

1011

INDEX BOOK

1873

IND

KEUFFEL & ESSER CO.

DRAWING MATERIALS

AND

SURVEYING INSTRUMENTS.

NEW YORK.

CHICAGO. ST. LOUIS. SAN FRANCISCO. MONTREAL.

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.

1011

Cross-Section of Torrey Road from end of

Biological Grade to beginning of Torrey Pine Grade

45 Davis
47 Hancock
17 Hermit

4.92

382.16

377.24

Elev. 1300. West to
fence past opp
Sta 0+00

1+50

0+00

2+00

0+50

1+00

Station	Distance	Elevation
15' R	7.3	74.9
10"	6.7	75.5
C	7.0	75.2
10 L	7.4	74.8
12"	8.0	74.2
15"	7.3	74.9
15 L	6.5	75.7
12"	7.5	74.7
C	6.6	75.6
15 R	7.3	74.9
15 R	6.4	75.8
11"	6.8	75.4
C	6.1	76.1
11 L	6.9	75.3
15"	5.7	76.5

15 L

10 "

9 "

C

11 R

12 "

15

15' R

12 "

11.5 "

C

10' L

10 "

15 "

Plotted

5.0

4.9

6.1

5.4

6.1

4.8

4.9

3.5

4.1

5.5

4.8

5.5

4.5

5.0

77.2

77.3

76.1

76.8

76.1

77.4

77.3

78.7

78.1

76.7

77.4

76.7

77.7

77.2

Note: At angle points Cross Sections taken on dividing angle

	82.16		Elev
	+	HI	-
		2750	
15 L		5.0	77.2
10		4.3	77.9
9		5.1	77.1
C		4.4	77.8
11		4.9	77.3
14		2.7	79.5
15		2.7	79.5
		3400	
15 R		3.9	78.3
12		4.5	77.7
C		4.0	78.2
9 L		4.0	77.6
15		5.6	76.6
		3450	
15 L		4.1	78.1
9		3.5	78.7
8		4.1	78.1
C		3.4	78.8

	82.16		Elev
	+	HI	-
		4700	
12 R		4.0	78.2
13		3.2	79.0
15		2.9	79.3
		4700	
15 R		1.2	81.0
11		3.4	78.8
C		2.7	79.5
9 L		3.4	78.8
10		2.0	80.2
15		2.1	80.1
		4759.50	
25 L		4.2	78.0
13		3.1	79.1
C		2.3	79.9
9 R		2.8	79.4
12		1.4	80.8
15		1.6	80.8
T.P.	6.17	786.06	2.27
B.M. Hub R.P. Sta 4759.50-3734E	2.88		779.89
			782.18

386.06

H.I.

-

Elev

5+00

15 R	4.5	81.6
12"	5.0	81.1
10 "	6.4	79.7
C	5.7	80.4
12 L	6.6	79.5
12 "	5.4	80.7
25 "	6.6	79.7

+50

25 L	5.7	80.4
12	5.2	80.9
11	6.1	80.0
C	5.4	80.7
11 R	5.7	80.4
15 "	4.4	81.7

+99 ⁴⁶

15 R	4.9	81.2
13'	5.3	80.8
C	5.2	80.9

386.06

H.I.

-

Elev

12 L

6.0

80.1

25 L

7.6

78.5

6+50

25 L

7.8

78.3

9"

5.9

80.2

C

5.4

80.7

~~81.7~~

15 R

4.9

81.2

7+00

15 R

4.9

81.2

C

5.7

80.4

15 L

7.3

78.8

+50

15 L

7.8

78.3

C

6.1

80.0

15 R

5.4

80.7

8+00

15 R

6.0

80.1

12 "

6.7

79.4

C

6.7

79.4

15 L

8.1

78.0

386.00

+

H.I.

-

Elev.

8450

15L	8.1	78.0
9"	7.5	78.8
8"	7.4	78.3
C	7.3	78.8
12R	7.5	78.6
15"	6.9	79.2

9400

15R	7.4	78.7
11"	8.2	77.9
C	7.9	78.5
9L	9.0	77.1
10"	8.5	77.6
15"	9.2	76.9

+50

15L	11.1	75.0
C	8.1	77.5
12R	8.9	77.2
15"	8.2	77.9

+

H.I.

-

Elev.

2.24

380.30

8.00

377.46

T.P.

10200

15R	2.9	77.4
12"	3.1	76.7
C	3.3	77.0
11L	4.1	76.2
15"	4.7	75.6

+50

15L	4.7	75.6
C	3.7	76.6
12R	4.0	76.3
15"	3.7	76.6

11400

15R	3.9	76.4
12"	4.4	75.9
C	4.0	76.3
12L	4.8	75.5
15"	5.1	75.2

380.30

+

H.I.

-

Elev.

11+50

15L	5.5	74.8
C	4.3	76.0
11 R	4.8	75.5
15"	4.0	76.3

12+00

15R	4.2	76.1
11 "	4.5	75.8
11 "	5.3	75.0
7	4.8	75.5
C	4.5	75.8
8 L	4.8	75.5
15 "	5.4	74.9

12+50

15L	5.0	75.3
7.	4.5	75.8
C	4.4	75.9
5 R	4.7	75.6
9.	5.3	75.0
15.	4.3	76.0

+

H.I.

-

Elev.

12+50 - Over & Proposed Culvert

35R	6.1	73.9
21.	6.4	73.9
14	4.8	75.5
C	4.4	75.9
14 L	4.7	75.6
27 "	5.4	74.9
36 "	5.4	71.9
50 "	5.6	71.7

13+00

15 R	3.9	76.4
16	3.6	76.7
10	4.4	75.9
5	4.0	76.3
6	3.8	76.5
5 L	3.9	76.4
14	4.6	75.7
15	3.2	77.1

	+	3.80-30 H.I.	-	Elev.
		13+50		
15L			3.7	76.6
10			2.0	77.3
C			2.8	77.5
5R			3.0	77.3
P "			3.2	77.1
10 "			2.0	78.3
15			1.3	79.0
		14+00		
15R			0.3	80.0
10 "			0.5	79.8
9			2.4	77.9
C			2.3	78.0
9L			2.6	77.7
15 "			2.3	77.0
T.P.	329	381.25	2.34	377.96
		14+50		
15R			0.9	80.4
10 "			1.5	79.8

	+	H.I.	-	Elev.
				9R
			3.3	78.0
			3.0	78.3
			3.3	78.0
			3.9	77.4
		15+00		
				15L
			3.8	77.5
			3.1	78.2
			3.0	78.3
			3.0	78.0
			3.7	77.6
			1.6	79.7
			1.5	79.8
		15+50		
				15R
			1.0	80.3
			1.2	80.1
			3.7	77.6
			3.1	78.2
			3.3	78.0
			3.8	77.5

	+	H.I.	-	Elev.
		381.25		
		16100		

15 L		4.3		77.0
8 "		3.7		77.6
C		3.6		77.7
9 R		4.2		77.1
10 "		1.2		80.1
15 "		1.4		79.9

16450

15 R		4.1		77.2
11 "		4.0		77.3
9		5.1		76.2
6		4.5		76.8
C		4.2		77.1
15 L		4.8		76.5

17100

15 L		5.9		75.4
8 "		5.1		76.2
C		5.0		76.3
7 R		5.3		76.0
15 "		6.3		75.0

	+	H.I.	-	Elev.
--	---	------	---	-------

17+14 - 4 Proposed Cul.

20 R		6.3		75.0
12 "		7.23		73.92
10		5.8		75.5
7		5.4		75.9
C		5.0		76.3
10 L		5.3		76.0
14		5.5		75.8
19.5 "		7.96		73.29
25		8.0		73.3

17150

15 L		6.9		74.4
12		5.7		75.6
C		5.2		76.1
7 R		5.4		75.9
15		6.0		75.3

38125

+

H.I.

-

Elev.

18+00

15 R 4.5 76.8

17 " 4.7 76.6

10 5.8 75.5

0 5.2 76.1

5 L 5.3 76.0

15 " 6.1 75.2

+50

15 L 4.2 77.1

13 " 4.0 77.3

12 " 6.1 75.2

6 5.4 75.9

0 5.2 76.1

9 R 5.6 75.7

10 3.8 77.5

14 2.7 79.1

15 2.5 78.8

+

H.I.

-

Elev.

19+00

15 R 5.7 75.6

9 " 6.8 75.3

6 " 5.6 75.7

6 5.3 76.0

5 L 5.4 75.9

11 " 6.2 75.1

15 " 6.4 74.9

+50

20 L 7.3 74.0

15 7.2 74.1

7 5.9 75.2

6 5.5 75.8

6 R 5.1 75.5

10 " 6.4 74.9

15 6.0 75.3

T.P. 403 379.74 5.54 375.71

379.74

+ H.I. - Elev.

19+59- Cul.

15.R	4.1	75.6
9	5.3	74.4
6	4.3	75.4
C	4.1	75.6
7L	4.6	75.3
15	5.7	74.0
20	6.1	73.6
20+00		
27L	6.1	73.6
17	5.8	73.9
10	4.5	75.2
C	4.0	75.7
10	4.0	75.7
19 R	4.4	75.3
23 "	5.1	74.6
30	4.3	75.4

(Make this end of Cul.)

+ H.I. - Elev.

