1450
ATLANTIC ST.
HARASTHY TO BROADWAY

LEVEL BOOK
373 A

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.

	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.

Atlantic St	Juniper to Harasthy	
Proposed Culvert	Atlantic at Bean	33
Rosecrans	P.H.Way to Gaines	34
Jefferson & Rosecrans		41-43 45-49
Survey of Knoxville St. Northerly from Marcina. Along Tecolote Creek.		44-45 50-59

Cross Section Atlantic St
Juniper to Harasthy

BM	1.35	11.35	10.00	HERB Juniper + Atlantic
	43+56.68 = NCL of Juniper			
66' Rt = Horiz CL BC Top CL		1.08	10.27	
66' Rt Paving		1.66	9.69	
46' Rt "		2.01	9.34	
46' Rt Top CL		1.35	10.00	
	43+70.68 = NL Juniper			
34' Rt = Existing CL Top		1.42	9.93	
34' Rt on Pav.		1.98	9.37	
30' Rt " "		2.03	9.32	
20' Rt " "		2.11	9.24	
10' Rt " "		2.18	9.17	
℄ " "		2.24	9.11	
10' Lt " "		2.44	8.91	
20' Lt " "		2.69	8.66	
27' Lt " "		2.87	8.48	
30' Lt " "		2.82	8.53	
46' Lt " "		2.51	8.84	
46' Lt Top CL		2.47	8.88	

11.35

E 2

44+10			
46' Lt = Top CL	✓	2.55	8.80
46' Lt Gutter		3.3	8.1
30' Lt		3.1	8.3
20' Lt		2.8	8.6
10' Lt = Edge Pav		2.36	8.99
℄ on "		2.22	9.13
10' Rt Edge "		2.15	9.20
20' Rt		2.6	8.8
30' Rt		2.7	8.7
46' Rt = Gutter		2.5	8.9
44+50			
46' Rt Gutter		3.1	8.3
30' Rt		3.0	8.4
20' Rt		2.7	8.7
10' Rt = Edge Pav		2.20	9.15
℄ on "		2.26	9.09
10' Lt = Edge "		2.42	8.93
20' Lt		3.1	8.3
30' Lt		3.4	8.0

11.35

46' Lt	2.5	7.9
46' Lt Top Cb ✓	2.78	8.57
45+0		
46' Lt Top Cb ✓	3.00	8.35
46' Lt	4.0	7.4
30' Lt	3.6	7.8
20' Lt	3.4	8.2
10' Lt = Edge Pav	2.55	8.80
✓ ℄ on "	2.49	8.86
10' Rt = Edge "	2.38	8.97
20' Rt	3.0	8.4
30' Rt	3.2	8.2
46' Rt = Gutter	2.7	8.7
45+50		
46' Rt = Gut	3.4	8.0
30' Rt	3.3	8.1
20' Rt	3.2	8.2
10' Rt = Edge Pav	2.59	8.76
✓ ℄ " "	2.69	8.66
10' Lt " "	2.84	8.51

11.35

3

20' Lt	3.7	7.7
30' Lt	3.9	7.5
46' Lt	4.2	7.2
46' Lt Top Cb ✓	3.20	8.15
46+0		
46' Lt = Top Cb ✓	3.37	7.98
46' Lt	4.4	7.0
30' Lt	3.9	7.5
20' Lt	3.9	7.5
10' Lt = Edge Pav	3.05	8.30
✓ ℄ on "	2.91	8.44
10' Rt = Edge "	2.81	8.54
20' Rt	3.4	8.0
30' Rt	3.8	7.6
46' Rt = Gut	3.7	7.7
46+50		
46' Rt = Gut	3.8	7.6
30' Rt	3.8	7.6
20' Rt	3.5	7.9
10' Rt = Edge Pav	3.01	8.34

11.35

℄ on Pav.	3.10	8.25
10' Lt = Edge Pav.	3.21	8.09
20' Lt	4.2	7.2
30' Lt	4.5	6.9
40' Lt	4.7	6.7
40' Lt = Top Cb	3.62	7.73
47+10		
40' Lt = Top Cb	3.84	7.51
40' Lt	4.9	6.5
30' Lt	4.7	6.7
20' Lt	4.3	7.1
10' Lt = Edge Pav	3.50	7.85
℄ on "	3.33	8.02
10' Rt = Edge "	3.24	8.11
20' Rt	3.9	7.5
30' Rt	4.1	7.3
40' Rt = Gut	3.9	7.5
47+50 = S End Cb on Rt.		
40' Rt = Top Cb End	3.18	8.17
40' Rt	4.0	7.4

11.35

30' Rt	4.4	7.0
20' Rt	3.9	7.5
10' Rt = Edge Pav	3.51	7.84
℄ on "	3.58	7.77
10' Lt = Edge "	3.70	7.65
20' Lt	4.5	6.9
30' Lt	4.7	6.7
40' Lt	4.9	6.5
40' Lt Top Cb	4.04	7.31
48+70 = N End Cb on Rt		
40' Lt = Top Cb	4.23	7.12
40' Lt	5.1	6.3
30' Lt	5.0	6.4
20' Lt	4.5	6.9
10' Lt = Edge Pav	3.99	7.36
℄ on "	3.86	7.49
10' Rt = Edge "	3.83	7.52
20' Rt	4.3	7.1
30' Rt	4.7	6.7
40' Rt	4.4	7.0
40' Rt Top Cb	3.57	7.78

11.35

48+50

46' Rt = Gutter	4.8	6.6
30' Rt	4.9	6.5
20' Rt	4.4	7.0
10' Rt = Edge Pav	4.08	7.27
℄ on '	4.13	7.22
10' Lt = Edge '	4.26	7.09
20' Lt	4.9	6.5
30' Lt	5.2	6.2
46' Lt	5.5	5.9
46' Lt Top Cb ✓	4.16	6.89

48+55

46' Lt = Grating	5.51	5.84

49+0

46' Lt Top Cb ✓	4.65	6.70
30' Lt = Top Rail	4.58	6.77
20' Lt	4.7	6.7
10' Lt Edge Pav	4.36	6.99
℄ on '	4.30	7.05
10' Rt Edge '	4.26	7.09

11.35

5

20' Rt	4.8	6.6
30' Rt	5.0	6.4
46' Rt	5.1	6.3

Note: SEnd of Cb. Int is SE End of Cb on Rt.

49+23 ℄ Abt = Int on Rt ✓

46' Rt Top Cb	3.94	7.41
46' Rt Grating	4.97	6.38

49+32.46 = ℄ RR Spar

46' Rt = Top Cb ✓	3.90	7.45
46' Rt	4.8	6.6
30' Rt	4.6	6.8
20' Rt	4.3	7.1
10' Rt = Edge Pav	4.12	7.23
℄ on ' ℄ Spar ✓	4.23	7.12
10' Lt = Edge '	4.26	7.09
20' Lt	4.8	6.6
30' Lt	5.1	6.3
46' Lt	5.6	5.8
46' Lt = Top Cb ✓	4.11	6.74

49+36 ℄ Int = Int on Lt

46' Lt = Top Cb ✓	4.10	6.75
46' Grating	5.60	5.75

1135

49+50

46 Lt Top Cb		4.55	6.80
46 Lt		5.3	6.1
30 Lt		5.2	6.2
20 Lt		4.9	6.5
10 Lt Edge Pav.		4.14	7.21
℄ "		4.07	7.28
10 Rt Edge "		4.03	7.32
20 Rt = Top Rail		4.02	7.33
30 Rt		3.9	7.5
46 Rt		3.9	7.5
46 Rt = Top Cb		3.74	7.61
TP	6.43 1401	3.77	7.58

49+81 = Grating 3.4×2.4

37.5 Rt on Grating		6.43	~~7.42~~ 7.53

50+0

46 Rt Top Cb		6.14	7.87
46 Rt		6.9	7.1
30 Rt		6.8	7.2
20 Rt		6.7	7.3

1401

10 Rt = Edge Pav.		6.50	7.51
℄ "		6.52	7.49
10 Lt = Edge "		6.53	7.48
20 Lt		7.3	6.7
30 Lt		7.6	6.4
46 Lt		7.6	6.4
46 Lt = Top Cb		6.94	7.07

50+51.83 = S.L. Laurel

46 Lt Top Cb		6.67	7.34
46 Lt		7.4	6.6
30 Lt		7.4	6.6
20 Lt		7.1	6.9
10 Lt = Edge Pav.		6.42	7.59
℄ "		6.31	7.70
10 Rt Edge "		6.30	7.71
20 Rt		6.6	7.4
30 Rt		6.7	7.3
37 Rt Grating 3.4×2.4		6.66	7.35
46 Rt		6.9	7.1
46 Rt Top Cb			

S.E. Curb l/o/f Center Rd.

