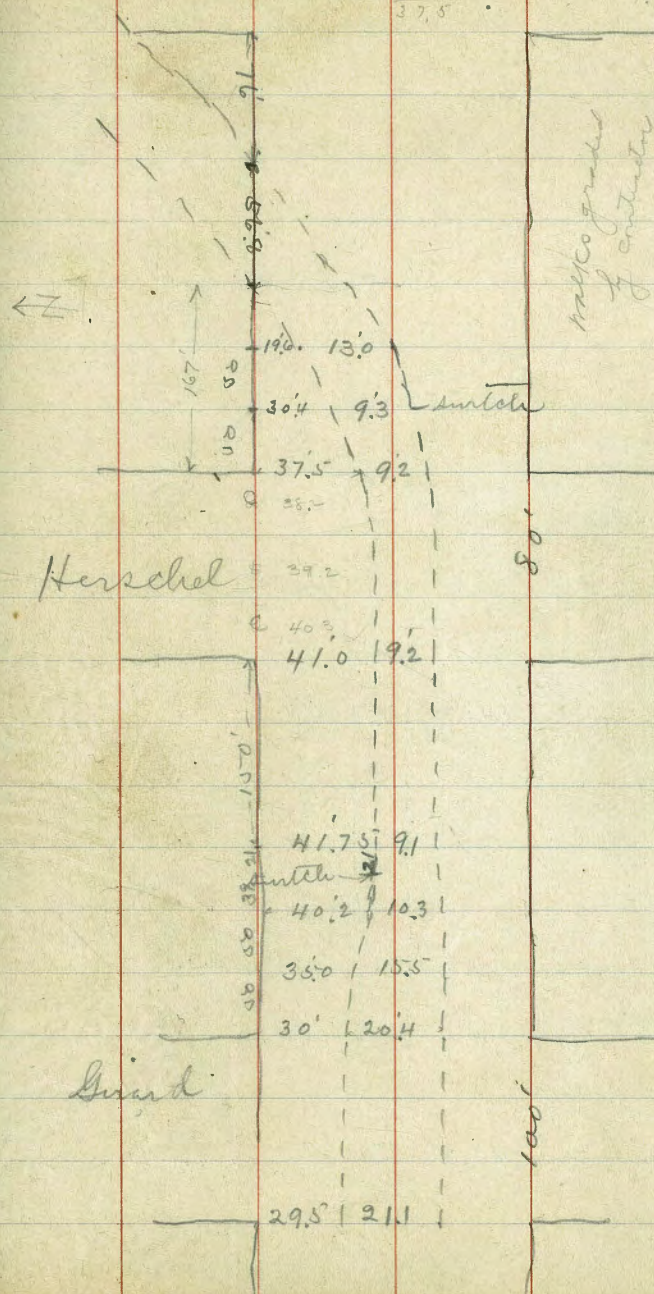
so. line	0.43	129.17
	1.9	
$\frac{1}{4}$	2.3	
$\frac{1}{4} + 15'$	2.7	
2' so. rail	6.8	
2' no. rail (+ quarter)	6.8	
cl.	6.5	
no. line	6.6	

sect O L. (East line Granthos)

70. line	6.6	
cb.	6.4	
2' no rail	7.0	123.7
2' so rail	6.9	123.8
C + 10'	3.7	
1/4	2.5	
cb.	2.4	
50. line	1.0	

80
 42.85
 37.5

61



29.5 | 21.1 | 29.4

 $\leftarrow Z$

4-80

Wallo graded
of Contract

Frang.

29.0	21.1	29.4
------	------	------

29.5 + 21.1

Graded
Malt
here

Wald, already
on

31.8 | 18.5 | 29.7

37.9 | 12.7

$$41.3 \quad \frac{1}{2} \quad 9.3$$

8. *Tch*

294
Silverado

Eads.

41.5 19.1 24.4'

41.5 : 9.21 293

62

2-80 →

Eads.

41.5 - 19.2

41.4 | 9.11

38.5 1921

33.1 / 9.2

$$31.4 \quad | \quad 9.2$$

31' 92'

487 1951

295
Silverado

Draper

$$\begin{array}{r} 318 \\ 185 \\ \hline 503 \end{array}$$

413
50.6

$$\begin{array}{r} 38.5 \\ 47.7 \\ \hline 86.2 \end{array}$$

$$\begin{array}{r} 41.4 \\ 50.5 \end{array}$$

80.5
50.5
—
29.5

$$\begin{array}{r} 41.5 \\ 9.1 \\ \hline 50.6 \end{array}$$

$$\begin{array}{r} 80.0 \\ 50.6 \\ \hline 29.4 \end{array}$$

37.9
270
108

$\frac{41.5}{9.2} = 4.5$

X sect. Silverado West line Granbo

80' street 14' walks 13' quarters

J.P.