+00

15.R	4.5	75.2
8	4.0	75.7
C	3.9	75.8
8L	4.3	75.4
15	4.5	75.2
21+00		
15L	4.1	75.6
14	4.6	75.1
6'	4.1	75.6
C	4.0	75.7
7R	4.0	75.7
12	4.3	75.4
15	3.0	76.7
+09.10		
15 R	2.8	76.9
14	2.9	76.8
12	4.4	75.3
6	4.0	76.7
C	4.0	75.7
13L	4.6	75.1
15	5.9	75.8

379.74

	+	HI	-	Elev
B.M. Hub 32.21 W Sta 21+09.2			2.56	377.18

21+50

15 L			4.3	75.4
13 "			4.8	74.9
C			4.4	75.3
6 R			4.4	75.3
11 "			5.0	74.7
12 "			4.2	75.5
15 "			4.2	75.5

22+00

15 R			5.3	74.4
11 "			5.5	74.2
6			5.0	74.7
C			4.8	74.9
5 L			5.0	74.7
11 L			5.6	74.1
15 "			5.6	74.1

	+	HI	-	Elev
--	---	----	---	------

750

20 L			6.7	73.0
10 "			6.2	73.5
5			5.7	74.0
C			6.4	74.3
10 R			5.6	74.1
12 "			5.8	73.9
15 "			5.1	74.6

23+00

15 R			5.9	73.8
12 "			6.3	73.5
6 "			6.0	73.7
C			5.9	73.8
5 L			6.3	73.4
10 "			6.9	72.8
15 "			7.2	72.5
20 "			7.6	72.1

379.74

	+	Ht.	-	Elev.
				23450
20L			7.8	71.9
15.			7.7	72.0
11"			7.3	72.4
6			6.5	73.2
C			6.3	73.4
7 R			6.3	73.4
11 "			6.8	72.9
15 "			6.6	73.1

23+84 Cul

20 R			6.8	72.9
11			6.9	72.8
9.5 bottom cul			8.0	71.7
8			6.5	73.2
C			6.7	73.3
6 L			6.6	73.1
13			7.5	72.2
15 bottom cul			8.15	376.59
20			8.2	71.5

+ Ht. - Elev

24400

20L			8.4	71.3
15			7.3	72.4
P			6.7	73.0
C			6.4	73.3
7 R			6.6	73.1
9 "			7.6	72.1
11 "			6.3	73.4
15			6.5	73.2

+50

15 R			6.0	73.7
10			5.6	74.1
4			7.2	72.4
C			6.7	73.0
4 L			6.5	73.2
15.			6.9	72.8
20.			7.3	72.4
25			8.0	71.7

T.P 7.74 277.38 10110 369.64

B.M West R.P.Hub 24+60.20

377.38

+

H.I.

-

Elev.

24+60 30

30 L		4.7	720
17		4.6	728
5		4.1	733
C		4.4	730
3 R		4.7	727
8		4.0	734
10		2.4	740
15		3.2	740

25+00

15 R		4.5	729
10		4.3	731
9		4.8	726
4		4.3	731
C		4.2	732
10 L		4.5	729
160		5.3	721
19		4.8	726
30		5.7	71.7

+

H.I.

-

Elev.

+50

25 L		6.5	709
18 "		5.6	71.8
8		4.8	726
C		4.4	730
9 R		4.4	730
14 "		4.9	72.5
15		4.6	72.8

26+00

15 R		4.9	72.5
11 "		4.5	72.9
C		4.7	72.7
6 L		5.0	72.4
10		5.5	71.9
15		6.1	71.3
20		6.3	71.1

377.38

+

Ht.

-

Elev.

26+00

15L	5.8	71.6	
F	5.5	71.9	
C	4.8	72.6	
9R	4.7	72.7	
15	4.9	72.5	

27+00

15R	4.9	72.5	
C	4.8	72.6	
8L	5.4	72.0	
9 "	4.3	72.1	
15 "	4.7	72.7	

27+50

15L	4.9	72.5	
9	4.5	72.9	
8	5.3	72.1	
C	4.8	72.6	
13 R	4.8	72.6	
15	5.0	72.4	

+

Ht.

-

Elev.

28+00

15R	5.0	72.4	
H	5.4	72.0	
7	5.0	72.4	
C	5.0	72.4	
9L	5.6	71.8	
15 "	6.2	71.2	

+50

15L	5.9	71.5	
8 "	5.7	71.7	
V	5.2	72.2	
6R	5.2	72.2	
12	5.6	71.8	
13	5.2	72.2	
15	5.2	72.2	

	+	377.38 H.I.	-	Elev
		29400		
15 R			5.5	71.9
11			6.1	71.3
C			5.6	71.8
5 L			6.6	71.8
9			5.9	71.5
15			5.5	71.9
		+50		
15 L			6.2	71.4
9			6.2	71.1
C			6.0	71.4
8 R			6.2	71.4
12			6.2	71.2
15			5.3	72.1
T.P	3.59	375.03	5.94	371.44
		30400		
15 R			3.8	71.2
13			3.8	71.2
12			4.5	70.5

	+	H.I.	-	Elev
7 R			4.0	71.0
C			4.0	71.0
8 L			4.3	70.7
10			4.0	71.0
15			4.0	71.0
		30450		
15 L			4.3	70.7
11			4.1	70.9
10			4.6	70.4
C			4.1	70.9
8 R			4.1	70.9
12			4.6	70.4
13			3.8	71.2
15			3.5	71.5
		31400		
15 R			4.0	71.0
13			4.3 4.5	70.7 70.0
9			4.5	70.5
C			4.3	70.7
10 L			4.8	70.2
16			4.3	70.7

376.03

+

H1

-

Elev

31450

16L	4.5	70.5
10	4.9	70.1
C	4.4	70.6
6R	4.6	70.6
11	5.0	70.0
13	4.3	70.7
15	4.1	70.9

32

15R	4.5	70.5
13	4.5	70.5
11	5.2	69.8
6	4.2	70.4
C	4.4	70.6
12L	4.7	70.3
15	4.5	70.5

+50

15L	4.5	70.5
10	4.7	70.3

+

H1

-

Elev

C

4.4

70.6

6R

4.5

70.5

10 "

4.9

70.1

11 "

4.5

70.5

15 "

4.7

70.3

33

15R

4.4

70.6

10

4.8

70.2

C

4.5

70.5

11L

4.7

70.3

15

4.5

70.5

+50

15L

3.9

71.1

11

4.5

70.5

C

4.3

70.7

9

4.7

70.3

11

4.1

70.9

15

4.2

70.8

T.P.

6.25

276.99

4.29

370.74

	+	141	-	Elev
		376.99		
		34100		
15 R			6.1	70.9
10			5.7	71.3
8			6.2	70.8
C			5.8	71.2
12 L			6.1	70.9
15 "			4.9	72.1
		+50		
15 L			4.0	73.0
12			5.6	71.4
5			5.3	71.7
C			5.4	71.6
10 R			5.7	71.3
15 "			5.2	71.8
		25		
15 R			4.0	73.0
13			3.9	73.1
11			5.2	71.8
C			4.7	72.3

	+	H.I.	-	Elev.
				71.2
				72.3
				72.2
				74.0
				74.0
				35+67
				15 L
				1.5
				75.5
				1.7
				75.3
				9
				3.9
				73.1
				C
				3.8
				73.2
				11 R
				4.2
				72.8
				1.5
				4.5
				72.5
				1.6
				3.2
				73.8
				3.8
				73.2
				35+67.5
				25 R
				3.6
				73.4
				3.1
				73.9
				4.2
				72.8
				4.0
				73.0
				C
				3.6
				73.4
				7 L
				3.9
				73.1
				1.0
				76.0
				1.2
				75.8
				T.P. 4.15 377.62
				3.52 → 273.47
				B.M. E. R. R. 1446 Sta 35+67.5

377.62

+ 14.1 - Elev.

36+00

25R	3.7	373.9
14'	3.1	74.5
13''	4.8	72.8
C	4.1	73.5
12L	4.2	73.4
14	1.5	76.5
15	1.5	76.1

36+50

15L	1.2	76.4
14	4.2	73.4
5'	4.0	73.6
C	4.1	73.5
11R	4.7	72.9
14	2.5	75.1
25	3.3	374.3

377.62

Sta + 14.1 - Elev.

3770428

25R	3.6	374.0
17'	3.0	74.6
15''	4.9	72.7
C	4.4	73.2
4L	4.5	73.1
7	4.9	72.7
12	1.8	75.8
15	2.0	75.6

37+50

15L	3.1	74.5
12'	3.3	74.3
10	5.3	72.3
C	5.3	72.3
12R	5.7	71.9
15''	4.4	373.2

37762

+ HT - E100

38+00

15R 5.7 371.9

14 5.6 72.0

10 6.8 70.8

C 6.3 71.3

14 L 6.5 71.1

15 5.1 72.5

39+50

15 L 6.7 70.9

13 7.9 69.7

C 7.4 70.2

10R 7.9 69.7

11 6.8 70.8

15 7.0 70.6

39+00

15R 8.2 69.4

10 8.1 69.5

9 8.7 68.9

C 8.3 369.3

37762

+ HT - E100

6 L 8.3 369.3

12 8.5 68.8

15 7.9 69.7

T.P. 1.95 371.31 8.26 369.36

39+50

15L 2.8 68.5

12 3.4 67.9

7 2.8 68.5

C 2.8 68.5

7R 2.2 68.1

8 2.5 68.8

15 2.7 68.6

40+00

15R 3.4 67.9

8 3.3 68.0

7 3.8 67.5

C 3.4 67.9

6 L 3.4 67.9

13 3.9 67.4

15 3.4 367.9

371.31

+ H1 - E100

40450

15L	4.0	367.3
12.	4.5	66.8
7	4.1	67.2
C	4.1	67.2
PR	4.4	66.9
9	4.0	67.3
15	4.0	67.3

41400

15R	4.3	67.0
10	4.4	66.9
5	5.0	66.3
e	4.6	66.7
7L	4.6	66.7
14	5.1	66.2
15	4.7	366.6

371.31

+ H1 - E100

41450

15L	4.9	366.4
14	5.5	65.8
6	5.0	66.3
C	4.9	66.4
7R	5.4	65.9
9	4.6	66.7
15	4.8	66.5

42400

15R	4.6	66.7
7	4.8	66.5
6	5.1	65.7
C	5.3	66.0
7	5.2	66.0
14	5.8	65.5
15	5.2	366.1

271.31

+

141

-

E100

43+50

15L	6.1	365.7
7	5.7	65.6
C	5.6	65.7
6R	5.8	65.5
7	5.2	65.9
15	5.5	65.8

43+00

15R	5.5	65.8
12	5.2	66.1
7	5.6	65.7
6	6.3	65.0
C	6.0	65.3
9L	6.0	65.3
15	6.5	364.8

371.31

+

141

-

E100

43+50

15L	6.1	364.5
7	6.3	65.0
C	6.2	65.1
6R	6.4	64.9
8	5.9	65.4
15	6.5	64.8

T.P.

4.48

369.57

6.22

365.09

44+00

15R	5.2	64.1
8	4.6	65.0
7	6.0	64.6
C	4.8	64.8
7L	4.7	64.9
14	6.1	64.5
15	4.7	364.9

369.57

+

+1

-

Elev.

44+50

15L	5.1	364.5
14	5.4	64.2
7	4.9	64.7
C	4.9	64.7
7 R	5.2	64.4
8	4.5	65.1
15	4.7	64.9

45+00

15R	5.4	64.2
9	4.8	64.8
8	5.2	64.4
C	4.8	64.8
7 L	4.9	64.7
13	5.0	64.3
15	5.0	364.6

+

+1

-

Elev.