54 Rt. Top Cb ✓	6.03	7.98
54 Rt	7.02	6.99
50+91.83 = ℄ Laurel		
46 Rt	5.3	8.7
30 Rt	6.2	7.7
20 Rt	6.8	7.2
10 Rt. Edge Pav.	6.04	7.97
✓ ℄ on "	6.02	7.99
10 Lt. Edge "	6.12	7.89
20 Lt	7.1	6.9
30 Lt	7.3	6.7
46 Lt	7.1	6.9
51+31.83 = ℄		
46 Lt Top Cb ✓	6.15	7.86
46 Lt	7.1	6.9
36 Lt	7.1	6.9
20 Lt	6.6	7.4
10 Lt = Edge Pav.	5.80	8.21
✓ ℄ on "	5.70	8.31

10 Rt. Edge Pav.	5.63	8.38
20 Rt	6.5	7.5
30 Rt	6.5	7.5
46 Rt	6.1	7.9
46 Rt Top Cb ✓	5.25	8.76
51+50		
46 Rt. Top Cb ✓	5.14	8.87
46 Rt	6.1	7.9
30 Rt	6.2	7.8
20 Rt	6.2	7.8
15 Rt	6.0	8.0
10 Rt. Edge Pav.	5.45	8.54
✓ ℄ on "	5.54	8.47
10 Lt. Edge "	5.65	8.36
20 Lt	6.6	7.4
30 Lt	7.0	7.0
46 Lt	7.0	7.0
46 Lt Top Cb ✓	5.97	8.04
52+0		
46 Lt Top Cb ✓	5.45	8.56
46 Lt	6.5	7.5

14.01

30 Lt		6.4	7.6
20 Lt		5.9	8.1
10 Lt = Edge Pav		5.15	8.86
℄ on		4.98	9.03
10 Rt = Edge		4.92	9.09
20 Rt		5.7	8.3
30 Rt		5.8	8.2
46 Rt		5.3	8.7
46 Rt = Top Cb ✓	✓	4.63	9.38
52+50			
46 Rt = Top Cb ✓		4.08	9.93
46 Rt		5.1	8.9
30 Rt		5.4	8.6
20 Rt		5.1	8.9
10 Rt = Edge Pav		4.33	9.68
℄ on "		4.45	9.56
10 Lt = Edge "		4.63	9.38
20 Lt		5.5	8.5
30 Lt		6.0	8.0
46 Lt		5.9	8.1
46 Lt = Top Cb ✓	✓	4.87	9.14

14.01

53+0			
46 Lt Top Cb	✓	4.44	9.57
46 Lt		5.5	8.5
30 Lt		5.4	8.6
20 Lt		4.9	9.1
10 Lt = Edge Pav		4.06	9.95
℄ on "		3.95	10.06
10 Rt Edge "		3.88	10.13
20 Rt		4.1	9.6
30 Rt		4.9	9.1
46 Rt		4.3	9.7
46 Rt = Top Cb ✓		3.50	10.51
53+50			
46 Rt = Top Cb ✓		2.92	11.09
46 Rt		3.8	10.2
30 Rt		4.4	9.6
20 Rt		3.9	10.1
10 Rt = Edge Pav		3.36	10.65
℄ on "		3.45	10.56
10 Lt = Edge "		3.58	10.43

14.01

20 Lt		45	9.5	
30 Lt		50	9.0	
40 Lt		50	9.0	
41 Lt = Top Cb	✓	3.93	10.08	
54+0				
41 Lt - Top Cb	✓	3.41	10.60	
41 Lt		46	9.4	
30 Lt		45	9.5	
20 Lt		38	10.2	
10 Lt - Edge Pav		3.04	10.97	54+32
✓ 0 "		2.92	11.09	38 Rt - Clear out Grating 2.82
10 Rt - Edge "		2.86	11.15	
20 Rt		3.8	10.2	
30 Rt		3.9	10.1	
40 Rt		3.8	10.8	
41 Rt - Top Cb	✓	3.46	11.55	
54+50				
41 Rt - Top Cb	✓	1.89	12.12	
41 Rt		27	11.3	
30 Rt		33	10.7	

14.01

30 Rt	3.1	10.9	
10 Rt - Edge Pav	2.34	11.67	
✓ 0 "	2.38	11.63	
10 Lt - Edge "	2.50	11.51	
20 Lt	35	10.5	
30 Lt	41	9.9	
40 Lt	4.3	9.7	
41 Lt - Top Cb ✓	3.93	11.08	
55+0			
41 Lt - Top Cb ✓	2.43	11.58	
40 Lt	37	10.3	
30 Lt	33	10.7	
20 Lt	28	11.2	
10 Lt - Edge Pav	1.97	12.04	
✓ 0 "	1.88	12.13	
10 Rt - Edge "	1.82	12.19	
20 Rt	25	11.5	
30 Rt	28	11.2	
40 Rt	2.3	11.7	
41 Rt - Top Cb ✓	1.38	12.63	

55+50			
46' Rt = Topcl ✓	0.90	13.11	
46' Rt	2.0	12.0	
30' Rt	2.3	11.7	
20' Rt	2.0	12.0	
10' Rt = Edge Pav	1.33	12.68	
℄ on ✓	1.38	12.63	
10' Lt = Edge	1.52	12.49	
20' Lt	2.6	11.4	
30' Lt	3.0	11.0	
46' Lt	3.0	11.0	
46' Lt = Topcl ✓	1.93	12.08	
56+0			
46' Lt = Topcl ✓	1.45	12.56	
46' Lt	2.4	11.6	
30' Lt	2.4	11.6	
20' Lt	1.9	12.1	
10' Lt = Edge Pav	0.97	13.04	
℄ on ✓	0.86	13.15	
10' Rt = Edge	0.82	13.19	

20' Rt	1.6	12.4	
30' Rt	1.8	12.2	
46' Rt	1.1	12.9	
46' Rt = Topcl ✓	0.42	13.59	
TP 7.47 19.98	1.50	12.51	
56+50			
46' Rt = Topcl ✓	5.90	14.08	
46' Rt	6.9	13.1	
36' Rt	6.6	13.4	
20' Rt	6.6	13.4	
10' Rt = Edge Pav	6.20	13.68	
℄ on ✓	6.40	13.58	
10' Lt = Edge	6.55	13.43	
20' Lt	7.2	12.8	
30' Lt	7.6	12.4	
46' Lt	7.9	12.1	
46' Lt = Topcl ✓	6.94	13.04	
56+68 = So End Full Widths Paving			
46' Lt = Topcl ✓	6.74	13.24	
46' Lt on Pav	7.12	12.56	

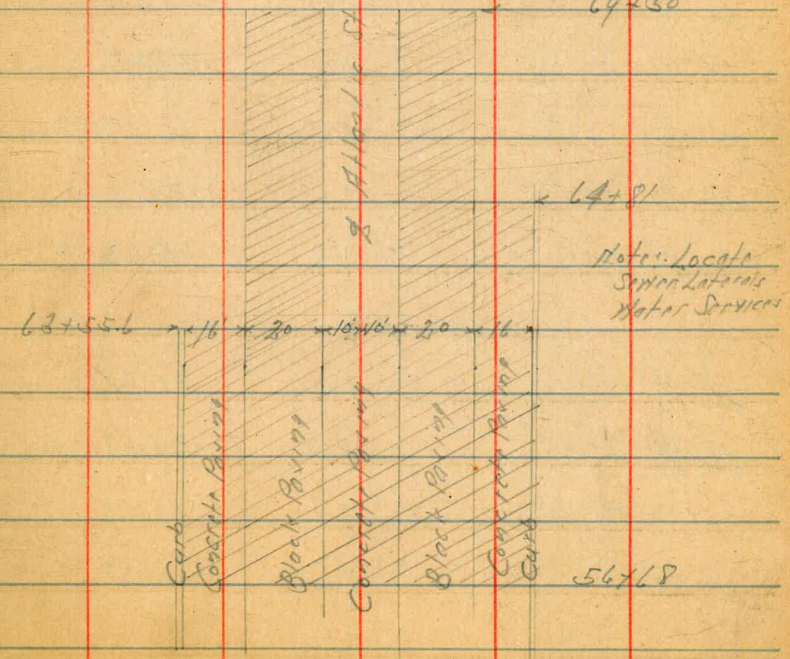
19-98

40' Lt on Paving		7.17	12.81	
30' Lt " "		6.75	13.23	
20' Lt " "		6.57	13.41	
10' Lt " "		6.36	13.62	
℄ " "		6.20	13.78	
10' Rt " "		6.09	13.89	
20' Rt " "		6.12	13.86	
30' Rt " "		6.15	13.83	
40' Rt " "		6.30	13.68	
46' Rt " "		6.40	13.58	
46' Rt Top Cb	✓	5.73	14.25	
57+87.53 BC Lt				
46' Rt. Top Cb	✓	4.69	15.29	
46' Rt on Paving		5.34	14.64	
40' Rt " "		5.24	14.74	
30' Rt " "		5.09	14.89	
20' Rt " "		5.02	14.96	
10' Rt " "		5.01	14.97	
℄ " "		5.06	14.92	
10' Lt " "		5.20	14.78	

19-98

20' Lt on Paving			5.38	14.60	
30' Lt " "			5.70	14.28	
40' Lt " "			6.06	13.92	
46' Lt " "			6.24	13.74	
46' Lt Top Cb		✓	5.65	14.33	
TP	3.74	18.27	5.45	14.53	BPE Inside Cb Front Rd on Bldg Lindbergh Field 12.235
BM			6.07	12.20	

Sketch of Paving At Lindbergh Field
From Sta. 56+68 to 69+50



Atlantic St.