1.07 ^{H.L.} 130.24

129.17

West line Granbo.

No. line

5.15 125.09

gutter

5.5 124.7

6.1 124.1

5.3 124.9

c

4.6 125.6

gutter

4.4 125.8

5.0 125.2

3.8 126.4

So. line

3.2 127.0

5' west

So. line

4.8 125.4

gutter

4.7 125.5

5.3 124.9

5.0 125.2

c

5.2 125.0

5.8 124.4

cb + 10'

no. line

6.0 124.2

6.0 124.2

7.3 122.9

to East line draper

Herschel 80' wide 14' walks 13' quarters

63

50' west

no. line

10.3 119.9

9.1 121.1

8.7 121.5

8.5 121.7

8.1 122.1

7.2 123.0

So. line

7.3 122.9

76' west 2' East track on 20

So. line

9.0 121.2

9.5 120.7

9.6 120.6

10.0 120.2

10.7 119.5

11.0 119.2

no. line

11.4 118.8

Siberado

J.P. 2.05 ^{H.I.} 119.71 12.58 117.66

13 2' 8 west (2' west track) no. line

no. line (2' no. rail)

2.8 116.9

2' no. rail

2.0 117.7

2' no. rail

4.4 115.3

200 1/4

2.1 117.6

2' no. rail

3.9 115.8

C

2.0 117.7

C

3.5 116.2

1.8 117.9

3.9 115.8

1.4 118.3

3.8 115.9

no. line

1.0 118.7

no. line

3.4 116.3

150' west

no. line

1.5 118.2

no. line

3.3 116.4

2.0 117.7

4.7 115.0

2.2 117.5

4.7 115.0

C

2.5 117.2

C (2' no. rail)

5.2 114.5

1/4

2.4 117.3

2' no. rail

4.6 115.1

2' no. rail

2.3 117.4

1/4

4.8 114.9

2' no. rail

3.0 116.7

4.9 114.8

no. line

3.0 116.7

no. line

4.9 114.8

4.9 114.8

119.7 H9

64

300' west

4.0 115.7

Siberada

115.8

65

J.P.	2.06	^{HT} 113.81	596	113.75	E 1/4		
300' west (East line Herschel)					no. line	2.8	113.0
no. line			2.2	113.6		2.8	113.0
			2.1	113.7		2.6	113.2
1/4			2.3	113.5	2' no. rail (+ C)	2.5	113.3
2' no. rail			1.9	113.9	2' no. 1	2.2	113.6
Elev. rail			1.8	114.0	1/4	2.0	113.5
2' no. rail			1.7	114.1		2.8	113.0
1/4			1.8	114.0	no. line	2.6	113.2
			2.0	113.8			
no. line			2.1	113.7	no. line	2.7	113.1
	East Eb.					2.7	113.1
no. line			2.2	113.6		2.4	113.4
			2.6	113.2	2' no. rail	2.6	113.2
1/4			2.0	113.8	2' no. 1 (+ Center)	2.6	113.2
2' no. rail			1.9	113.9	1/4	2.7	113.1
2' no. rail			2.2	113.4		2.9	112.9
			2.5	113.3	no. line	3.2	112.6
			2.6	113.2			
no. line			2.6	113.2			

Siberado
115.8

West $\frac{1}{4}$

no. line

3.4 112.4

3.4 112.4

3.3 112.5

C

2.8 113.0

2' no. rail

2.9 112.9

2' so. "

2.8 113.0

$\frac{1}{4}$

2.6 113.2

3.2 112.6

so. line

3.3 112.5

W. Cb.

so. line

3.7 112.1

3.3 112.5

3.0 112.8

2' so. rail

2.9 112.9

2' no. "

3.1 112.7

C

3.1 112.7

3.6 112.2

3.6 112.2

no. line

3.6 112.2

115.8

West line Herschel

66

no. line

4.1 111.7

4.0 111.8

4.0 111.8

C

3.5 112.3

2' no. rail

3.4 112.4

2' Elev. rail

3.4 112.4

2' so. rail

3.2 112.6

$\frac{1}{4}$

3.4 112.4

3.7 112.1

so. line

3.7 112.1

50' West.

so. line

4.5 111.3

4.7 111.1

4.3 111.5

2' so. rail

4.3 111.5

2' no. rail

4.7 111.1

C

4.7 111.1

5.0 110.8

5.0 110.8

no. line

4.7 111.1

115.8
Silverado

100' west

no. line	5.7	110.1
	5.8	110.0
	6.1	109.7
C	5.5	110.3
2' no. rail	5.5	110.3
2' no. rail	5.3	110.5
1/4	5.1	110.7
	5.4	110.4
no. line	5.4	110.4