45+29 Cul. 10' Pipe 0.70

17' L - End Cul bottom	6.00	363.6
15	5.6	64.0
14	5.1	64.5
C	4.7	64.9
9 R	5.3	64.3
10	4.9	64.7
12 End Cul bottom	6.13	363.44
15	6.1	63.5

45+50

15 R	5.5	64.1
11	4.9	64.7
10	5.2	64.4
C	4.7	64.9
13 L	5.1	64.5
14	4.7	64.9
15	5.0	364.6

369.57

NA
46+00

	-	Elev
15L	4.5	365.1
14	5.1	64.5
6	4.5	65.1
C	4.6	65.0
9 R	5.1	64.5
10	4.7	64.9
15	4.9	64.7

46+50

15R	4.7	64.9
10	4.3	65.3
9	5.0	64.6
C	4.4	65.2
6 L	4.0	65.3
14	4.9	64.7
15	4.5	365.1

NA

-

Elev

47+00

15L	4.9	364.7
7	4.2	65.4
C	4.2	65.4
8R	4.7	64.9
9	4.1	65.5
15	4.4	65.2

47+50

15R	4.0	65.3
E	3.8	65.8
7	4.5	65.1
C	4.2	65.4
8L	4.1	65.5
15	4.7	364.9

	+	NI	-	Elev
		369.57		
		48+0		
15L			4.1	365.3
14			4.5	65.1
7			2.9	65.7
C			4.0	65.6
7 R			4.2	65.4
P			3.2	66.2
20			3.6	66.0
T.P.	5.06	370.63	4.00	365.57

4P+50

20R			4.7	65.9
11			4.0	66.3
9			5.2	65.4
C			4.8	65.8
8 L			4.8	65.8
13			5.2	65.4
15			4.0	366.6

	+	NI	-	Elev
		49+0128		
15L			4.1	366.5
11			4.3	66.3
10			5.1	65.5
C			4.7	65.9
11R			4.8	65.8
13			3.9	66.7
25			4.0	66.3

49+50

25R

25R			4.4	66.2
10			4.3	66.3
10			5.0	65.6
C			4.6	66.0
6 L			4.6	66.0
11			5.1	65.5
13			3.7	66.9
15			3.6	367.0

370.63

+

141

-

Elev

50400

15L

42

366.4

12

51

65.5

C

46

66.0

9R

48

65.8

11

40

66.6

20

43

66.3

50450

15R

41

66.5

12

41

66.5

9

49

65.7

C

46

66.0

6L

46

66.0

12

51

65.5

15

40

366.6

+

141

-

Elev

51400

15L

41

366.5

11

52

65.4

C

47

65.9

10R

50

65.6

12

40

66.6

15

41

66.5

51450

15R

46

66.0

9

52

65.4

C

49

65.7

10L

63

65.3

15

49

65.7

514360 = 0400

15L

50

65.6

10

54

65.2

C

51

65.5

9

52

65.4

11

48

65.8

15

46

66.0

T.P

3.19

369.18

4.64

365.99

B.M. E. R. P. Hub Sta 0400

369.18

+ Ht. - E10r

0+50

15R

3.3

365.9

10

4.1

65.1

C

3.9

65.3

11

4.4

64.8

14

4.0

65.2

15

4.2

65.0

1+00

15L

4.6

64.6

13

4.4

64.8

12

4.8

64.4

C

4.2

65.0

10R

4.4
4.0

64.8

65.2

15

4.3

64.9

1+50

15R

4.2

65.0

11

4.1

65.1

10

4.7

64.5

C

4.4

364.8

+ Ht. - E10r

6L

4.6

364.6

13

5.2

64.0

15

5.0

64.2

2+00

15L

5.0

64.2

14

5.3

63.9

C

4.6

64.6

9R

4.9

64.3

10

4.6

64.6

15

4.5

64.7

2+60

15R

4.0

65.2

12

4.0

65.2

10

4.5

64.7

C

4.5

64.7

13

5.2

64.0

15

4.8

364.4

	+	HT	-	Elev
		369.18		
		3+00		
15L			41	365.1
14			52	63.9
7			47	64.5
C			45	64.7
10 L			49	64.3
11			45	64.7
15			48	64.4

3+00

15R			5.3	63.9
12			{ 4.6 5.1	64.6 64.1
C			4.5	64.7
7 L			4.8	64.4
13			5.3	63.9
15			3.7	365.5

	+	HT	-	Elev
		4+00		
15L			5.3	363.9
12			5.2	63.8
6			4.9	64.3
C			4.7	64.5
8 R			4.8	64.4
12			5.3	63.9
15			5.5	63.7

4+00

15R			5.8	63.4
13			5.4	63.8
8			4.9	64.3
C			4.8	64.4
7 L			5.0	64.2
13			5.5	63.7
14			5.1	64.1
15			5.0	364.2
T.P.	5.04	369.73	4.79	364.39

369.43

+

M1

-

Elev

5700

15 L 5.9 363.5

7 5.2 64.1

C 5.1 64.3

14 R 5.3 64.1

15 5.2 64.1

5+17 Cul.

20 R 6.7 62.7

14.4 - End Cul bottom 6.55 362.88

13 5.5 63.9

7 5.2 64.2

C 5.0 64.4

13 L 5.6 64.0

14 - End Cul bottom 6.48 362.95

15 6.4 363.0

+

M1

-

Elev

5760

15 L 5.6 363.8

7 5.1 64.3

C 5.0 64.4

14 R 5.2 64.2

12 5.6 63.8

15 6.0 63.4

20 6.3 63.1

6700

15 R 5.0 64.4

12 4.2 65.0

10 5.0 64.4

C 4.8 64.6

8 L 4.9 64.5

14 5.3 63.1

15 5.1 364.3

369.43

+

147.

-

FIN

6+50

15 L	48	364.6	
14	5.1	64.3	
8	4.6	64.8	
e	4.7	64.7	
10 R	5.0	64.4	
11	4.8	64.6	
15	5.2	64.2	

7+20

15 R	5.0	64.4	
11	{ 4.2 5.0	{ 65.2 64.4	
5	4.5	64.9	
C	4.4	65.0	
8 L	4.4	65.0	
15	5.0	364.4	

+

141

-

Elev.

7+50

15 L	4.4	365.0	
7	3.9	65.5	
C	4.0	65.4	
8 R	4.2	65.2	
10	4.6	64.8	
11	4.0	65.4	
15	4.5	64.9	

8+00

15 R	4.2	65.2	
11	3.3	66.1	
10	3.7	65.7	
e	3.4	66.0	
8	3.5	65.9	
15	3.9	365.5	

	+	369.43	-	Elor
		8+50		
15L			2.3	367.1
4			3.5	65.9
6			3.2	66.4
C			2.1	66.4
9 R			3.1	66.3
10			2.7	66.7
15			3.2	66.2
		9+00		
15R			2.5	66.9
11			2.2	67.0
10			3.0	66.4
C			2.8	66.6
7 L			2.9	66.5
13			3.3	66.1
15			2.6	366.8
T.P	±12	370.80	2.75	366.68

	+	370.80	-	Elor
		9+50		
15L			2.7	368.1
14			2.6	66.2
8			2.2	66.6
C			4.1	66.7
10 R			4.5	66.3
11			3.5	67.3
15			3.6	67.2
		10+00		
15R			3.7	67.1
12			3.3	67.5
12			2.8	66.0
6			4.2	66.6
C			4.2	66.6
13			4.5	66.3
15			2.6	368.2

370.80

+

141

-

Elev

10+50

15L 26 368.4

12 47 66.1

6 43 66.5

C 42 66.6

6R 43 66.5

12 47 66.1

13 33 67.5

15 25 67.3

11+00

15R 24 67.4

13 24 67.4

12 49 65.9

6 44 66.4

C 43 66.5

8L 46 66.2

13 50 65.8

15 28 368.0

+

141

-

Elev

11+50

15L 26 367.2

13 55 65.3

C 48 66.0

FR 48 66.0

13 53 65.5

15 27 67.1

12+00

15R 39 66.9

14 57 65.1

9 54 65.4

e 55 65.3

12L 61 64.7

13 46 66.2

15 44 366.4

BMW R 146 Sta 12+08 294 366.86

	+	37080 HJ	-	Elev
		12750		
10 L			5.0	365.8
14			4.9	65.9
12			6.9	63.9
7			6.5	64.3
C			6.3	64.5
9 R			6.3	64.5
13			6.6	64.2
15			4.8	66.0

13700

16 R			6.0	64.8
14			7.6	63.2
9			7.1	63.7
C			7.1	63.7
7 L			7.4	63.4
11			8.0	62.8
13			6.6	64.2
15			6.6	364.2

	+	HJ	-	Elev.
		12750		
15 L			7.3	363.5
12			7.3	63.5
11			9.0	61.8
5			8.2	62.6
C			8.1	62.7
8 R			8.2	62.6
14			8.7	62.1
15			6.8	64.0
TIP	0.57	362.35	8.02	362.78

14700

15 R			7.3	61.1
10			1.7	61.7
C			1.6	61.8
5			1.9	61.5
10			2.5	60.9
12			0.7	62.7
15			0.9	362.5

36235

	+	HT	-	Elev
		147		
		14750		

15 L 07 367.7

11 09 62.5

9 36 59.8

5 31 60.3

C 27 60.7

8 R 27 60.7

15 34 60.0

15700

15 R 40 59.4

7 39 59.5

C 41 59.3

8 L 47 58.7

10 26 60.8

15 21 361.3

	+	HT	-	Elev
		157		
		15750		

15 L 32 359.8

9 45 58.9

8 58 57.6

C 52 58.2

5 R 49 58.5

15 50 58.4

16700

15 R 60 57.4

7 60 57.4

C 61 57.3

7 L { 56.6 56.8

15 { 57.4 58.0

57 57.7

16750

15 L 71 56.3

9 71 56.3

5 76 55.8

C 72 56.2

9 R 68 56.6

15 68 356.6

363.35

+

M

-

Elev

17+00

15R

7.5

355.9

20L

7.2

353.1

7

7.6

55.8

15

7.1

53.2

C

8.1

55.3

9

7.5

52.8

15L

8.6

54.8

C

7.4

52.9

T.P.

4.98

360.26

8.07

355.25

1.R. - End cul botm.