					B.P.E location Front Retaining Wall
B.M.	3.59	15.82		12.23	
		63+55.6 = N. End Full Width Pav			
46' Lt	Top Cb	✓	1.95	13.87	
46' Lt	on Pav		2.16	13.16	
30' Lt	"	"	2.15	13.67	
20' Lt	"	"	2.05	13.77	
10' Lt	"	"	1.94	13.88	
℄	"	"	1.94	13.88	
10' Rt	"	"	1.92	13.90	
20' Rt	"	"	1.96	13.86	
30' Rt	"		2.08	13.74	
46' Rt	"	"	2.38	13.44	
46' Rt	Top Cb	✓	1.80	14.02	
		63+79.05 = E.B.			
46' Rt	Top Cb	✓	2.02	13.80	
46' Rt	on Pav		2.15	13.17	
30' Rt	Edge B Paving		2.32	13.50	
10' Rt	"	"	2.13	13.69	
℄			2.1	13.4	

15.82

10' Lt	Edge Paving		2.32	13.50	
30' Lt	"	"	2.48	13.34	
46' Lt			3.2	12.6	
46' Lt	Top Cb	✓	2.28	13.54	
		64+0			
46' Lt	Top Cb	✓	2.48	13.34	
46' Lt			3.3	12.5	
30' Lt	Edge Pav.		2.73	13.09	
10' Lt	"	"	2.57	13.25	
℄			2.6	13.2	
10' Rt	Edge Pav		2.41	13.41	
30' Rt			2.53	13.29	
46' Rt	on Pav		2.87	12.95	
41' Rt	Top Cb	✓	2.25	13.57	
		64+56			
46' Rt	Top Cb	✓	2.15	13.17	
46' Rt	Pav		3.37	12.45	
30' Rt			3.03	12.79	
10' Rt	Edge Pav		2.91	12.91	
℄			3.2	12.6	

Oct. 30-32
12

			15.82						
10' Lt	Edge Pav.			3.09	12.75				
30' Lt	" "			3.24	12.58				
46' Lt				3.9	11.9				
46' Lt	Top Cb		✓	3.05	12.77				
		64+81							
46' Lt	Top Cb		✓	3.38	12.44				
46' Lt				4.3	11.5				
30' Lt	Edge Pav.			3.59	12.23				
10' Lt	Edge Pav.			3.42	12.40				
✓ Lt				3.6	12.2				
10' Rt.	Edge Pav.			3.23	12.59				
30' Rt	on "			3.33	12.49				
46' Rt	on Edge Pav.			3.66	12.16				
46' Rt	Top Cb		✓	2.98	12.84				
		65+0							
46' Rt	Top Cb		✓	3.17	12.65				
46' Rt				3.9	11.9				
30' Rt	Edge Pav.			3.52	12.30				
10' Rt	Edge Pav.			3.45	12.37				
✓ Lt				3.9	11.9				

			15.82						
10' Lt	Edge Pav.			3.66	12.16				
30' Lt	" "			3.82	12.00				
46' Lt				4.5	11.3				
46' Lt	Top Cb		✓	3.59	12.23				
		65+50							
46' Lt	Top Cb		✓	4.08	11.74				
46' Lt				5.1	10.7				
30' Lt	Edge Pav.			4.32	11.50				
10' Lt	" "			4.16	11.66				
✓ Lt				4.8	11.0				
10' Rt	Edge Pav.			3.96	11.86				
30' Rt	" "			4.06	11.76				
46' Rt				4.5	11.3				
46' Rt	Top Cb		✓	3.62	12.20				
		66+0							
46' Rt	Top Cb		✓	4.06	11.76				
46' Rt				5.0	10.8				
30' Rt	Edge Pav.			4.50	11.32				
10' Rt	" "			4.12	11.40				
✓ Lt				5.1	10.7				

			15.82						15.82		
10' Lt	Edge Pav		4.69	11.13		10' Lt	Edge Pav		5.47	10.35	
30' Lt	" "		4.82	11.00		30' Lt	" "		5.69	10.13	
46' Lt			5.8	10.0		46' Lt			6.5	9.3	
46' Lt	Top Cb	✓	4.69	11.13		46' Lt	Top Cb	✓	5.46	10.36	
		66+50						67+50			
46' Lt	Top Cb	✓	5.80	10.62		46' Lt	Top Cb	✓	5.70	10.12	
46' Lt			6.2	9.6		46' Lt			6.8	9.0	
30' Lt	Edge Pav		5.42	10.40		30' Lt	Edge Pav		5.94	9.88	
10' Lt	" "		5.23	10.59		10' Lt	" "		5.73	10.09	
✓ ℄			5.7	10.1		✓ ℄			6.0	9.8	
10' Rt	Edge Pav		4.94	10.88		10' Rt	Edge Pav		5.48	10.34	
30' Rt	" "		5.00	10.82		30' Rt	" "		5.51	10.31	
46' Rt			5.7	10.1		46' Rt			5.9	9.9	
46' Rt	Top Cb	✓	4.54	11.28		46' Rt	Top Cb	✓	5.09	10.73	
		69+0						68+0			
46' Rt	Top Cb	✓	4.82	11.00		46' Rt	Top Cb	✓	5.34	10.48	
46' Rt			5.8	10.0		46' Rt			6.3	9.5	
30' Rt	Edge Pav		5.21	10.51		30' Rt	Edge Pav		5.79	10.03	
10' Rt	" "		5.18	10.64		10' Rt	" "		5.69	10.13	
✓ ℄			5.9	9.9		✓ ℄			6.3	9.5	

15.82

10' Lt	Edge Pav.		5.93	9.89
30' Lt	" "		6.16	9.68
46' Lt			6.9	8.9
46' Lt	Top Cb ✓		5.92	9.90
	68+50			
46' Lt	Top Cb ✓		6.16	9.66
46' Lt			7.1	8.7
30' Lt	Edge Pav.		6.40	9.42
10' Lt	" "		6.17	9.65
✓ ℄			6.5	9.3
10' Rt	Edge Pav.		5.94	9.88
30' Rt	" "		6.03	9.79
46' Rt			6.5	9.3
46' Rt	Top Cb ✓		5.61	10.21
	69+0			
46' Rt	Top Cb ✓		5.80	10.02
46' Rt			6.8	9.0
30' Rt	Edge Pav.		6.24	9.58
10' Rt	" "		6.16	9.66
✓ ℄			6.7	9.1

15.82

15

10' Lt	Edge Pav.		6.38	9.44
30' Lt	" "		6.54	9.28
46' Lt			7.3	8.5
46' Lt	Top Cb ✓		6.43	9.39
	69+50 = N End 2 Strip Black Pavement			
46' Lt	Top Cb ✓		6.66	9.16
46' Lt			7.3	8.5
30' Lt	on Edge Pav.		6.85	8.97
20' Lt	on "		6.71	9.11
10' Lt	on Edge "		6.60	9.22
✓ ℄			7.0	8.8
10' Rt	" " "		6.42	9.40
20' Rt	on "		6.45	9.37
30' Rt	" " "		6.55	9.27
46' Rt			6.9	8.9
46' Rt	Top Cb ✓		6.08	9.74
PT	2.22	12.00	6.04	9.78
	70+0			
46' Rt	Top Cb ✓		7.53	9.47
46' Rt			8.3	8.7

		12.00		
30' Rt			3.5	8.5
30' Rt			3.6	8.4
✓ Δ			3.6	8.4
30 Lt			3.8	8.2
30' Lt			3.9	8.1
46' Lt			3.9	8.1
46' Lt - Top Cb		✓	3.01	8.99
	70+50			
46' Lt - Top Cb		✓	3.18	8.82
46' Lt			4°	8.0
30' Lt			4.3	7.7
30' Lt			4.1	7.9
✓ Δ			3.8	8.2
30' Rt			3.9	8.1
30' Rt			3.9	8.1
46' Rt			3.8	8.2
46' Rt - Top Cb		✓	3.75	9.25
	71+0			
46' Rt - Top Cb		✓	3.90	9.10
46' Rt			3.6	8.4

		12.00		
30' Rt			4.0	8.0
30' Rt			4.2	7.8
✓ Δ			4.0	8.0
30 Lt			4.3	7.7
30' Lt			4.3	7.7
46 Lt			4.3	7.7
46' Lt Top Cb		✓	3.27	8.73
	71+50			
46' Lt			3.45	8.55
46' Lt - Top Cb		✓	4.4	7.6
30' Lt			4.5	7.5
30' Lt			4.4	7.6
✓ Δ			4.1	7.9
30' Rt			4.2	7.8
30' Rt			4.2	7.8
46' Rt			4.0	8.0
46' Rt - Top Cb		✓	3.05	8.95
	72+0			
46' Rt - Top Cb		✓	3.23	7.77
46' Rt			4.2	7.8