150' west

no. line	6.4	109.4
	6.4	109.4
	6.4	109.4
2' no. rail	6.4	109.4
2' no. "	6.5	109.3
C	6.5	109.3
	6.8	109.0
	6.3	109.5
no. line	6.1	109.7

115.8 119

87

200' west

no. line	7.4	108.4
	7.2	108.6
	7.5	108.3
C	7.2	108.6
2' no. rail	7.2	108.6
2' no. rail	7.2	108.6
1/4	7.0	108.8
	7.1	108.7
no. line	7.1	108.7

250' west

no. line	7.7	108.1
	7.7	108.1
	8.3	107.5
2' no. rail	8.4	107.4
2' no. rail	8.3	107.5
1/4	8.3	107.5
	8.0	107.8
no. line	8.2	107.6

Suberado

115.81

300' west (East line Girard)

no. line		9.1	106.7
gutter	cement curb.	9.35	106.46
1/4		9.6	106.72
		9.4	106.4
2' no. rail		9.3	106.5
Elev. rail		9.05	106.76
2' so. rail		9.2	106.6
1/4		9.2	106.6
gutter		9.2	106.6
curb	cement curb.	8.9	106.9

so. line		8.6	107.2
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J.P.	0.96	H.F. 106.47	10.3a 105.51
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West line Girard

so. line		0.7	105.8
gutter	cement curb.	1.0	105.5
1/4		1.2	105.3
		1.1	105.4
2' so. rail		1.2	105.3
Elev. rail		1.3	105.2
2' no. rail		1.5	105.0
1/4		1.7	104.8
gutter		1.8	104.7
	cement curb.	1.5	105.0
no. line		1.3	104.2

106.549

68

50' west

no. line		2.2	104.3
		2.5	104.0
		2.5	104.0
2' no. rail		2.4	104.1
2' so. rail		2.1	104.4
		1.9	104.6
		2.0	104.5
so. line		1.1	105.4

100' west

so. line		2.8	103.7
		2.7	103.8
1/4		2.6	103.9
2' so. rail		2.7	103.8
2' no. rail		3.2	103.3
1/4		3.2	103.3
		3.1	103.4
no. line		3.3	103.2

Siberada

106.5 H9.

150' west

no. line	3.8	102.7
	3.6	102.9
	3.8	102.7
2' no. rail	3.8	102.7
2' so. rail	3.7	102.8
	3.7	102.8
	3.7	102.8
so. line	3.7	102.8
200' west		
so. line	3.7	102.8
	3.8	102.7
	4.8	101.7
2' so. rail	4.6	101.9
2' no. rail	4.7	101.8
	4.8	101.7
	4.5	102.0
no. line	4.4	102.1

106.5 H9

69

250' west

no. line	5.2	101.3
	4.9	101.6
gutter	5.7	100.8
1/4	5.3	101.2
2' no. rail	5.4	101.1
2' so. rail	4.9	101.6
1/4	4.7	101.8
	5.0	101.5
so. line	4.8	101.7
300' west (East line Fay)		
so. line	5.2	101.3
	5.4	101.1
cement curb	5.8	100.7
gutter	5.6	100.9
1/4		
2' so. rail	6.7	100.8
Elev. rail	5.8	100.7
2' no. rail	6.0	100.5
1/4		
gutter	6.1	100.4
	6.3	100.2
cement curb	6.0	100.5
no. line	5.7	100.8

Silverado

106,47

West line Flag

no line 6.7 99.8

gutter cement curb. 7.0 99.5
8.0 98.5

7.7 98.8

1/4 2' no rail 7.5 99.0

elev. rail 7.0 99.5

2' so rail 7.1 99.4

1/4 gutter 7.2 99.3

7.2 99.3

cement curb. 6.5 100.0

40 line 6.3 100.2

50' west

40 line 7.3 99.2

gutter cement curb. 7.6 98.9

8.3 98.2

1/4 8.1 98.4

2' so rail 8.1 98.4

2' no rail 8.1 98.4

1/4 9.1 97.4

9 8.5 98.0

no line 8.3 98.2

J.P.