7.3

53.0

17+50

2

6.2

54.1

15L

6.2

54.1

6

5.4

54.9

C

5.4

54.9

15

5.1

55.2

9R

4.9

55.4

22

5.1

55.2

15

4.8

55.5

15

5.4

54.9

18+00

26.5

6.9

53.4

15R

5.1

55.2

15R

5.1

55.2

6

5.2

55.1

4

5.7

54.6

1

5.7

54.6

C

6.6

53.7

C

6.6

53.7

15L

7.5

52.8

15L

7.0

553.3

20

7.9

352.4

+

M

-

Elev.

18+14 Cul.

360.26

19700

	+	-	Elev
20 L		7.5	352.8
15		7.4	52.9
C		6.2	54.1
4 R		5.5	54.8
15		4.8	55.5

19750

15 R		4.7	55.6
6		5.0	55.3
C		5.5	54.8
15		6.0	53.8
20 L		6.6	53.7

20700

20 L		5.9	54.4
15		5.9	54.4
C		5.5	54.8
9 R		4.6	55.7
15		4.3	356.0

147

20750

	+	-	Elev
15 R		3.8	356.5
C		2.6	56.7
15 L		4.6	55.7
20 L		4.9	55.4

21700

15 L		3.7	56.6
C		3.5	56.8
10 R		3.1	57.2
15		2.9	57.4

21750

15 R		2.1	58.2	
7		2.4	57.9	
C		3.0	57.3	
3 L		2.7	57.6	
15 L		3.5	356.8	
T.P	11.39	368.72	2.93	357.23

368.72

+

22+00

-

Elev

25L

13.1

355.6

15

11.9

56.8

C

11.4

57.3

2R

11.0

57.7

9

10.9

57.8

10

11.4

57.3

15

11.0

57.7

22+50

15R

9.4

59.3

P

11.0

57.7

C

11.4

57.3

3L

10.8

57.9

9

10.8

57.9

15

11.5

57.2

20

12.2

356.5

BM ERP Hub Sta 22+86.73

47.7

363.95

+

M1

-

Elev

22+86.73 PC

20L

11.0

357.7

15

11.4

57.3

10

11.4

57.3

C

10.5

58.2

9R

9.2

59.5

15

9.6

60.1

22+00

15R

8.3

60.4

7

9.0

59.7

C

9.1

59.6

4L

9.3

59.4

6.

10.7

58.0

10

11.2

57.5

13

10.8

57.9

15

10.9

357.8

368.72

	+	MI	-	E107
				23+00
15L			8.7	360.0
1V			8.2	60.5
E			7.8	60.9
6R			7.0	61.4
15			6.7	62.0
				24+00
15R			5.1	63.6
7			5.1	63.1
1			6.3	62.4
C			5.7	63.0
1L			4.7	64.0
15			6.2	62.5
				24+50
15L			6.1	62.6
6			5.2 6.3	63.3 62.4
C			5.8	62.9
7R			5.2	63.5
15			4.9	363.8

	+	MI	-	E107
				25+00
15R			5.6	363.1
C			6.0	62.7
15L			6.8	61.9
				25+50
15L			7.1	61.6
C			6.4	62.3
15R			6.3	62.4
				26+00
15R			5.7	63.0
13			6.8	61.9
C			6.7	62.0
12L			7.3	61.4
15			7.4	361.3
TIP	3.22	365.25	6.69	362.03

36525

+

M1

-

Elev

26+50

			Elev
15L		43	361.0
C		36	61.7
5R		36	61.7
10		39	61.4
12		28	62.5
15		26	62.7

26+66²⁴ EC

			Elev
15R		28	62.5
12		30	62.3
10		41	61.2
C		37	61.6
15L		42	61.1

27+00

			Elev
15L		45	60.8
C		39	61.4
9R		42	61.1
11		33	62.0
15		31	62.2

+

M1

-

Elev.

27+50

			Elev.
15R		27	361.6
11		38	61.5
10		46	60.7
5		43	61.0
C		43	61.0
6L		46	60.7
15		49	60.4

28+00

			Elev.
15L		53	60.0
11		54	59.9
6		50	60.3
C		48	60.5
6		49	60.4
10		51	60.2
11		45	60.8
15		44	360.9

	+	365.25	-	E 100
		141		
		28+50		
15R			56	360.7
12			56	60.7
11			54	59.9
C			52	60.1
10L			58	59.5
15			57	59.6
		29+00		
15L			62	59.1
6			57	59.6
C			54	59.9
7R			56	59.7
11			60	59.3
13			51	60.2
15			50	560.3

	+	141	-	E 100
		29+50		
15R			58	359.5
11			63	59.0
C			58	59.5
5			61	59.2
15			68	58.5
		30+00		
15L			74	57.9
9			67	58.7
C			60	59.3
15			65	58.9
		30+12		
15R			63	59.0
13			64	58.9
7			59	59.4
C			60	59.3
8L			66	58.7
10			72	58.1
15			72	358.1

36578

+ 141 - Elev

30450

15L		6.9	358.4
C		6.1	59.2
13R		6.2	59.1
15		6.0	59.3

31400

15R		6.2	59.1	
C		6.4	58.9	
15L		7.0	58.3	
T.P.	4.19	363.05	6.59	358.86

31450

20L		6.3	56.8
10		5.7	57.4
C		4.5	58.6
13		4.7	58.4
20		5.0	358.1

+ 141 - Elev

3178⁵⁰

20R		6.5	356.6
15		6.1	57.0
12		5.0	58.1
6		4.6	58.5
C		4.7	58.4
9L		6.5	57.6
12		6.8	56.3
15		7.1	56.0
20		7.7	55.7

B.M. Near R. A. Hub Sta 3172⁵⁰ 8.02 355.03

3178 Cul

20L		7.1	55.5
15		7.6	55.5
10.5 = End cul bottom		7.15	355.90
9		5.5	57.6
C		4.7	58.4
5R		4.6	58.5
12		4.9	58.7
1.5 End Cul bottom		6.8	56.3
20		6.3	356.8

363.05

+

141

-

E 105

32400

20R

6.5

356.6

15

6.4

56.7

12

4.9

58.2

C

4.7

58.4

10L

5.6

57.5

12

6.9

56.2

15

7.3

55.8

20

7.5

55.6

32450

20 L

6.8

56.3

15

6.9

56.2

12

6.2

56.9

10

5.4

57.7

C

4.8

58.3

13

5.2

57.9

15

5.9

57.2

20

6.1

357.0

+

141

-

E 105

33400

15R

4.7

358.4

C

4.6

58.5

15L

5.2

57.9

33450

15L

5.4

57.7

C

4.7

58.4

12R

4.5

58.6

15

4.6

58.5

34400

15R

5.1

58.0

7

4.9

58.2

C

5.0

58.1

15

6.0

57.1

34450

20L

7.3

55.8

16

7.1

56.0

15

6.4

56.7

13

5.9

57.2

C

5.1

58.0

15R

5.6

57.5

17

6.3

56.8

20

6.3

356.8

	+	14	-	Elev.
		363.05		
		34774		
20 R			6.1	357.0
15' - End Cul botm			6.9	56.2
14			5.5	57.6
4			5.2	58.1
C			5.0	58.1
14			6.0	57.1
15' - End Cul botm			7.5	55.6
20			7.4	55.3
		35400		
20 L			6.6	56.5
15			5.9	57.2
C			5.0	58.1
13			5.5	57.6
15			5.8	357.3

	+	14	-	Elev.
		35450		
15 R			4.8	358.3
14			5.2	57.7
C			4.9	58.2
7			5.1	58.0
15 L			6.0	57.1
		35462	4.7	EC
15 L			5.8	57.3
7			5.0	58.1
C			4.8	58.3
14			5.3	57.8
15 R			4.6	58.5
T.P. BM.	5.41	365.32	3.14	359.91
		36400		
15 R			6.0	59.3
14			6.1	59.2
13			7.0	58.3
7			6.8	58.5
C			6.8	58.5
7 L			7.0	58.3
15			7.7	357.6

Near R.P. Hub
Sta 35+62.42

365.32

+

141

-

Elev

36+50

15L	7.5	357.8
7	6.7	58.6
C	6.5	58.8
14	6.7	58.6
15R	5.9	59.4

37+00

15R	6.6	58.7
7	6.3	59.0
C	6.2	59.1
7L	6.5	58.8
15	7.1	58.2

37+50

15L	6.5	58.9
13	6.1	58.5
C	6.1	59.2
15R	6.0	359.3

365.32

+

141

-

Elev

38+00

15R	6.2	359.1
C	6.0	59.3
10L	6.4	58.9
15	6.5	58.8

38+50

15L	7.1	58.2
8	6.2	59.1
C	6.7	59.6
7R	6.7	59.6
15	5.8	59.5

39+00

15R	6.5	59.8
8	5.3	60.0
C	5.4	59.9
12L	6.0	59.3
15	6.7	358.6

365.32

+

N1

-

Elev

39+50

15L

4.7

360.6

14

5.2

60.1

C

4.8

60.5

PR

4.8

60.5

14

5.2

60.1

15

4.7

60.6

T.P

6.13

366.97

4.48

360.94

40+00

15R

5.1

61.9

14

5.3

61.7

13

6.5

60.5

C

6.2

60.8

8L

6.1

60.9

14

6.5

60.5

15

6.2

360.8

366.97

+

N1

-

Elev

40+50

15L

6.1

360.9

P

5.6

61.4

C

5.6

61.4

7R

5.8

61.7

14

6.2

60.8

13

4.4

62.6

15

4.3

62.7

41+00

15R

6.0

63.0

13

4.2

62.8

12

5.9

61.1

C

5.5

61.5

9L

5.4

61.6

15

5.7

361.3

366.97

+ 141 - Elev

41+25¹² DC

		Elev
15L	57	361.3
7	53	61.7
C	54	61.6
7R	54	61.6
12	58	61.2
14	43	62.7
15	41	62.9
41+50		
15R	41	62.9
14	57	61.3
7	54	61.6
C	53	61.7
8L	53	61.7
15	53	361.2

+ 141 - Elev

42+00

		Elev
15L	5.1	361.9
14	5.5	61.5
C	5.0	62.0
15R	5.4	61.6

42+38²⁶

15R	5.2	61.8
C	4.8	62.2
15L	5.2	61.8

BM. Near R.P. Hub Sta 42+38²⁶ 3.43 363.54

42+50

15L	5.0	62.0
14	5.2	61.8
C	4.8	62.2
15R	5.1	61.9

43+00

15R	4.0	63.0
14	5.0	62.0
C	4.6	62.4
15L	5.1	361.9

	+	N.T.	-	Elev.
		366.97		
		43+50		
15L			48	362.2
C			54	626
14R			48	622
15			36	634
		44+00		
15R			35	635
14			41	624
C			42	628
15+			41	628
		44+50		
15L			46	624
C			40	630
14R			43	627
15			31	363.9
T.P	5.91	368.84	404	362.93