12.00

30 Rt		4.4	7.6	
20 Rt		4.4	7.6	
✓ ℄		4.3	7.7	
30 Lt		4.6	7.4	
30 Lt		4.7	7.3	
46 Lt		4.6	7.4	
46 Lt = Top Cb	✓	3.65	8.85	
72+50				
46 Lt = Top Cb	✓	3.75	8.25	
46 Lt		4.5	7.2	
30 Lt		4.6	7.4	
30 Lt		4.7	7.3	
℄		4.2	7.8	
30 Rt		4.5	7.5	
20 Rt		4.7	7.3	
46 Rt		4.2	7.7	
46 Rt = Top Cb	✓	3.42	8.58	
73+0				
46 Rt = Top Cb	✓	3.47	8.53	
46 Rt		4.4	7.6	

12.00

17

30 Rt		4.8	7.2	
20 Rt		4.7	7.3	
✓ ℄		4.7	7.3	
20 Lt		4.8	7.2	73+31 = M.H. ℄ St 50 Rt 4.81
30 Lt		5.0	7.0	
46 Lt		4.8	7.2	
46 Lt = Top Cb	✓	3.88	8.12	
73+50				
46 Lt = Top Cb	✓	4.00	8.0	
46 Lt		4.9	7.1	
30 Lt		4.9	7.1	
20 Lt		4.9	7.1	
✓ ℄		4.6	7.4	
20 Rt		4.7	7.3	
30 Rt		4.8	7.2	
46 Rt		4.5	7.5	
46 Rt = Top Cb	✓	3.62	8.38	
74+0				
46 Rt = Top Cb	✓	3.78	8.22	
46 Rt		4.6	7.4	

	12.0°		
30' Rt		4.9	7.1
20' Rt		5.0	7.0
✓ Z		5.0	7.0
20' Lt		5.1	6.9
30' Lt		4.9	7.1
46' Lt		5.1	6.9
46' Lt. Top Cb	✓	4.17	7.83
	74+50		
46' Lt - Top Cb	✓	4.22	7.78
46' Lt		5.1	6.9
30' Lt		5.2	6.8
20' Lt		5.1	6.9
✓ Z		5.0	7.0
20' Rt		4.8	7.2
30' Rt		4.8	7.2
46' Rt		4.7	7.3
46' Rt - Top Cb	✓	3.84	4.86
	75+096 = opp Cb in Lt + Rt + Lt		
46' Rt - Top Cb	✓	3.80	8.20
46' Rt on Grating		4.82	7.18

	12.0°		
30' Rt		4.9	7.1
20' Rt		4.9	7.1
✓ Z		4.8	7.2
30' Lt		5.1	6.9
30' Lt		5.2	6.8
46' Lt on Grating		5.22	6.78
46' Lt - Top Cb	✓	4.21	7.79
	75+50		
46' Lt. Top Cb	✓	4.00	8.00
46' Lt		5.2	6.8
30' Lt		5.1	6.9
20' Lt		4.9	7.1
✓ Z		4.8	7.2
30' Rt		4.6	7.4
30' Rt		5.0	7.0
46' Rt		4.6	7.4
46' Rt - Top Cb	✓	3.72	8.28
	96+0		
46' Rt - Top Cb	✓	3.56	8.44
46' Rt		4.5	7.5

12:00

30' Rt			4.6	7.4	
20' Rt			4.8	7.2	
✓ ℄			4.6	7.4	
20' Lt			4.8	7.3	
30' Lt			5.0	7.0	
40' Lt			4.9	7.1	
46' Lt	Top Cb	✓	3.84	8.16	
	76+50				
46' Lt	Top Cb	✓	3.74	8.26	
40' Lt			4.9	7.1	
30' Lt			4.7	7.3	
20' Lt			4.6	7.4	
✓ ℄			4.4	7.6	
20' Rt			4.6	7.4	
30' Rt			4.5	7.5	
40' Rt			4.3	7.7	
46' Rt	Top Cb	✓	3.37	8.63	
	77+0				
46' Rt	Top Cb	✓	3.25	8.15	
40' Rt			4.2	7.8	

12:00

19

30' Rt			4.5	7.5	
20' Rt			4.4	7.6	
✓ ℄			4.4	7.6	
20' Lt			4.5	7.5	
30' Lt			4.6	7.4	
40' Lt			4.8	7.2	
46' Lt	Top Cb	✓	3.57	8.43	
TP	3.21	11.66	3.55	8.45	
	77+50				
46' Lt	Top Cb	✓	3.64	8.52	
40' Lt			4.3	7.4	
30' Lt			4.2	7.5	
20' Lt			4.0	7.7	
✓ ℄			3.9	7.8	
20' Rt			3.9	7.8	
30' Rt			3.9	7.8	
40' Rt			3.4	8.3	
46' Rt	Top Cb	✓	3.74	8.92	
	77+99: Rt. SL. Sassafras				
46' Rt	Top Cb	✓	2.52	9.14	

11.66

40' Rt			3.6	8.1
30' Rt			3.6	8.1
20' Rt			3.7	8.0
✓ ℄			3.8	7.9
30' Lt			3.9	7.8
30' Lt			4.2	7.5
40' Lt			4.1	7.6
40' Lt - Top Cb		✓	3.00	8.66
78+39 = ℄ Sassafras				
40' Lt - Top Cb		✓	3.02	8.64
40' Lt			4.2	7.5
30' Lt			4.2	7.5
20' Lt			4.2	7.5
✓ ℄			3.7	8.0
20' Rt			3.8	7.9
30' Rt			3.6	8.1
40' Rt			3.2	8.5
78+79 Hobbs Sassafras				
40' Rt - Top Cb		✓	2.55	9.11
40' Rt			3.3	8.4

11.66

2R

30' Rt			3.9	7.8
20' Rt			4.1	7.6
✓ ℄			4.1	7.6
30' Lt			4.2	75
30' Lt			4.2	7.5
40' Lt			4.3	7.4
40' Lt - Top Cb		✓	3.02	8.64
79+0				
40' Lt - Top Cb		✓	3.09	8.57
40' Lt			4.4	7.3
30' Lt			4.3	7.4
20' Lt			4.2	7.5
✓ ℄			4.3	7.4
20' Rt			4.1	7.6
30' Rt			3.9	7.8
40' Rt			3.9	8.8
40' Rt - Top Cb		✓	2.66	9.00
79+50				
40' Rt - Top Cb		✓	2.81	8.82
40' Rt			3.3	8.4

11.66

30 Rt		4.0	7.7
20 Rt		4.0	7.7
✓ ℄		4.1	7.6
20 Lt		4.0	7.7
30 Lt		4.3	7.4
40 Lt		4.5	7.2
46 Lt = Top Cb ✓		3.24	8.42
	80+0		
46 Lt = Top Cb ✓		3.37	8.27
40 Lt		4.5	7.2
30 Lt		4.5	7.2
20 Lt		4.4	7.3
✓ ℄		4.2	7.5
20 Rt		4.1	7.6
30 Rt		4.1	7.6
40 Rt		3.5	8.2
46 Rt = Top Cb ✓		3.03	8.63
	80+50		
46 Rt = Top Cb ✓		3.10	8.56
46 Rt		3.9	7.8

11.66

21

30 Rt		4.3	7.4
20 Rt		4.4	7.3
✓ ℄		4.3	7.4
20 Lt		4.4	7.1
30 Lt		4.4	7.3
40 Lt		4.8	6.9
46 Lt = Top Cb ✓		3.54	8.12
	81+0		
46 Lt = Top Cb ✓		3.70	7.96
40 Lt		4.8	6.9
30 Lt		4.7	7.0
20 Lt		4.7	7.0
✓ ℄		4.5	7.2
20 Rt		4.5	7.2
30 Rt		4.6	7.1
46 Rt		3.8	7.9
46 Rt = Top Cb ✓		3.26	8.40
	81+50		
46 Rt = Top Cb ✓		3.38	8.28
46 Rt		3.9	7.8

81+05 = N.H. & Attleboro on Rim 4.50 — 7.1

	11.66			
30' Rt		4.3	7.4	
20' Rt		4.4	7.3	
✓ ℄		4.6	7.1	
20' Lt		4.8	6.9	
30' Lt		4.9	6.8	
40' Lt		4.9	6.8	
46' Lt = Topcb ✓		3.81	7.85	
	82+0			
41' Lt = Topcb ✓		3.87	7.79	
41' Lt		4.9	6.8	
30' Lt		4.9	6.8	
20' Lt		4.9	6.8	
✓ ℄		4.6	7.1	
20' Rt		4.5	7.2	
30' Rt		4.4	7.3	
40' Rt		4.2	7.5	
41' Rt - Topcb ✓		3.54	8.15	
	82+50			
46' Rt Topcb ✓		3.50	8.16	
40' Rt		4.3	7.4	