0.88 HI 98.50 8.85 97.62

100' west

no line 1.5 97.0

1.3 97.2

1.5 97.0

C 1.0 97.5

2' no rail 1.0 97.5

2' so rail 1.0 97.5

1/4 gutter 1.0 97.5

1.3 97.2

cement curb. 0.5 98.0

so line 0.3 98.2

150' west

so line 1.5 97.0

2.4 96.1

2.2 96.3

2.2 96.3

2' no rail 2.2 96.3

C 2.1 96.4

2.4 96.1

2.5 96.0

2.5 96.0

cl.
no line

Silverdale
98.5049
300' west.

no. line		3.4	95.1
gutter	Cement curb.	3.3	95.2
1/4		4.2	94.3
C		3.4	95.1
		2.9	95.6
2' no. rail		3.0	95.5
2' so. rail		3.0	95.5
1/4		3.0	95.5
gutter		2.9	95.6
	Cement curb.	2.5	96.0
so. line		2.1	96.4

250' west

no. line		3.3	95.2
gutter	Cement curb.	3.5	95.0
1/4		3.9	94.6
		3.9	94.6
2' so. rail		4.0	94.5
2' no. rail		4.0	94.5
C		4.0	94.5
1/4		4.3	94.2
gutter		4.9	93.6
	Cement curb	4.4	94.1
no. line		4.3	94.2

98.5049

300' west (East line Eads)

91

no. line		5.3	93.2
gutter	Cement curb.	5.5	93.0
1/4		5.7	92.8
C		5.2	93.3
		5.0	93.5
2' no. rail		5.0	93.5
Elev. rail		4.9	93.6
2' so. rail		4.9	93.6
1/4		5.2	93.3
gutter		5.4	93.1
	Cement curb.	4.5	94.0
so. line		4.2	94.3

West line Eads.

so. line		5.1	93.4
gutter	Cement curb.	5.5	93.0
1/4		6.5	92.0
		6.3	92.2
2' so. rail		6.4	92.1
Elev. rail		6.3	92.2
2' no. rail		6.3	92.2
C		6.5	92.0
1/4		6.8	91.7
gutter		7.3	91.2
	Cement curb.	6.6	91.9
no. line		6.5	92.0

Silverado
50' west. ^{98.50}

no. line		7.7	90.8
cement curb.		7.8	90.7
gutter		8.6	89.9
1/4		7.9	90.6
c		7.5	91.0
2' no. rail		7.5	91.0
2' so. rail		7.5	91.0
1/4		7.3	91.2
gutter		7.6	90.9
cement curb.		6.7	91.8
so. line		6.7	91.8
	100' west		
so. line		7.4	91.1
cement curb.		7.9	90.6
gutter		8.8	89.7
1/4		8.4	90.1
2' so. rail		8.7	89.8
2' no. rail		8.8	89.7
1/4		8.9	89.6
gutter		9.7	88.8
cement curb.		9.1	89.4
no. line		8.9	89.6

98.50
100' west 72

no. line		10.2	88.3
cement curb.		10.4	88.1
gutter		11.0	87.5
1/4		10.1	88.4
2' no. rail		9.9	88.6
2' so. rail		10.0	88.5
1/4		9.7	88.8
		9.5	89.0
so. line	cutway.	9.2	89.3
	200' west		
so. line		10.4	88.1
cement curb.		10.5	88.0
gutter		11.0	87.5
1/4		10.9	87.6
2' so. rail		11.3	87.2
2' no. rail		11.3	87.2
1/4		11.5	87.0
gutter		12.2	86.3
cement curb.		11.6	86.9
no. line		11.5	87.0

Silverado

H.I.

J.P.

3.23

90.06

11.67

86.83

250' west.

no. line

4.3

85.7

cement curb.

4.4

85.6

gutter

5.1

84.9

1/4

4.5

85.5

2' no. rail

4.0

86.0

2' so. rail

4.0

86.0

1/4

3.8

86.2

gutter

4.1

85.9

cement curb.

3.3

86.7

so. line

3.2

86.8

300' west (East line draper)

so. line

4.2

85.8

cement curb.

4.5

85.5

gutter

5.3

84.7

2' so. rail

5.3

84.7

elev. rail

5.2

84.8

2' no. rail

5.1

84.9

C

5.6

84.4

1/4

5.7

84.3

gutter

6.2

83.8

cement curb.

5.6

84.4

no. line

6.3

84.5

J.P.