	+	N.T.	-	Elev.
		368.84		
		45+00		
15R			50	363.8
13			63	625
C			57	631
12			61	627
15L			54	634
		45+50		
15L			53	635
13			58	630
C			46	632
15			56	632
		46+00		
15L			58	630
C			54	634
13R			60	628
15			57	363.1

	+	NI	-	Elev
		368.84		
		467.50		
15 L			6.0	362.8
9			5.5	63.3
C			5.2	63.6
15R			5.5	63.3
		477.00		
15R			5.3	63.5
C			4.8	64.0
15L			5.6	63.2
		477.50		
20L			6.8	62.0
15			5.8	63.0
12			4.9	63.9
C			4.8	64.0
13			5.3	63.5
15 R			4.7	364.1

	+	NI	-	Elev
		368.84		
		487.00		
15R			3.8	365.0
13			4.9	63.9
C			4.5	64.3
12L			4.9	63.9
15			4.2	64.6
		487.50		
15L			4.2	64.6
13			4.1	64.7
12			4.5	64.3
C			4.3	64.5
14			4.5	64.3
15R			3.4	65.4
		497.00		
15R			3.4	65.4
14			4.6	64.4
C			4.2	64.6
13L			4.6	64.2
14			3.9	64.9
15			4.0	364.8

	+	368.84	-	E 100
		147		✓
T.P.	5.15	369.81	4.18	364.66
		49+50		
15L			5.1	364.7
14			4.9	64.9
13			5.5	64.3
C			5.1	64.7
9R			5.1	64.7
13			5.5	64.3
14			4.4	65.4
15			4.4	65.4
		50+00		
15R			4.4	65.4
13			5.4	64.4
C			5.1	64.7
13L			5.4	64.4
15			5.0	364.8

	+	369.81	-	E 100
		147		
		50+50		
15L			5.5	364.3
C			5.1	64.7
15R			5.4	64.4
		51+00		
15R			5.2	64.6
C			5.0	64.8
13			5.4	64.4
15L			5.1	64.7
		51+50		
15L			5.1	64.7
C			4.9	64.9
15R			5.1	64.7
		52+00		
15R			5.0	64.8
C			4.7	65.1
14L			5.2	64.6
15			4.9	364.9

	+	369.81	-	Elor.
		52+50		
15L			4.5	365.3
14			4.9	64.9
C			4.6	65.2
15R			4.9	64.9
		53+00		
15R			4.8	65.0
C			4.4	65.4
15L			4.5	65.3
		53+50		
15L			4.2	65.6
13			4.8	65.0
C			4.3	65.5
15R			4.8	365.0
T.P.	5.10	370.64	4.27	365.54
BM Near R.P. Huk Sta		53+56.22	6.43	364.21

	+	370.64	-	Elor.
		52+00		
15L			4.7	365.9
13			5.6	65.0
C			5.0	65.6
15R			5.6	65.0
		54+50		
15R			5.4	64.7
C			5.4	65.2
14			6.1	64.5
15L			5.4	65.2
		55+00		
15L			5.5	65.1
13			6.3	64.3
C			5.7	64.9
15R			6.2	64.4
		55+50		
15R			6.5	64.1
C			6.0	64.6
14			6.5	64.1
15			6.2	364.4

	+	NI	-	Elev
		370.64		
		56+00		
15L			6.7	363.9
14			7.0	63.6
C			6.5	64.1
15R			6.9	63.7
		56+50		
15R			7.1	63.5
C			6.9	63.7
15L			7.2	63.4
		57+00		
15L			7.7	62.9
C			7.2	63.4
15R			7.7	62.9
TP	3.84	367.32	7.16	363.48
		57+50		
15R			4.7	62.6
C			4.1	63.2
7L			4.3	63.0
15			4.7	362.6

	+	NI	-	Elev
		367.32		
		58+00		
15L			5.4	361.9
12			4.8	62.5
C			4.3	63.0
15R			5.0	62.3
		58+50		
15R			5.1	62.2
C			4.7	62.6
7L			4.8	62.5
15			5.7	61.6
		59+00		
15L			5.5	61.8
6			5.0	62.3
C			4.9	62.4
15R			5.3	62.0
		59+50		
15R			5.3	62.0
C			5.2	62.1
15L			5.3	362.0

367.32

+

HT

-

Elev

60+00

15L	5.2	362.1
10	5.6	61.7
C	5.3	62.0
10 R	5.2	62.1
15	5.5	61.8

60+50

15R	6.0	61.3
10	5.5	61.8
C	5.5	61.8
10 L	5.7	61.6
11	5.3	62.0
15	5.3	62.0

61+00

15L	5.7	61.6
11	5.3	61.7
10	6.1	61.2
C	5.7	61.6
10 R	5.9	61.4
15	6.2	361.1

367.32

+

HT

-

Elev.

61+50

15R	6.5	361.8
10	6.0	61.3
C	5.8	61.5
10 L	6.2	61.1
11	5.4	61.9
15	5.4	61.9

T.P	365	365.13	5.84	361.48
-----	-----	--------	------	--------

62+00

15L	3.3	61.8
11	3.4 2.4	61.7 60.7
C	3.9	61.2
10	4.1	61.0
15R	4.6	60.5
15R	5.0	60.1
9	4.4	60.7
C	4.3	60.8
11L	4.7	60.4
12	4.1	61.0
15	4.2	60.9

	+	365.13	-	Elev
		141		
		63+00		
15 L			5.1	360.0
P			4.7	60.4
C			4.6	60.5
9			4.7	60.4
15 R			5.2	59.9
		63+50		
15 R			5.1	59.3
7			4.9	60.2
C			4.9	60.2
P L			5.0	60.1
15			6.1	59.0
20			6.6	58.5
		63+73	C41	
20 L			7.1	58.0
15			7.0	58.1
13			6.9	58.2
10			5.7	59.7
C			4.9	60.2
14			5.2	59.9
15			5.7	59.4
16 R			6.6	58.5
19			6.6	58.5

	+	365.13	-	Elev
		141		
		63+76 ²⁴	7.30	357.83 ✓
		64+00		
18 R			6.3	358.8
15			6.2	58.9
14			5.4	59.7
C			5.0	60.1
8 L			5.2	59.9
15			6.3	58.8
20			6.6	58.7
		64+50		
15 L			5.3	59.8
13			5.4	59.7
12			5.8	59.3
C			5.2	59.9
8 R			5.3	59.8
15			5.8	359.3

36513

+ H1. - Elev

65+00

15 R	5.8	357.3
C	5.4	57.7
FL	5.5	57.6
14	6.0	57.1
15	5.0	60.1

65+50

15 L	5.5	57.6
14	6.3	58.8
C	5.7	57.4
9 R	5.7	57.4
15	6.1	57.0

66+00

15 R	6.6	58.5		
C	6.0	59.1		
9 L	6.2	58.9		
15	6.7	358.4		
T.P.	3.80	362.90	6.03	359.10

36290

+ H1. - Elev

66+50

20 L	5.7	357.2
15	5.5	57.4
8	4.4	58.5
C	4.2	58.7
12 R	4.6	58.3
15	5.6	57.3
20	5.6	57.3

66+60 cul

20 R	5.3	57.6
15	6.4	56.5
14	5.0	57.9
12	4.5	58.4
C	4.3	58.6
7	4.6	58.3
14	5.5	57.4
15	6.0	56.9
20 L	7.1	355.2

	+	362.90	-	14.1	-	Elev
				67	+00	
20L				59		357.0
15				56		57.3
6				45		58.4
C				44		58.5
13				50		57.9
15				56		57.3
18 R				53		57.6
				67	+50	
15 R				51		57.8
C				45		58.4
15 L				52		57.7
				68	+00	
15 L				47		58.2
13				51		57.8
C				45		58.4
10 R				46		58.3
				52		357.7

	+	362.90	-	14.1	-	Elev
				67	+50	
15 R				49		358.0
C				46		58.3
12				52		57.7
15 L				41		58.8
				69	+00	
15 L				48		58.1
12				56		57.3
C				49		58.0
15 R				55		57.4
				69	+50	
15 R				58		57.1
C				54		57.5
15 L				61		56.8
				70	+00	
20 L				84		57.5
15				78		55.1
9				64		56.5
C				57		57.2
12				61		56.8
15				70		53.9
20				44		356.5

362.90

+

NA

-

Elev

20+50 Cul

20 R		7.1	355.8
15		7.7	55.2
13		7.7	55.2
10		6.1	52.8
C		5.9	57.0
8 L		6.3	52.6
15		8.9	54.0
20		9.7	53.2

T.P	6.19	363.24	5.85	357.05
		71+00		

20 L		8.1	55.1
15		8.0	55.2
11		7.5	55.7
8		6.6	52.6
C		6.0	57.2
12 R		6.3	52.9
15		7.0	52.2
20		7.2	356.0

363.24

+

NA

-

Elev

71+50

15 R		6.4	356.8
11		6.0	57.2
C		5.9	57.3
9		6.5	52.7
12		7.5	55.7
15		7.9	55.3
20 L		8.4	54.8

72+00

20 L		8.3	54.9
15		7.8	55.4
12		7.3	55.9
8		6.3	52.9
C		5.6	57.6
13		6.0	57.2
15		6.6	52.6
18 R		7.0	356.2

	363.24		E10r
±	141	-	
	72+50		
20 R		64	356.8
15		57	57.5
C		52	58.1
11		56	57.6
15		68	56.5
20 L		72	56.0
	73+00		
15 L		51	58.1
11		53	57.9
C		45	58.6
10		47	58.5
15 R		51	58.1
	73+50		
15 R		42	59.0
C		40	59.2
11		47	58.5
15 L		36	359.6

	363.24		E10r
±	141	-	
	74+00		
15 L		42	359.0
12		45	58.7
C		38	59.4
15 R		40	59.2
	74+50		
15 R		38	59.4
C		35	59.7
12		45	58.9
15		52	58.0
20 L		55	59.7
	75+00		
20 v		49	58.3
15		45	58.7
9		34	59.8
C		29	60.3
15 R		21	360.1