	11.66		
30' Rt		4.4	7.3
20' Rt		4.5	7.2
✓ ℄		4.5	7.2
20' Lt		4.8	6.9
30' Lt		5.0	6.7
40' Lt		4.8	6.9
41' Lt - Topcb ✓		3.87	7.79
	82+72 = Opp Cb lab't Rt Lt.		
41' Lt - Topcb ✓		3.86	7.80
46' Lt Grating		4.89	6.77
38 Lt MH on Rim		4.16	7.50
30' Lt		5.0	6.7
20' Lt		4.8	6.9
✓ ℄		4.4	7.3
20' Rt		4.5	7.2
30' Rt		4.5	7.2
46' Rt on Grating		4.49	7.17
46' = Topcb ✓		3.47	8.19
	82+08.95 = Cb BC Lt		
46' Rt		3.34	8.32

		11.66					1391		12-21-32
46' Rt			4.3	7.4					23
30' Rt			4.3	7.4			83+50		
20' Rt			4.4	7.3	46' Rt - Top Ch	✓	5.49	8.44	
✓ ℄			4.3	7.4	46' Rt		6.3	7.6	
20' Lt			4.6	7.1	30' Rt		6.5	7.4	
30' Lt			4.8	6.9	20' Rt		6.7	7.2	
46' Lt			4.7	7.0	✓ ℄		6.5	7.4	
46' Lt Top Ch	✓		3.66	8.00	30' Lt		6.7	7.2	
TP	592	1391	3.67	7.99	30' Lt		7.1	6.8	
	83+17.61 = Pav. BC				46' Lt		7.1	6.8	
46' Lt - Top Ch	✓		5.87	8.04	46' Lt - Top Ch	✓	5.71	8.15	
46' Lt			7.0	6.9	84+0				
30' Lt			7.0	6.9	46' Lt - Top Ch	✓	5.67	8.24	
20' Lt			6.8	7.1	46' Lt		7.0	6.9	
✓ ℄			6.5	7.4	30' Lt		7.0	6.9	
20' Rt			6.6	7.3	✓ ℄		6.8	7.1	
30' Rt			6.6	7.3	30' Rt		6.3	7.6	
46' Rt			6.5	7.4	30' Rt		6.4	7.5	
46' Rt - Top Ch	✓		5.53	8.38	46' Rt		6.3	7.6	
					46' Rt - Top Ch	✓	6.3	7.7	
							5.31	8.57	

13.91

84+50

46 Rt - Top Ch	✓	5.19	8.72	
46 Rt		6.3	7.6	
30 Rt		6.2	7.7	
20 Rt		6.4	7.5	
✓ ℄		6.4	7.5	
20 Lt		6.6	7.3	
30 Lt		6.8	7.1	
46 Lt		6.8	7.1	
46 Lt - Top Ch	✓	5.45	8.43	

85+0

46 Lt - Top Ch	✓	5.27	8.64	
46 Lt		6.4	7.5	
30 Lt		6.6	7.3	
20 Lt		6.4	7.5	
✓ ℄		6.1	7.8	
20 Rt		6.2	7.7	
30 Rt		6.2	7.7	
46 Rt		6.0	7.9	
46 Rt - Top Ch	✓	5.07	8.89	

13.91

85+50

46 Rt - Top Ch	✓	4.86	9.05	
46 Rt		5.9	8.0	
30 Rt		6.0	7.9	
20 Rt		6.0	7.9	
✓ ℄		5.8	8.1	
20 Lt		6.2	7.7	
30 Lt		6.4	7.5	
46 Lt		6.4	7.5	
46 Lt - Top Ch	✓	5.13	8.78	

86+00

46 Lt - Top Ch	✓	5.04	8.87	
46 Lt		6.1	7.8	
30 Lt		6.3	7.6	
20 Lt		6.1	7.8	
✓ ℄		5.8	8.1	
20 Rt		5.9	8.0	
30 Rt		5.8	8.1	
46 Rt		5.7	8.2	
46 Rt - Top Ch	✓	4.73	9.18	

1391

	86+50		
46' Rt	Topch	4.66	9.25
46' Rt		5.6	8.3
30' Rt		5.8	8.1
20' Rt		5.9	8.0
℄		5.6	8.3
20' Lt		5.9	8.0
30' Lt		6.2	7.7
46' Lt		6.1	7.8
46' Lt	Topch	4.86	9.05
	87+00		
46' Lt	Topch	4.71	9.20
46' Lt		6.0	7.9
30' Lt		6.0	7.9
20' Lt		5.9	8.0
℄		5.6	8.3
20' Rt		5.7	8.2
30' Rt		5.6	8.3
46' Rt		5.6	8.3
46' Rt	Topch	4.76	9.45

1391

	87+50		
46' Rt	Topch	4.30	9.61
46' Rt		5.4	8.5
30' Rt		5.4	8.5
20' Rt		5.5	8.4
℄		5.5	8.4
20' Lt		5.7	8.2
30' Lt		6.0	7.9
46' Lt		5.8	8.1
46' Lt	Topch	4.58	9.33
	88+00		
46' Lt	Topch	4.46	9.45
46' Lt		5.7	8.2
30' Lt		5.7	8.2
20' Lt		5.5	8.4
℄		5.3	8.6
20' Rt		5.2	8.7
30' Rt		5.2	8.7
46' Rt		5.1	8.8
46' Rt	Topch	4.13	9.78

88+50

46 Rt. Top Cb ✓		3.97	9.94
46 Rt		5.2	8.7
30 Rt		5.3	8.6
20 Rt		5.3	8.6
✓ ℄		5.2	8.7
20 Lt		5.4	8.5
30 Lt		5.7	8.2
46 Lt		5.5	8.4
46 Lt = Top Cb ✓		4.22	9.69

88+63 = Lt Ext Cb or Lt Cb Rt on Rt. ✓

46 Lt = Top Cb		4.22	9.68
46 Rt = " "		3.98	9.93

89+0

46 Rt		5.1	8.8
30 Rt		5.0	8.9
30 Rt		5.0	8.9
✓ ℄		4.9	9.0
20 Lt		5.3	8.6
30 Lt		5.5	8.4

46 Lt		5.5	8.4

89+50

46 Lt		5.3	8.6
30 Lt		5.1	8.8
30 Lt		4.9	9.0
✓ ℄		4.7	9.2
20 Rt		4.8	9.1
30 Rt		4.9	9.0
46 Rt		5.1	8.8

90+0

46 Rt		5.1	8.8
30 Rt		4.9	9.0
20 Rt		4.9	9.0
✓ ℄		4.8	9.1
20 Lt		4.9	9.0
30 Lt		5.2	8.7
46 Lt		5.5	8.4

90+50

46 Lt		5.6	8.3
30 Lt		5.5	8.4

1422 p 39
44
47
60

1450 p 44
871

2229 p58

1791 p1
p27
p70
p99

1099 p 48

871 p 50

1050 p 44

64.58
+ .5
49.58

44.07
- 7
37.07

3832, 3613

1391

20 Lt			54	8.5
✓ ℄			49	9.0
20 Rt			52	8.6
20 Rt			53	8.6
40 Rt			53	8.6
	91+0			
40 Rt			53	8.6
20 Rt			51	8.8
20 Rt			50	8.9
✓ ℄			50	89
20 Lt			54	8.5
20 Lt			54	8.5
40 Lt			58	8.1
	91+50			
40 Lt			57	8.2
20 Lt			55	8.4
20 Lt			54	8.5
✓ ℄			51	8.8
20 Rt			53	8.6
20 Rt			53	8.6

1391

40 Rt			55	8.4
	92+0			
40 Rt			54	8.5
20 Rt			52	8.7
20 Rt			52	8.7
✓ ℄			51	8.8
20 Lt			54	8.5
20 Lt			56	8.3
40 Lt			58	8.1
	92+50			
40 Lt			59	8.0
20 Lt			57	8.2
20 Lt			55	8.4
✓ ℄			54	8.5
20 Rt			55	8.4
20 Rt			56	8.3
40 Rt			59	8.0
	93+0			
40 Rt			59	8.0
20 Rt			59	8.1

1891

30 Rt			5.8	8.1
✓ ℄			5.6	8.3
30 Lt			5.9	8.0
30 Lt			6.0	7.9
46 Lt			6.2	7.7
	93+50			
46 Lt			6.2	7.7
30 Lt			6.0	7.9
30 Lt			5.9	8.0
✓ ℄			5.6	8.3
30 Rt			5.8	8.1
30 Rt			5.9	8.0
46 Rt			6.0	7.9
	94+0			
46 Rt			6.2	7.6
30 Rt			6.1	7.8
30 Rt			6.0	7.9
✓ ℄			5.7	8.2
30 Lt			6.0	7.9
30 Lt			6.3	7.7