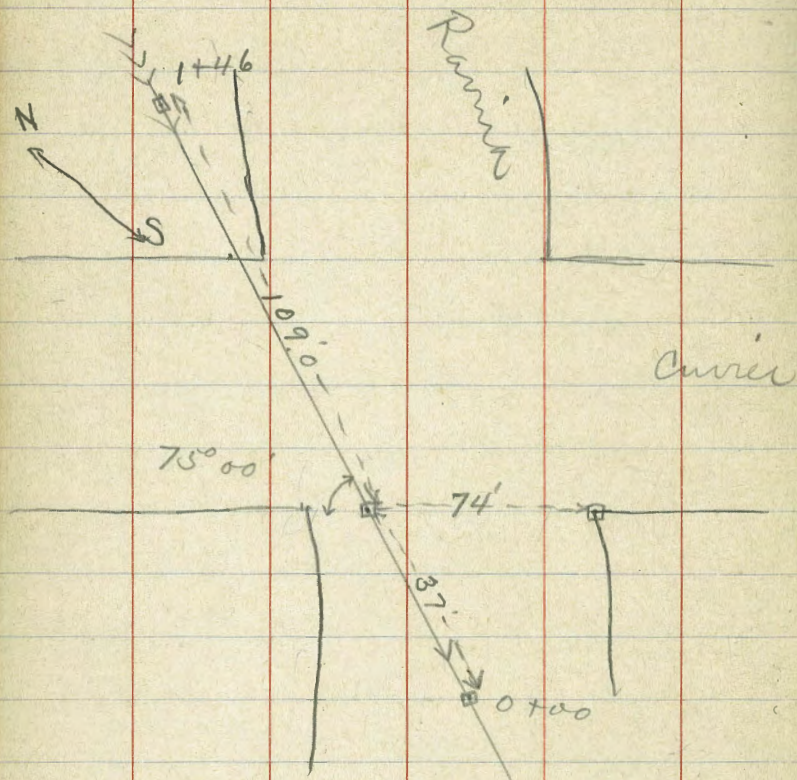
5.90

84.26

B.M.

84.26

Location of culvert at



See levels next page

July 12/15 - 16 miles
Creek and Ravine (Elevation 4
Shaw)

Levels for Culvert

at currier + Ravine

75

J.P. 2.98 ^{HI} 79.47 76.49 B.M.