	+	360.24	-	Elev
		141		
		75+50		
15R			26	360.6
C			23	60.9
10			28	60.4
15			36	59.6
20 L			39	59.3
T.P.	9.23	370.15	252	360.92
		76+00		
20L			10.8	59.4
15			10.5	59.7
10			9.2	61.0
C			8.7	61.5
12 R			8.8	61.4
15			9.3	60.9
		76+50		
15 R			8.3	61.9
9			7.9	62.3
C			7.9	62.3
10			8.5	61.7
15			9.1	61.1
20 L			9.3	360.9

	+	370.15	-	Elev
		77+00		
15L			6.4	363.8
11			7.5	62.7
C			6.9	63.3
15R			7.3	62.9
		77+50		
15 R			4.1	66.1
14			4.0	66.2
13			5.9	64.3
C			5.7	64.5
11			6.4	63.8
15 L			4.0	66.2
		78+00		
15L			4.9	65.3
12			5.9	65.3
			5.6	64.6
C			4.9	65.6
9			5.0	65.2
13			5.4	64.8
15			2.5	367.7

	+	47	-	Elev
		78+50		370.15
15R			3.6	366.6
13			4.9	65.3
9			4.4	65.8
C			4.4	65.8
12			5.1	65.1
14			4.0	66.2
15 L		79+00	4.2	66.0
15 L			3.4	66.8
10			3.1	67.1
12			4.9	65.3
C			4.2	66.0
5			4.2	66.0
13			4.7	65.5
15 R		79+50	3.0	67.2
15 R			3.8	66.4
13			4.5	65.7
C			4.2	66.0
11			4.7	65.5
12			3.0	67.2
15 L			3.1	367.1
			5.42	364.78

BM. Near R.P. Hub 79+17.20

	+	47	-	Elev
				370.15
		80+00		
15L			3.0	367.2
12			3.1	67.1
11			4.4	65.4
C			4.4	65.8
12			4.5	65.7
15 R		80+50	3.1	67.1
15 R			2.9	66.3
12			5.0	65.2
C			4.9	65.3
9			5.2	65.0
11			3.3	66.9
15 L			2.5	66.7
T.P.	0.39	365.63	4.91	365.24
		81+00		
15L			4.4	66.0
11			4.2	65.8
10			1.5	64.1
C			1.2	64.4
13			1.3	64.3
15 R			0.3	365.3

	365.63	-	Elev.
	147 81+50		
15R		1.7	363.9
14		2.1	63.5
C		2.2	63.4
10		2.5	63.1
11		1.6	64.0
15 L		1.0	64.3
15 L	82+00	3.3	62.3
13		3.1	62.5
12		2.7	61.9
C		3.1	62.5
8		3.0	62.6
15 R		3.5	62.1
15 R	82+50	4.5	61.1
10		4.1	61.5
C		4.2	61.2
10		4.7	60.9
15 L		5.0	360.6

	365.63	-	Elev.
	147 82+00		
15L		5.6	360.0
C		5.1	60.5
11		5.1	60.5
15R		5.4	60.2
15R	82+00	6.0	59.6
C		5.7	59.9
15L		6.1	59.5
15L	84+00	6.5	59.1
C		6.0	59.6
15R		6.2	59.4
15R	84+00	6.4	59.2
C		6.2	59.4
15L		6.9	58.7
15L	85+00	7.4	58.2
14		7.1	58.5
C		6.4	59.2
15R		6.7	58.9
T.P	3.34	6.35	359.29
15R		4.1	58.5
C		3.6	59.0
15L		4.6	358.0

	+	362.62	141	-	Elev.
			86+00		
15L				50	357.6
C				41	58.5
15R				45	58.1
			86+50		
15R				34	59.2
14				47	57.9
C				42	58.4
15L				53	57.3
			87+00		
15L				57	56.9
C				45	58.1
15R				51	57.5
			87+50		
15R				40	58.6
14				52	57.4
C				48	57.8
13				55	57.1
15L				62	56.4
			88+00		
15L				62	56.4
C				52	57.4
14				36	57.0
15R				46	358.0

	+	362.62	141	-	Elev.
			88+00		
15R				x4	358.2
				x4	58.2
14				59	56.7
8				54	57.2
C				54	57.2
15L				64	56.2
			89+00		
20L				76	55.0
15				73	55.3
8				59	56.7
C				54	57.2
13				62	56.4
15R				54	57.2
			89+50		
20R				62	56.4
15				68	55.8
11				59	56.7
C				57	56.9
9				63	56.3
10				78	55.1
15				81	54.5
20L				85	354.1

	+	MS	-	Elev
		362.62		
T.P	5.10	362.03	5.69	356.93
		90400		
20 L			8.0	354.0
15			7.5	54.5
10			6.9	55.1
7			5.7	56.3
C			5.2	56.8
10			5.4	56.6
13			6.7	55.3
15			6.1	55.9
20 R			5.7	56.3
		90425	6.4	
20 R			5.5	56.5
16			5.7	56.3
15			6.4	55.6
14			7.1	54.9
10			5.2	56.8
C			5.3	56.7
9			5.7	56.3
12			7.3	54.7
15			7.8	54.2
20 L			7.9	354.1

	+	MS	-	Elev
		362.03		
		90450		
20 L			7.6	354.4
15			7.3	54.7
10			6.5	55.5
8			5.8	56.2
C			5.2	56.8
10R			5.5	56.5
14			6.5	55.5
15			5.5	56.5
20 R			5.3	56.7
		91400		
20 R			5.3	56.7
15			5.5	56.5
14			6.1	55.9
10			5.4	56.6
C			5.2	56.8
8			5.7	56.3
15			7.0	55.0
20 L			7.5	354.5

	362.03		Elev
	147	-	
	91+50		
20 L		66	355.4
15		63	55.7
10		56	56.4
C		51	56.9
11		52	56.8
14		58	56.7
15 R		53	56.7
	92+00		
15 R		55	56.5
C		49	57.1
10		54	56.6
15		64	56.6
20 L		69	55.1
	92+50		
20 L		58	56.2
15		57	56.3
11		50	57.0
C		46	57.4
7		45	57.5
15 R		51	356.9

	362.03		Elev
	147	-	
	93+00		
15 R		46	357.4
C		42	57.8
15 L		49	57.1
	93+50		
15 L		38	58.2
11		42	57.8
C		36	58.4
15 R		38	58.2
	94+00		
15 R		13	60.7
13		3.1	57.9
C		29	59.1
10		32	57.8
15 L		27	59.3
T.P	7.12	266.25	359.12
		94+50	
15 L		6.1	60.2
10		6.7	59.6
C		6.4	59.9
12		6.6	59.7
15 R		4.5	361.8

	+	366.25	-	Elev
		95+00		
15R			3.8	362.5
13			6.1	60.2
C			5.9	60.4
9			6.0	60.0
15L			5.4	60.9
		95+50		
15L			4.1	62.2
9			5.7	60.6
C			5.3	61.0
12			5.7	60.6
15R			3.5	62.8
		96+00		
15R			2.3	64.0
13			5.0	61.3
C			4.8	61.5
11			5.3	61.0
15L			2.3	363.0

	+	366.25	-	Elev
		96+50		
15L			3.4	362.9
10			4.9	61.4
C			4.5	61.8
12			4.6	61.7
13			2.9	63.4
15R			2.1	64.2
		97+00		
15R			1.9	64.4
13			4.4	61.9
C			4.2	62.1
9			4.7	61.6
15L			3.5	62.8
		97+50		
15L			2.7	62.6
10			4.5	61.8
C			3.9	62.4
12			4.3	62.0
15			2.6	363.7

	+	366.25 141 99+00	-	Elev
15R			2.5	363.8
14			4.0	62.3
C			3.9	62.4
10			4.0	62.0
15 L			3.8	62.5
		99+50		
15 L			3.6	62.7
12			3.7	62.6
11			4.4	61.9
C			4.0	62.3
13			4.2	62.1
14			2.5	63.8
15 R			2.4	63.9
TR	4.27	366.54 99+00	3.98	362.27
15R			3.1	63.4
L			{3.3 4.4	63.2 62.1
C			4.4	62.1
10			4.8	61.7
15L			4.2	362.3

	+	366.54 141 99+50	-	Elev
15L			4.2	362.3
9			4.8	61.7
C			4.4	62.1
12			{4.6 4.9	61.9 63.6
15 R		100+00	4.7	63.8
15R			3.1	63.4
13			{3.4 4.9	63.1 61.6
C			4.6	61.9
9			5.0	61.5
15 L			4.7	61.8
T.P. BM	4.35	365.26	5.63	360.91
		100+50		
15L			3.3	62.0
11			3.0	62.0
10			3.8	61.5
C			3.5	61.8
13			{3.7 4.2	61.6 63.1
15 R			2.0	363.3

Near R.P. Hut
Sta 99+90.68

	365.26		Elev.
	HI	-	
	101+00		
15 R		25	362.8
14		{ 25 41	62.8 61.2
C		29	61.4
11		42	61.1
12		37	61.6
15 L		29	61.4
	101+50		
15 L		52	60.1
12		46	60.7
10		49	60.4
C		46	60.7
14		{ 49 38	60.4 61.5
15 R		38	61.5
	102+00		
15 R		49	60.4
13		57	59.6
8		52	60.1
C		50	60.3
4		51	60.2
10		57	59.6
11		55	59.8
15 L		64	358.9

	365.26		Elev.
	HI	-	
	102+50		
20 L		76	357.7
15		70	58.3
11		63	59.0
5		55	59.8
C		54	59.9
9		56	59.7
15 R		62	59.1
	102+93 Cul. 12" pipe		
20 R		62	59.1
15		65	58.8
12		67	58.6
9		58	59.5
C		65	59.8
10		60	59.3
12		71	58.2
15		72	58.1
20 L		73	358.0

365.26

	+	M	-	Elev
20 L		103+00	7.4	357.9
15			7.3	58.0
10			6.2	59.1
C			5.5	59.8
9			5.9	59.4
15			6.5	58.8
20 R			6.3	59.0
15 R		103+50	5.8	59.5
11			5.7	59.4
C			5.4	59.9
9			5.8	59.5
15 L			6.4	58.9
15 L		104+00	4.9	60.4
11			4.5	60.8
9			5.5	59.8
C			5.1	60.2
12			5.3	60.0
14			4.1	61.2
15 R			3.9	361.4