1891

46 Lt			6.3	7.6
TP	3.02	11.97	4.96	8.95
	94+50	11.97		
46 Lt			4.7	7.3
30 Lt			4.4	7.6
30 Lt			4.2	7.8
✓ ℄			3.8	8.4
30 Rt			4.2	7.8
30 Rt			4.3	7.7
46 Rt			4.4	7.6
	95+0			
46 Rt			4.5	7.5
30 Rt			4.5	7.5
30 Rt			4.5	7.5
✓ ℄			4.1	7.9
30 Lt			4.5	7.5
30 Lt			4.6	7.4
46 Lt			5.0	7.0
	95+50			
46 Lt			5.1	6.9

11+97

30' Lt		4.9	7.1
20' Lt		4.7	7.3
℄		4.4	7.6
30' Rt		4.5	7.5
30' Rt		4.4	7.6
46' Rt		4.3	6.7

96+0 = Prop Culvert

46' Rt		4.4	7.6
30' Rt		4.4	7.6
20' Rt		4.5	7.5
℄		4.3	7.7
30' Lt		4.6	7.4
30' Lt		4.7	7.3
46' Lt		5.1	6.9

96+50

46' Lt		4.9	7.1
30' Lt		4.8	7.2
20' Lt		4.6	7.4
℄		4.3	7.8
30' Rt		4.3	7.8

11+97

30' Rt		4.1	7.9
46' Rt		4.0	8.0

97+0

46' Rt		4.0	8.0
30' Rt		3.9	8.1
20' Rt		4.1	7.9
℄		3.9	8.1
20' Lt		4.6	7.4
30' Lt		4.7	7.3
46' Lt		4.9	7.1

97+50

30' Lt		4.0	8.0
20' Lt		3.8	8.2
℄		3.5	8.5
30' Rt		3.5	8.5
20' Rt		3.6	8.4

98+0

30' Rt		3.2	8.8
20' Rt		3.3	8.7
℄		3.2	8.8

11.97

30 Lt		3.7	8.3
30 Lt		3.8	8.2
	98+50		
30 Lt		3.4	8.6
30 Lt		3.4	8.6
✓ ℄		3.0	9.0
30 Rt		3.1	8.9
30 Rt		3.0	9.0
	98+64.05 = CL EC		
30 Rt		2.9	9.1
30 Rt		3.1	8.9
✓ ℄		2.9	9.1
30 Lt		3.2	8.8
30 Lt		3.3	8.7
	98+73.59 = Pav EC		
30 Lt		3.2	8.8
30 Lt		3.2	8.8
✓ ℄		2.8	9.2
30 Rt		3.0	9.0
30 Rt		2.9	9.1

11.97

TP	5.30	1513	2.14	9.83
		99+0		
30 Rt			6.0	9.1
30 Rt			6.0	9.1
✓ ℄			5.9	9.2
30 Lt			6.3	9.8
30 Lt			6.3	9.8
		99+50		
30 Lt			6.0	9.1
30 Lt			6.0	9.1
✓ ℄			5.8	9.3
30 Rt			6.0	9.1
30 Rt			6.0	9.1
		100+0		
30 Rt			5.8	9.3
30 Rt			5.9	9.2
✓ ℄			5.5	9.6
30 Lt			5.7	9.4
30 Lt			5.7	9.4

	15.13		
	100+50		
30' Lt		5.6	9.5
20 Lt		5.6	9.5
✓ ℄		5.3	9.8
20 Rt		5.7	9.4
30 Rt		5.7	9.4
	101+0		
30 Rt		5.4	9.7
20 Rt		5.5	9.6
✓ ℄		5.3	9.8
20 Lt		5.5	9.6
30 Lt		5.5	9.6
	101+50		
30 Lt		5.5	9.6
20 Lt		5.3	9.8
✓ ℄		5.3	9.8
20 Rt		5.2	9.9
30 Rt		4.9	10.2
	101+67.4 = S End Cb Rt		
30.5' Rt - Top Cb		4.59	10.54

	15.13		
	102+0		
30.5' Rt Gutter in Driveway		4.97	10.16
20' Rt		5.1	10.0
✓ ℄		5.1	10.0
20' Lt		5.4	9.7
30 Lt		5.4	9.7
	102+50		
30 Lt		5.6	9.5
20 Lt		5.6	9.5
✓ ℄		5.2	9.9
20 Rt		5.1	10.0
30.5 Rt		4.9	10.2
30.5 Rt Top Cb		4.28	10.85
	103+0		
30.5' Rt Top Cb		4.12	11.01
30.5' Rt - Gut		5.0	10.1
20' Rt		5.1	10.0
✓ ℄		5.2	9.9
20 Lt		5.5	9.6
30 Lt		5.5	9.6

15.13

1037/1943 - St. Harasthy

30 Lt	on Pax	5.82	9.31	
30 Lt	" "	5.10	9.73	
Lt	" "	5.06	10.07	
30 Rt	" "	4.63	10.50	
30 Rt	" "	4.57	10.56	
BM		5.09	10.01	N.E.B.P. Harasthy Atlantic 10.00

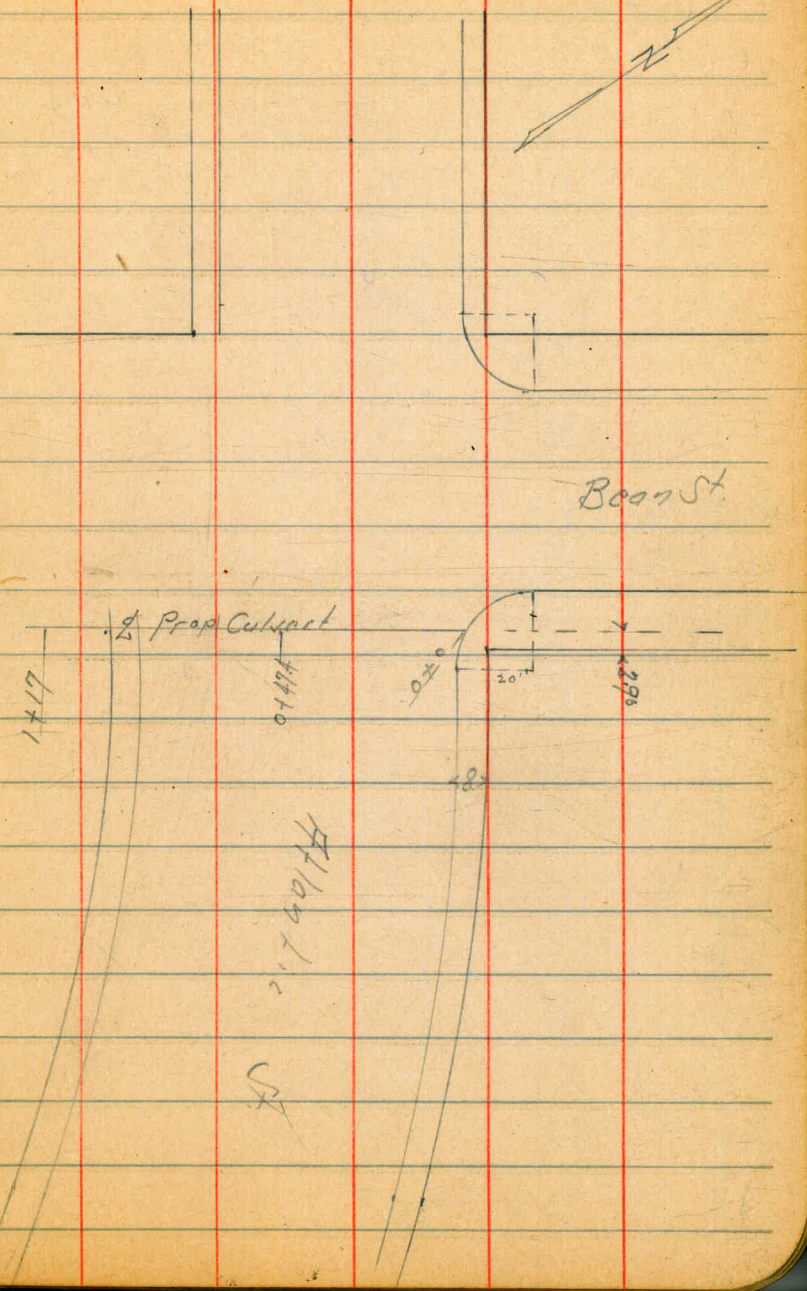
Proposed Culvert
Atlantic & Beon St.