J.P. 0.17 ^{HI} 67.15 12.49 66.98

J.P. 1.65 ^{HI} 55.74 13.06 54.09

0+00 hub. 10.05

+37 west line currier hub. 8.23

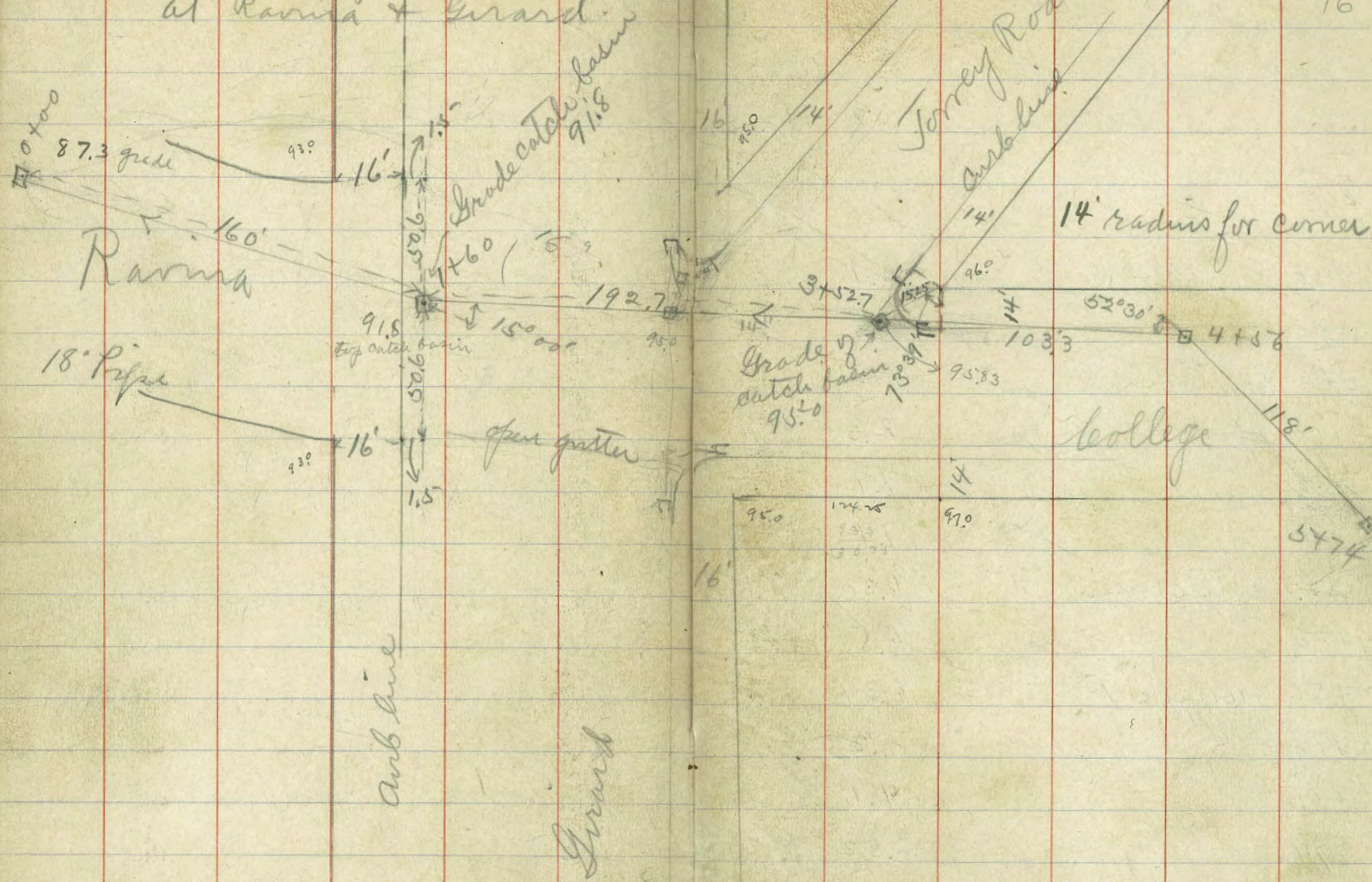
+80 7.7

+09 6.7

+13 5.3

+46 hub. 3.68

Location of Pipe line &
at Ravina & Girard.



76

see levels next page

levels for pipeline see

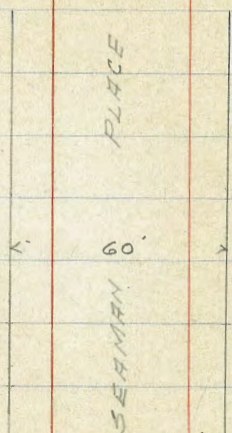
page 76

77

J.P.	344	^{14.5} 107.41	103.97
J.P.	552	^{14.5} 102.05	96.53
0+00		16.0	86.1
+50		12.1	90.0
1+00		10.3	91.8
+60	catch basin	9.06	93.0
2+00		8.3	93.8
+50		7.9	94.2
3+00		7.4	94.7
+52.7	catch basin	6.30	95.75
4+00		6.5	95.6
+56	angle.	6.34	95.71
5+00		5.2	96.9
+50		4.1	98.0
+74		2.52	99.53

5/4/6 Gregory
Moore
10/1/61

NOTES ON DRAINAGE
WEST END OF SEANAN PLACE



B.M.	110	304.10		303.0
T.P.	3.93	301.01	7.02	297.08
No. End of pipe	bottom	5.87		295.14
✓ - ✓ - ✓	Top	5.10		295.91
50 ✓ - ✓ -	bottom	10.97		290.04
19.1 No. of End of Pipe on E. end		5.6		295.4
36.1 - - - - -		5.3		295.7
37.1 - - - - -		5.2		295.8