	+	M	-	Elev
T.P	5.72	265.93 104+50	5.05	260.21
15 R			5.7	362.2
12			3.8	62.1
11			5.3	60.6
C			5.1	60.8
9			5.5	60.4
13			4.1	61.8
15 L			4.1	61.8
15 L		105+00	4.2	61.7
P			5.2	60.7
C			4.8	61.1
10			5.0	60.9
12			3.6	62.3
15 R			3.6	62.3
15 R		105+50	3.6	62.3
12			3.7	62.2
10			5.1	60.8
C			4.8	61.1
8			5.1	60.8
14			4.0	61.9
15 L			4.0	361.9

365.93

	+	N ₁ 106+00	-	Elev
15L			4.3	361.6
9			5.3	60.6
C			4.8	61.1
11			5.0	60.9
13			3.9	62.0
15R			3.9	62.0
BM. Near R.P. Hub	105+50	2.8.3		263.10
		106+50		
15R			4.0	61.9
13			4.1	61.8
12			5.2	60.7
C			5.0	60.9
9			5.4	60.5
15L			4.0	61.3
15L		107+00	5.0	60.9
9			5.2	60.3
C			5.2	60.7
11			5.5	60.4
14			4.2	61.7
15R			4.3	361.6

365.93

	+	N ₁ 107+50	-	Elev
15R			4.7	361.2
14			4.8	61.1
11			5.9	60.0
C			5.6	60.3
10			6.1	59.8
15L			5.2	60.7
15L		108+00	5.7	60.2
12			6.5	59.4
C			6.0	59.9
11			6.3	59.6
15R			5.5	60.4
T.P.	4.19	1	6.01	359.92
		264.11		
		108+50		
15R			4.1	60.0
11			4.8	59.3
C			4.4	59.7
11			5.2	58.9
15L			4.6	359.5

36411

141
108+66 99 pc.

Elev.

		Elev.
15L	46	359.5
11	52	58.9
C	44	59.7
11	49	59.2
15R	4.3	59.8
15R	4.0	60.1
12	4.1	60.0
11	50	59.1
C	46	59.5
12	54	58.7
15L	4.9	59.2
15L	4.5	59.6
13	4.6	59.5
11	5.7	58.4
C	4.9	59.2
6	4.9	59.2
12	54	58.7
14	34	60.7
15R	34	360.7

36411

141
110+00

Elev.

		Elev.
15R	46	359.5
12	63	57.8
6	56	58.5
C	57	58.4
9	64	57.7
11	4.8	59.3
15L	4.6	59.5
15L	7.5	56.6
11	57.0	57.1
	57.7	56.4
e	7.0	57.1
8	7.1	57.0
13	7.5	56.6
15R	6.9	58.2
15R	8.3	55.8
C	8.1	56.0
6	8.4	55.9
15L	8.9	355.2

	36411		Elev.
	141	-	
	111+00		
15L		9.1	355.0
C		9.4	55.7
15R		9.5	55.6
	111+50		
15R		9.2	54.9
8		9.6	54.5
C		9.4	54.7
7		9.5	54.6
15L		10.6	53.5
	111+81.44 pc		
15L		11.2	52.9
7		10.3	53.8
C		10.1	54.0
5		10.4	53.7
15R		9.7	54.4
BM. E. R. 2 Hub Sta	111+81.44	6.67	357.44
T. P.	194	10.13	352.98
	355.92		
	112+00		
15R		21	53.8
8		27	53.2
C		2.5	53.4
8		26	53.3
15		36	52.3
20L		38	352.1

	355.92		Elev.
	AM	-	
	112+50		
20L		49	351.0
15		44	51.5
9		38	52.1
C		36	52.3
9		36	52.3
15R		31	52.8
	113+00		
15R		42	51.7
12		45	51.4
C		4.5	51.4
13		50	50.9
15		56	50.3
20L		59	50.0
	113+50		
25L		97	46.2
19		92	46.7
15		77	48.2
7		63	49.6
C		58	50.1
15R		58	350.1

		355.92		Elev.
	T	AT 114+00	-	
20 R			84	347.5
15			84	47.5
10			8.3	47.6
C			9.1	46.8
15			10.1	45.8
25 L			10.9	45.0
25 L		114+50	13.9	42.0
15			12.5	43.4
8			12.2	43.7
C			12.9	43.0
4			12.1	43.8
15			11.5	44.4
20 R			11.0	44.9
T.P.	2051	346.75 115+00	11.68	344.24
25 R			42	42.6
15			45	42.3
C			51	41.7
15			54	41.4
20			5.1	41.7
25 L			60	340.8

		346.75		
		115+50		
25 L			64	340.4
15			57	41.1
12			62	40.6
C			55	41.0
15			55	41.3
25 R			5.0	41.8
25 R		116+00	3.6	43.2
20			50	41.8
15			53	41.5
C			58	41.0
15			6.6	40.5
20			58	41.0
25 L		116+50	67	40.1
25 L			58	41.0
15			55	41.3
C			5.1	41.7
13			41	41.7
15			29	43.9
20 R			20	344.8

	346.75		Elev.
	117+50		
20 R		29	343.9
15		35	43.3
11		45	42.3
C		52	41.6
15		57	41.1
25 L		59	40.9
	117+50		
25 L		67	40.1
15		66	40.2
C		61	40.7
15		49	41.9
20 R		29	41.9
	118+00		
20 R		46	42.2
15		48	42.0
C		50	41.8
15		55	41.3
25 L		56	41.2

	346.75		
	118+50		
25 L		49	341.9
15		45	42.3
C		42	42.6
15		37	42.1
20 R		35	43.3
TP	4.31	4.24	342.51
	346.82		
	119+00		
20 R		3.5	43.3
15		3.7	43.1
C		4.0	42.8
15		4.5	42.3
25 L		4.8	42.0
	119+50		
20 L		4.8	42.0
15		4.9	41.9
C		5.1	41.7
7		5.0	41.8
15		4.4	42.4
20		4.4	342.4

346.82

HJ
120+00

			E100
15 R		48	342.0
1		49	419
C		52	416
V		55	413
15		57	411
20 L		57	411
20 h	120+50	58	410
15		56	412
C		48	420
13		50	418
15		52	414
20		70	398
25 R		75	393
25 R	121+00	79	389
18		75	393
15		69	399
10		47	421
C		46	422
8		45	423
15		57	411
20 V		58	341.0

346.82

(627)
121+22 EC

20 L		54
15		52
9		42
C		41
10		46
15		62
20 R		65
20 R	121+50	61
15		57
9		42
C		38
9		39
15		50
20 L		47
15 V	122+00	29
13		30
12		36
8		31
C		29
9		32
15		37

341.4

412

42.6

42.7

42.2

40.6

40.3

40.7

41.1

42.6

43.0

42.9

41.8

42.1

43.9

43.8

43.2

43.7

43.9

43.6

343.1

		346.82		E 100
15 R			27	344.1
12			32	43.6
C			23	44.5
8			25	44.3
11			{ 27 1.0	44.1 45.8
15 L			07	46.1
T.P.	6.66	351.15	233	344.49
20 L		123+00	20	49.2
15			23	48.9
11			67	44.5
C			63	44.9
10			64	44.8
15			26	46.6
20 R			40	47.2
15 R		123+50	66	44.6
11			70	44.2
C			65	44.7
6			67	44.5
10			70	44.2
14			22	49.0
15			19	49.3
20 L			13	349.9

		351.15		
			20	349.2
			25	47.7
			26	43.6
			71	44.1
			78	43.4
			73	43.9
		124+2522 PC	82	43.0
			74	43.8
			81	43.1
			77	43.5
			20	48.2
		124+50	46	46.6
			93	42.9
			86	42.6
			77	43.5
			85	342.7

	+	351.15	-	Elcr.
		125+00		
15R			9.1	342.4
13			10.4	40.8
C			9.4	41.8
6			9.5	41.7
12			10.1	41.1
15L			8.0	43.2
		125+18.50	EC	
15L			9.8	41.4
13			10.7	40.5
6			10.2	41.0
C			10.4	40.8
13			11.3	40.2
			10.3	40.9
15R		125+50	10.3	40.9
15R			11.6	39.6
13			12.1	39.1
C			11.7	39.5
15L			11.7	339.5
BM. Near R.P. Hut Sta		125+18.50	9.75	341.40
T.P.	1.88	341.27	11.66	339.49

340.91

341.37

		341.37
		126+00
15L		37
C		32
15R		37
		126+50
15R		5.2
11		4.4
C		4.0
15L		4.5
		127+00
15L		5.0
10		4.6
C		4.3
13		5.2
15R		5.7
15R		5.3
9		4.8
C		4.7
9		5.0
13		5.4
15L		4.4

337.7

38.2

37.7

36.2

37.0

37.4

36.9

36.4

36.8

37.1

36.2

35.7

36.1

36.6

36.7

36.4

36.0

336.5

	341.37		
	147	-	Elder
	128+00		
15L		52	336.7
13		53	36.1
P		49	36.5
C		48	36.6
12		51	36.3
15 R		46	36.8
	129+50		
15R		46	36.8
12		57	35.8
C		50	36.4
9		53	36.1
15		57	35.7
15L		52	36.7
	129+00		
15L		53	36.1
13		60	35.4
8		56	35.8
C		53	36.1
12		58	35.6
15 R		45	336.9

	341.37		
	129+50		
15R		43	337.1
14		43	37.1
13		67	35.2
P		59	35.5
C		57	35.7
8		58	35.6
13		64	35.0
15L		52	35.8
TP	2.51	568	335.69
	338.20		
	130+00		
15L		2.3	35.9
13		38	34.4
P		32	35.0
C		31	35.1
9		32	35.0
13		35	34.7
14		18	36.4
15R		14	336.8

33820

+

147.
130+50

-

E10r.

15R	41	334.1
9	37	34.5
C	37	34.5
8	39	34.3
13	43	33.9
15L	33	34.9
15L	42	34.0
12	49	33.8
7	44	33.8
C	43	33.9
14	47	33.5
15R	37	34.5
15R	44	33.6
13	53	32.9
C	48	33.4
15	53	332.9

131+00

131+50

338.20

132+00

15L	6.3	331.9
C	5.6	32.6
17	6.1	32.1
15R	5.5	32.7
15R	6.1	32.1
14	6.5	31.7
C	5.9	32.3
15L	6.7	31.5
15L	7.0	31.2
C	6.2	32.0
13	6.7	31.5
15R	6.2	32.0
15R	6.2	32.0
17	6.3	31.9
13	7.0	31.2
C	6.2	32.0
15L	7.1	31.1
15L	7.3	30.9
C	6.5	31.7
10	4.7	31.5
14	7.2	31.0
15R	6.3	331.9
TP	0.31	332.00
	6.51	331.19

132+50

133+00

133+50

134+00

332.00

+

134+50

-

Elev.