B.M	2.24	12.07	14.1	9.83
0+0			4.3	7.8 ✓
+47.4 = ℄ Atlantic			4.7	7.4 ✓
+90			5.3	6.8 ✓
+93.4 = N ℄ Atlantic			4.7	7.4 ✓
1+01.4 = W.L	"		8.9	8.2 ✓
+12			5.5	6.6 ✓
+17			14.3	-2.2 ✓

TP Page 80

1-7-38
Moore
Sisso
Norberg

33



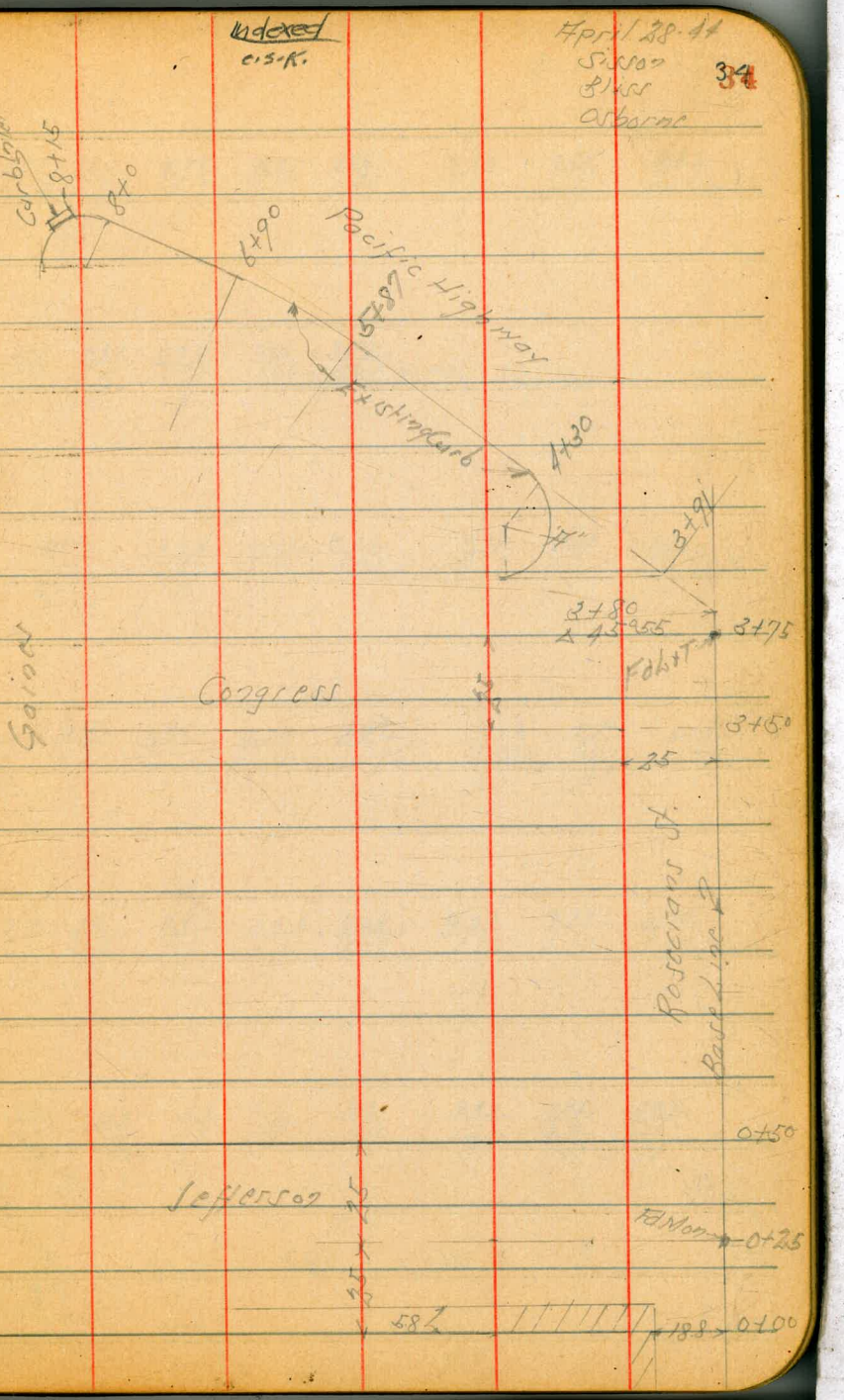
Cross Section 44 ft 28' of Rosecrans St. & S 44 ft
Curb Line of Pacific Hwy. Jefferson St to Gaines St.

Levels Next Page

Indexed
C.S.K.

April 28-11
Sisson
Bliss
Osborne

34



Station	Note												
							Lt = W			℄		Rt = E	
1+0						409 / 497 / 25 = N/L	397 / 5.09 / 21	380 / 5.26 / 16	3.88 / 5.18 / 11	405 / 5.01 / 5	4.16 / 4.90	420 / 4.86 / 4	4.75 / 4.31 / 15	5.03 / 4.03 / 25
0+93	16' Lt = Ely Tel Pole					409 / 497 / 25	391 / 5.15 / 19	3.90 / 5.16 / 16	3.84 / 5.22 / 12	406 / 5.00 / 5	4.14 / 4.92			
0+75								4.08 / 5.01 / 25	366 / 5.40 / 15	4.01 / 5.05 / 5	4.11 / 4.95	4.19 / 4.87 / 4	4.25 / 4.31 / 15	5.06 / 4.00 / 25
0+50	= N/L Jefferson						4.0 / 5.1 / 25	3.7 / 5.4 / 18	345 / 5.61 / 13	3.72 / 5.34 / 5	399 / 5.07	4.12 / 4.94 / 5	470 / 4.30 / 15	5.05 / 4.01 / 25
0+25							39 / 5.2 / 25	3.8 / 5.3 / 20	3.5 / 5.6 / 7	366 / 5.40 / 5	4.04 / 5.02	426 / 4.80 / 5	499 / 4.27 / 15	5.06 / 4.00 / 25
0+0	= S/L Jefferson					438 / 4.68 / 25 = W/L Rosecrans	431 / 4.75 / 18.8 = Ely Conc Walk	4.1 / 5.0 / 15	3.3 / 5.8 / 8	3.7 / 5.4 / 5	4.2 / 4.9	443 / 4.63 / 5	485 / 4.21 / 15	509 / 3.97 / 25 = E/L Rosecrans
											9.06			
TP		3.64	9.06	4.85	5.42									
BM		5.65	10.27		4.62	S.F.R.P. ℄ Curve San Diego Ave Rosecrans								

	Lt				Rt	
1+50	4.34 / 4.72 / 25	4.05 / 5.01 / 19	4.69 / 4.39 / 5	4.83 / 4.23	5.27 / 3.79 / 15	
1+42	16' Lt - Ex Power & Tel Pole					
1+25	4.29 / 4.77 / 25	4.10 / 4.96 / 19	4.52 / 4.54 / 5	4.75 / 4.31	4.89 / 4.19 / 5	5.21 / 3.85 / 15
1+10	4.28 / 4.78 / 25	4.10 / 4.96 / 18	4.37 / 4.69 / 5	4.46 / 4.60	4.69 / 4.37 / 5	5.15 / 3.91 / 15	5.33 / 3.73 / 25
1+80	4.12 / 4.84 / 25	4.03 / 5.03 / 18	4.10 / 4.96 / 13	4.35 / 4.71 / 5	4.46 / 4.60	4.57 / 4.49 / 5	5.08 / 3.98 / 15	5.30 / 3.76 / 25
1+50	4.13 / 4.93 / 25	3.97 / 5.09 / 17	4.28 / 4.78 / 5	4.39 / 4.67	4.45 / 4.61 / 4	4.91 / 4.15 / 15	5.15 / 3.91 / 25
1+25	4.08 / 5.01 / 25	3.92 / 5.14 / 15	4.18 / 4.88 / 5	4.32 / 4.74	4.32 / 4.74 / 5	4.82 / 4.24 / 15	5.08 / 3.98 / 25

9.06

9.06

	Lt				Rt
3+75 = ℄ Congress	391 / 5.15 / 75	394 / 5.12 / 50	388 / 5.18 / 25	389 / 5.30 / 21	425 / 4.81 / 5	439 / 4.67
3764 = Gutter Line to West	361 / 5.45 / 75	375 / 5.31 / 65	385 / 5.21 / 25	380 / 5.24 / 20	426 / 4.80 / 5	441 / 4.65
389 25 Lt = Fly Power Pole						
3750 = ℄ Congress	391 / 5.09 / 25	380 / 5.26 / 19	434 / 4.72 / 5	444 / 4.62		467 / 4.39 / 15
3725	405 / 5.01 / 25	381 / 5.25 / 20	423 / 4.83 / 12	448 / 4.58 / 5	450 / 4.56	488 / 4.18 / 15
370	419 / 4.87 / 25	391 / 5.15 / 20	461 / 4.46 / 5	469 / 4.39		511 / 4.05 / 15
3675	426 / 4.80 / 25	401 / 5.05 / 20	479 / 4.29 / 5	480 / 4.28		524 / 3.92 / 15

9.06

9.06

5+0

4+75

4+50

TP 3.79 8.34 4.51 4.55

4+30 = Cb EC

11 = ℄ Rd

3+91 Taken on Line of Congress 5.43 5.22
69 54

9.06

8.34

℄ ℄

4.29 ~~5.44~~ 1.05 =Cb ~~5.37~~ 4.75 3.59

3.84 ~~4.56~~ 1.50 Cb in Dr ~~4.80~~ 4.58 3.78

3.95 ~~4.67~~ 4.39 Cb in Drive ~~4.60~~ 4.16 =Gut 3.88

4.92 8.34

~~4.62~~ 4.44 =Cb ~~4.99~~ 5.07 =Gut 3.99

~~4.54~~ 4.52 0.05 Cb ~~4.91~~ 5.10 =Gut 3.96

484 ~~385~~ 497 ~~521~~ 46 =Cb 46 =Gutt

382 ~~382~~ 5.19 5.18 18

382 ~~382~~ 5.19 5.19 19

408 ~~408~~ 498 5

419 ~~419~~ 4.87

9.06

7+50

6+90 App Cb.EC.