5/5/16

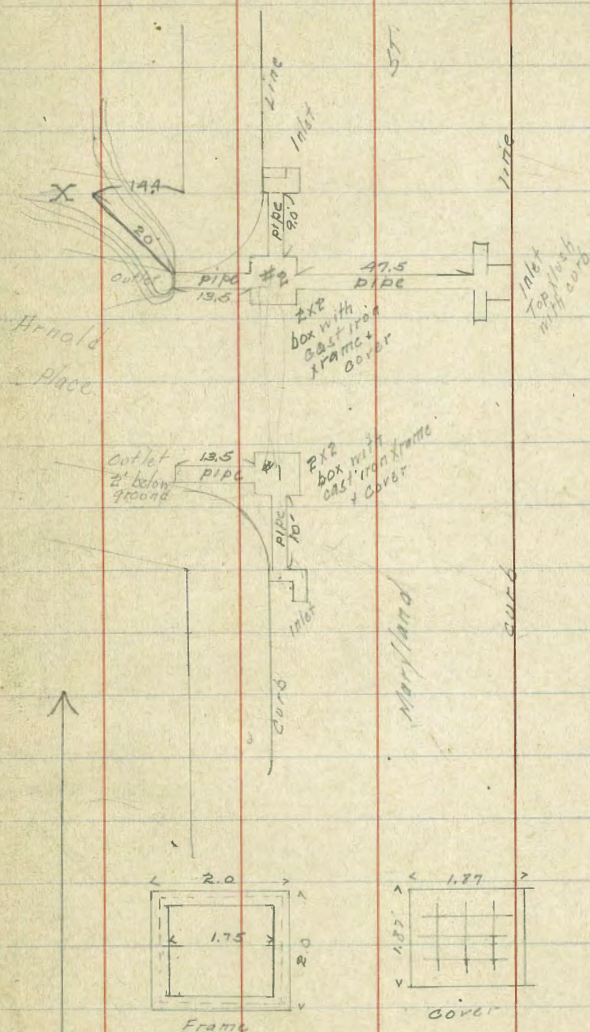
Gregory
Moore
Miller

Elevations on
Drainage at Arnold
~~at~~ Maryland

79

on Curb.	5.75	300.75	295.0
Curb So. Side Arnold Pl.	5.75		295.0
Bottom of So. Inlet.	6.85		293.9
- - Box #1	6.85		293.9
- - So. Outlet	6.95		293.8
			Covered 2' by xill
Curb No. Side Arnold Pl.	5.85		294.9
Bottom of No. Inlet.	6.95		293.8
- - Box #2	6.95		293.8
- - No. Outlet	7.05		293.7
Top of Curb East Inlet	4.65		296.1
Bottom of East Inlet	5.75		295.0
On ground below No. Outlet	8.8		292.0
- - at point X	13.2		287.6
			17' center of wash.

Pipe connecting various boxes and outlets is corrugated iron, half round set in a concrete base.



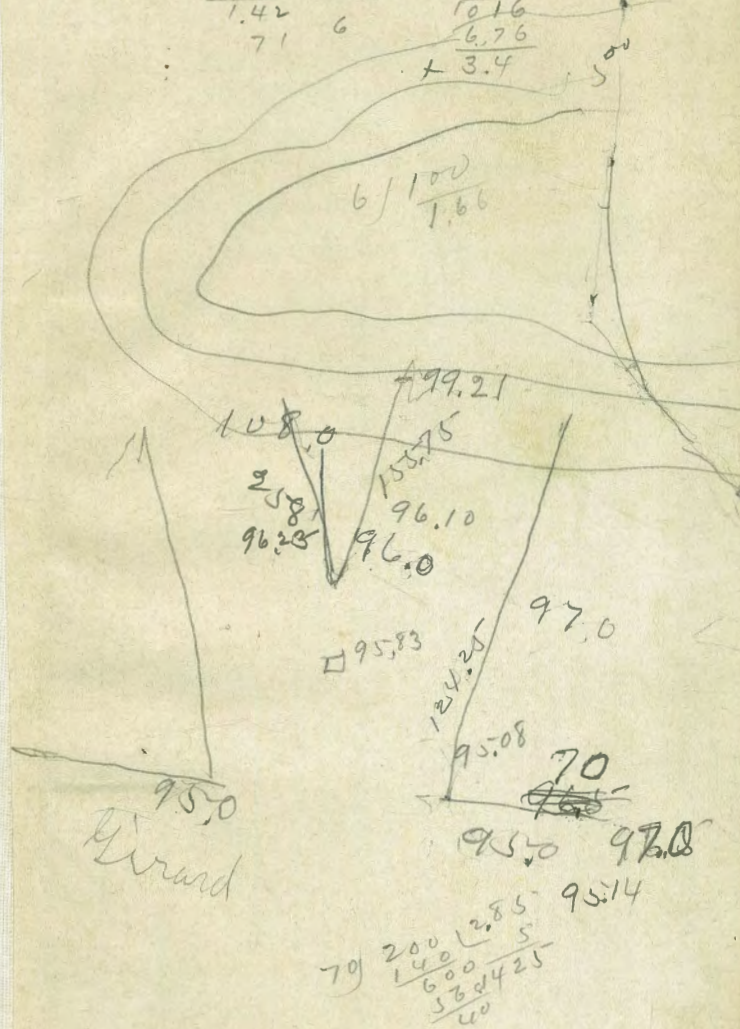
80

92.99
 0.78
 98.17 H.I.
 96.00 96.23 96.10
 2.17 1.94 2.07
 95.83 95.00 95.14
 2.34 3.17 3.03
 91.80
 6.37
 95.08
 3.09

124.25) 200.00 1.61
 124.25
 75.75 0.805
 74.55 0
 12000

258) 1200 4.65
 1032
 168 02325
 1548
 1320
 155.70) 32700 2.06
 31150
 9500 0.1030

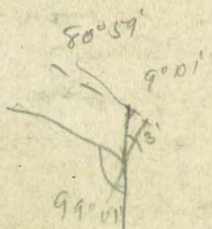
91.8
 87.3 37 117
 4.5
 3:08' 88.72
 87.30
 1.42
 71 6
 10.87
 71
 10.16
 6.76
 + 3.4



153. 69.5 29.2
85.0

83.0

13
50
75
100



68.73
74.5

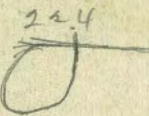
X = $\frac{13}{\sin 80^\circ 59'}$

84.26
12.48
96.74 H.I.
93.00

94.0
2.74

3.74 2.49
62 2.18
312

19° 12'
9° 36'



145.8
119.2
28.6

N.W. p. 113.114

210
80
130
14
35.34

125
80
45
8

80° 59'

N 30° 72' E

18° 32'

N 11° 40' E

19° 07'

N 7° 27' W

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 14 FEET WIDE. SIDE SLOPES 1½ TO 1.