15R	+0.5	332.5
4	0.0	32.0
3	2.0	30.0
8	1.3	30.7
C	1.1	30.9
15L	2.1	29.9
15L	2.2	29.8
14	3.0	29.0
5	2.3	29.7
C	2.3	29.7
8	2.3	29.7
12	3.2	28.8
15	0.5	31.5
17R	0.0	32.0
17R	4.7	22.7
15	1.3	31.7
12	4.0	28.0
7	3.4	28.6
C	3.2	28.8
14	4.0	28.0
15	3.7	28.8
20L	0.3	331.7

134+77.62 PC

135+00

332.0

135+50

20L	32	328.8
15	3.8	28.2
12	5.5	26.5
C	5.6	26.4
P	5.9	26.1
13	6.4	25.6
15R	5.3	26.7
17	1.0	31.0
15R	8.4	23.6
C	9.5	23.5
15L	8.4	23.6
15L	12.3	19.7
C	12.0	20.0
15R	12.0	20.0
BM Top Concrete Collar on Cul Sta 135+45	5.39	326.61
TP	1.84	321.85
15R	11.97	320.03
11	4.6	17.3
C	4.2	17.7
12	4.5	17.4
15	4.6	17.3
15	5.8	16.1
26	12.5	09.4
02 L	13.5	308.4

136+00

136+50

	321.85		E 101.
	147	-	
	127+50		
25 L		7.9	314.0
1P		7.9	14.0
15		6.4	15.5
C		5.9	16.0
12		5.7	16.2
15 R		6.1	15.8
	138+00		
15 R		6.5	15.4
C		6.5	15.4
11		6.5	15.4
15		8.4	13.5
30		18.0	303.9
44 L		21.4	300.5
	138+50		
15 L		6.8	15.1
C		6.2	15.2
15 R		6.4	15.5

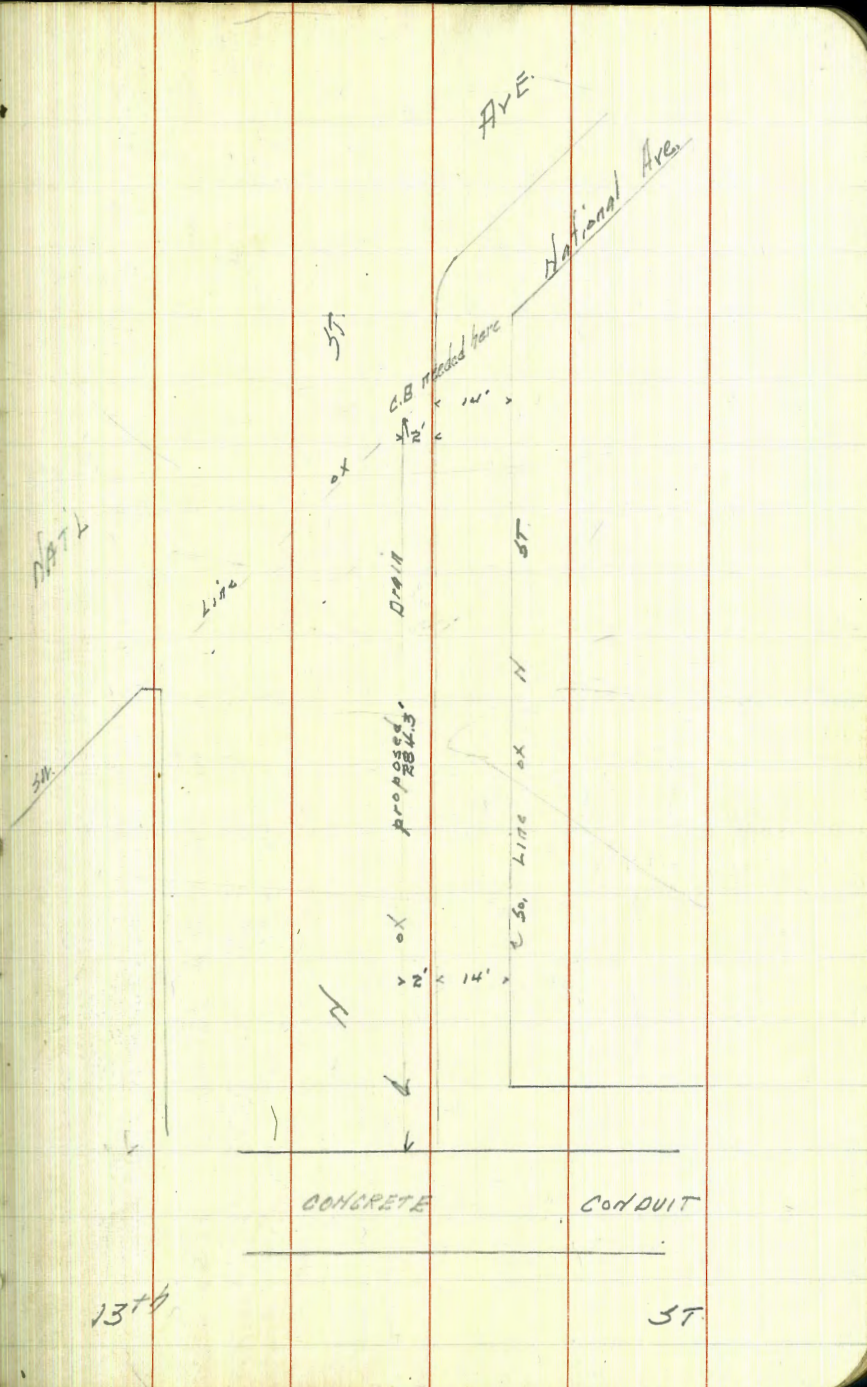
	321.85		
	138+93	13 EC.	
20 R		3.2	318.7
15		4.3	17.6
12		6.8	15.1
C		6.3	15.6
15 L		6.0	15.9
15 L	139+21.73	PC	
C		6.8	15.1
10		7.1	14.8
15		7.8	14.1
20 R		4.6	17.3
20 R	139+50	2.0	19.9
15		3.5	18.4
13		7.1	14.8
C		8.4	13.5
15 L		7.7	14.2
		7.6	314.3

8/19/18 Grading Levels on proposed Drain
 from S.W. Nat'l and N to
 Conduit in 13th St.

B.M.	0.88	7.81		6.93	NE. 14th + Imperial Ave
0.0 on d. of Drain = S.W. Line		as Nat'l Ave	5.55	2.26	= edge paving
			4.75	3.06	= top Cb. at op
3 W. of 0.0			3.95	3.86	
50 - - -			4.8	3.0	
100 - - -			5.0	2.8	
150 - - -			5.0	2.8	
200 - - -			5.1	2.7	
250 - - -			4.8	3.0	
284.3' - - = East Edge Conduit.			7.98	- 0.17	

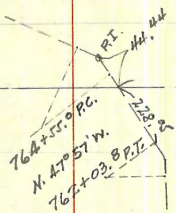
(stakes 5' Sp. old) Cuts on Above ditch

Edge paving	4.80	7.86	stakes Elev	Grade	3.00
50' W		4.76	3.11	- 0.61	+ 3.75
100' W		5.04	2.82	- 1.28	+ 4.10
150' W		5.12	2.71	- 1.92	+ 4.66
200' W		5.43	2.63	- 2.56	+ 5.19
250' W		4.95	2.91	- 3.30	+ 6.11
280' W		4.73	3.13	- 3.58	+ 6.71
288 W = conduit				- 3.67	

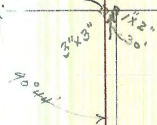


Monroe
Gregory 8/28/17.
Moore
Miller

N. 89° 27' W.
N.L. Lot. 18
Ex. Mission



N. 89° 27' W. 140.2



Lemon Grove Blvd.
2" x 2"

5th Ave.
2" x 2"

22.2' Pipe
2" x 2" Tooley Ave.

23.80
24° 25' 24"
58' 15" 1/2
P.I.

30'

128.

B.M.

0.75 ^{H.I.} 319.74

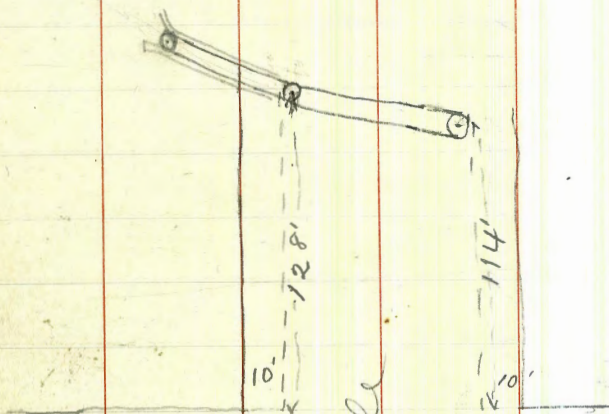
318.39 N.W. Thorn & Dale.

Top. culvert
Pipe

10.94 308.2

grade of catch basin

310.5



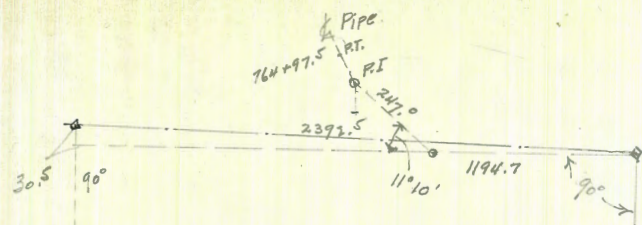
Thorn

Dale

North ↓

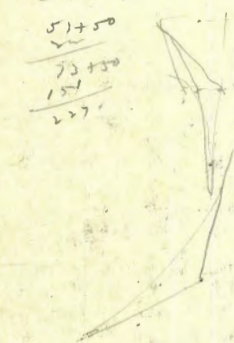
Oct. 16/17 ⁽⁸⁰⁾

Lehilds
Evans
moore



Lot. 18 *

1 P. 99 Saw
 1.72
 20.71 M
 803
 12.68 T.P.
 2.09
 14.74 M
 1.39
 5.88 T.P.



51+50
 73+50
 151
 227

457
 00029
 4113
 914
 13263
 28
 106024
 39759
 5.03612

58° 15'
 116 31'
 58° 15'

425
 243
 303.54
 423

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.