FOR SINGLE TRACK EMBANKMENT.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	7.0	7.2	7.3	7.5	7.6	7.8	7.9	8.1	8.2	8.4	0
1	8.5	8.7	8.8	9.0	9.1	9.3	9.4	9.6	9.7	9.9	1
2	10.0	10.2	10.3	10.5	10.6	10.8	10.9	11.1	11.2	11.4	2
3	11.5	11.7	11.8	12.0	12.1	12.3	12.4	12.6	12.7	12.9	3
4	13.0	13.2	13.3	13.5	13.6	13.8	13.9	14.1	14.2	14.4	4
5	14.5	14.7	14.8	15.0	15.1	15.3	15.4	15.6	15.7	15.9	5
6	16.0	16.2	16.3	16.5	16.6	16.8	16.9	17.1	17.2	17.4	6
7	17.5	17.7	17.8	18.0	18.1	18.3	18.4	18.6	18.7	18.9	7
8	19.0	19.2	19.3	19.5	19.6	19.8	19.9	20.1	20.2	20.4	8
9	20.5	20.7	20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.9	9
10	22.0	22.2	22.3	22.5	22.6	22.8	22.9	23.1	23.2	23.4	10
11	23.5	23.7	23.8	24.0	24.1	24.3	24.4	24.6	24.7	24.9	11
12	25.0	25.2	25.3	25.5	25.6	25.8	25.9	26.1	26.2	26.4	12
13	26.5	26.7	26.8	27.0	27.1	27.3	27.4	27.6	27.7	27.9	13
14	28.0	28.2	28.3	28.5	28.6	28.8	28.9	29.1	29.2	29.4	14
15	29.5	29.7	29.8	30.0	30.1	30.3	30.4	30.6	30.7	30.9	15
16	31.0	31.2	31.3	31.5	31.6	31.8	31.9	32.1	32.2	32.4	16
17	32.5	32.7	32.8	33.0	33.1	33.3	33.4	33.6	33.7	33.9	17
18	34.0	34.2	34.3	34.5	34.6	34.8	34.9	35.1	35.2	35.4	18
19	35.5	35.7	35.8	36.0	36.1	36.3	36.4	36.6	36.7	36.9	19
20	37.0	37.2	37.3	37.5	37.6	37.8	37.9	38.1	38.2	38.4	20
21	38.5	38.7	38.8	39.0	39.1	39.3	39.4	39.6	39.7	39.9	21
22	40.0	40.2	40.3	40.5	40.6	40.8	40.9	41.1	41.2	41.4	22
23	41.5	41.7	41.8	42.0	42.1	42.3	42.4	42.6	42.7	42.9	23
24	43.0	43.2	43.3	43.5	43.6	43.8	43.9	44.1	44.2	44.4	24
25	44.5	44.7	44.8	45.0	45.1	45.3	45.4	45.6	45.7	45.9	25
26	46.0	46.2	46.3	46.5	46.6	46.8	46.9	47.1	47.2	47.4	26
27	47.5	47.7	47.8	48.0	48.1	48.3	48.4	48.6	48.7	48.9	27
28	49.0	49.2	49.3	49.5	49.6	49.8	49.9	50.1	50.2	50.4	28
29	50.5	50.7	50.8	51.0	51.1	51.3	51.4	51.6	51.7	51.9	29
30	52.0	52.2	52.3	52.5	52.6	52.8	52.9	53.1	53.2	53.4	30
31	53.5	53.7	53.8	54.0	54.1	54.3	54.4	54.6	54.7	54.9	31
32	55.0	55.2	55.3	55.5	55.6	55.8	55.9	56.1	56.2	56.4	32
33	56.5	56.7	56.8	57.0	57.1	57.3	57.4	57.6	57.7	57.9	33
34	58.0	58.2	58.3	58.5	58.6	58.8	58.9	59.1	59.2	59.4	34
35	59.5	59.7	59.8	60.0	60.1	60.3	60.4	60.6	60.7	60.9	35
36	61.0	61.2	61.3	61.5	61.6	61.8	61.9	62.1	62.2	62.4	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.

MADE IN GERMANY.