6+50

6+0

+87 = Hopnex Cb.BC

5+60

831

8,34

39
37

2.92 2.28
5.42 6.06
Cb Gutter

3.27 2.62
5.07 5.92

3.48 2.88
4.86 5.46

3.85 3.09
4.49 5.25

3.91 3.17
4.43 5.17

3.51 3.40
4.83 4.94 Gutter
Cb. in Di.

8.34

8715 = Cambrian lat at Gainesville

870

8.84

2.57 1.69
5.77 6.65 = Granite Gneiss
-20

2.68 2.04
5.66 6.30 = Gabbro
-26

8.34

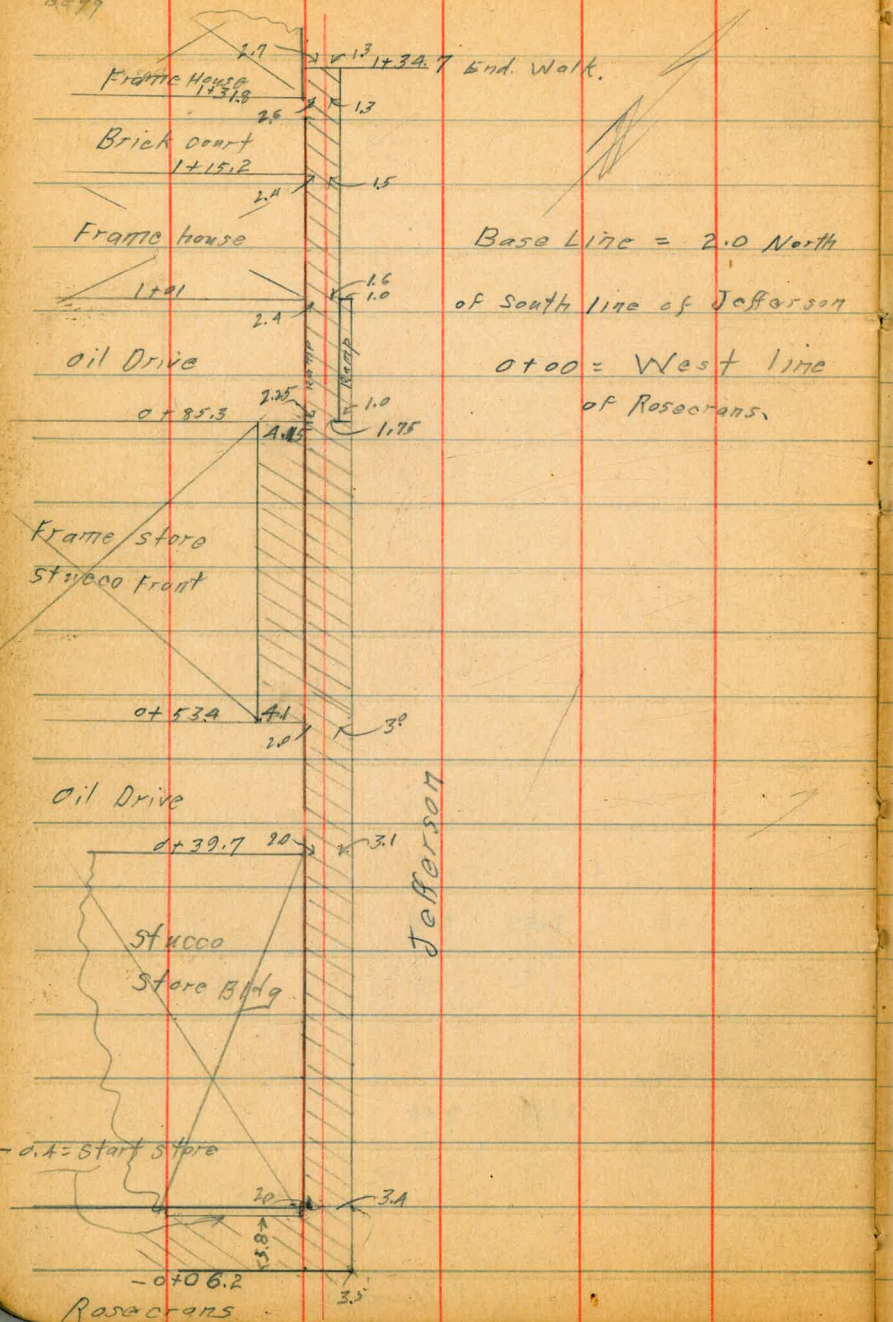
Sommermeyer
W. Moore
Bagg

S.W. Cor. Jefferson & Rose crans - To West

indexed
Co. Sk.

8-1-44

41



Base Line = 2.0 North of South line of Jefferson

0+00 = West line of Rosecrans.

BM. = BP. 900 ft. W. from Rose crans. W. side Pacific	5.37	9.68	—	4.31
T.P.	4.92	10.52	4.08	5.60
T.P.	~~4.72~~ 3.60	8.92	5.20	5.32
T.P.	4.72	8.98	4.66	4.26 ✓ Cor. walk
-0+06.3				
3.5 Rt			4.9	4.1
2.0 Lt			4.8	4.2
-0+06.2 Edge Walk				
3.5 Rt			4.72	4.26
3.6 Rt Ground			4.9	4.1
0+00				
3.4 Rt Walk			4.66	4.32
3.5 Rt			4.8	4.2
2 Lt			4.67	4.31
0+20				
3.2 Rt			4.61	4.37
3.3 Rt			5.0	4.0
2 Lt			4.63	4.35

X-Sec. S.W. Cor. Jefferson & Rosecrans, To West

0+39.7	8.98		
3.1 Rt. Walk		4.62	4.36
3.2 Rt		4.9	4.1
2.0 Lt		4.64	434
0+53.4			
3 Rt Walk		4.68	4.30
3.1 Rt		4.8	4.2
2 Lt		4.42	4.56
6.1 Lt		4.18	4.70
0+85.3			
2.75 Rt. Walk		4.83	4.15
2.8 Rt		5.1	3.9
2.25 Lt		4.53	4.45
6.4 Lt		4.26	4.72
0+86.3			
1.75 Rt Top Ramp		4.98	4.20
2.75 Rt Bottom "		4.99	3.99
1.6 Lt Top Ramp		4.62	4.36
2.25 Lt Bottom Ramp		4.71	4.27
1+00	8.98		
1.6 Lt		4.91	4.07
2.4 Lt		5.05	393
1+01			
1.6 Rt Top Ramp		4.94	404
2.6 Rt Bottom Ramp		5.16	382
2.7 Rt		5.3	3.7
1.6 Lt		4.90	4.08
2.4 Lt		4.37	4.61
1+15½			
1.5 Rt Edge Walk		4.82	4.16
1.6 Rt		5.2	3.8
2.4 Lt		4.80	4.18
1+31.8			
1.3 Rt		4.80	4.18
1.4 Rt		5.1	3.9
2.6 Lt		4.73	4.25
1+39.7			

over

S.W. Jefferson & Rosecrans
x-sec. to Wash

1+34.7		8.98		
	1.3 Rt End Walk		5.09	3.89
	1.4 Rt Ground		5.1	3.9
	2.7 Lt End. walk		4.95	4.03
1+50				
	1.4 Rt. Ground		4.9	41
	2.7 Lt		48	4.2
T.P.	5.97	10.72	4.23	4.75
T.P.	4.20	9.87	5.05	5.67
Starting B.M.				
SB. 431			5.54	4.33
				4.31
			Error	0.02

Indexed
C.S.R.

Survey of Knoxville ST.

Cold Empire ST.

C. Moore Marina Blvd. to Litchfield Dr.

Sonnemann Meyer
W. Moore
10-10-44.

Levels P 50

See Roll # 4146

FB. 871-31-5C.

Fd. Con. Mon. 0.04 West
R.E. 4718

Lot V

Lot 3

Ditch

P.L. 265

20.88

Fd. 1½" pipe by Shelton
Reset from 30' R.P.
3' deep

50

30

Pl. 255

4"x6" R.W.R.P.
F.B. 871-31

2x4 R.P.

417.93

S 89° 59' 30" E

Fd. Mon. 6" deep
N.E. Cor. Pl. 256

180°00'30"

Tonopah St.

97.43

Ditch

Corella Tract
#1571

Knoxville St.

495.70

P.L. 264

Corella Line

Corella Line

5+93.13

90°

Copper Spike

Ld. C.T.

Ld. C.T.

Ld. C.T.

℄ Marina Blvd Ld. C.T.

See G.B. #97

2" below New Surfacing

FB. 871-48

1-Span Pile Bridge

45°23'

4+95.70

P.L. 25C

30 c.27

14'

20°

10

10

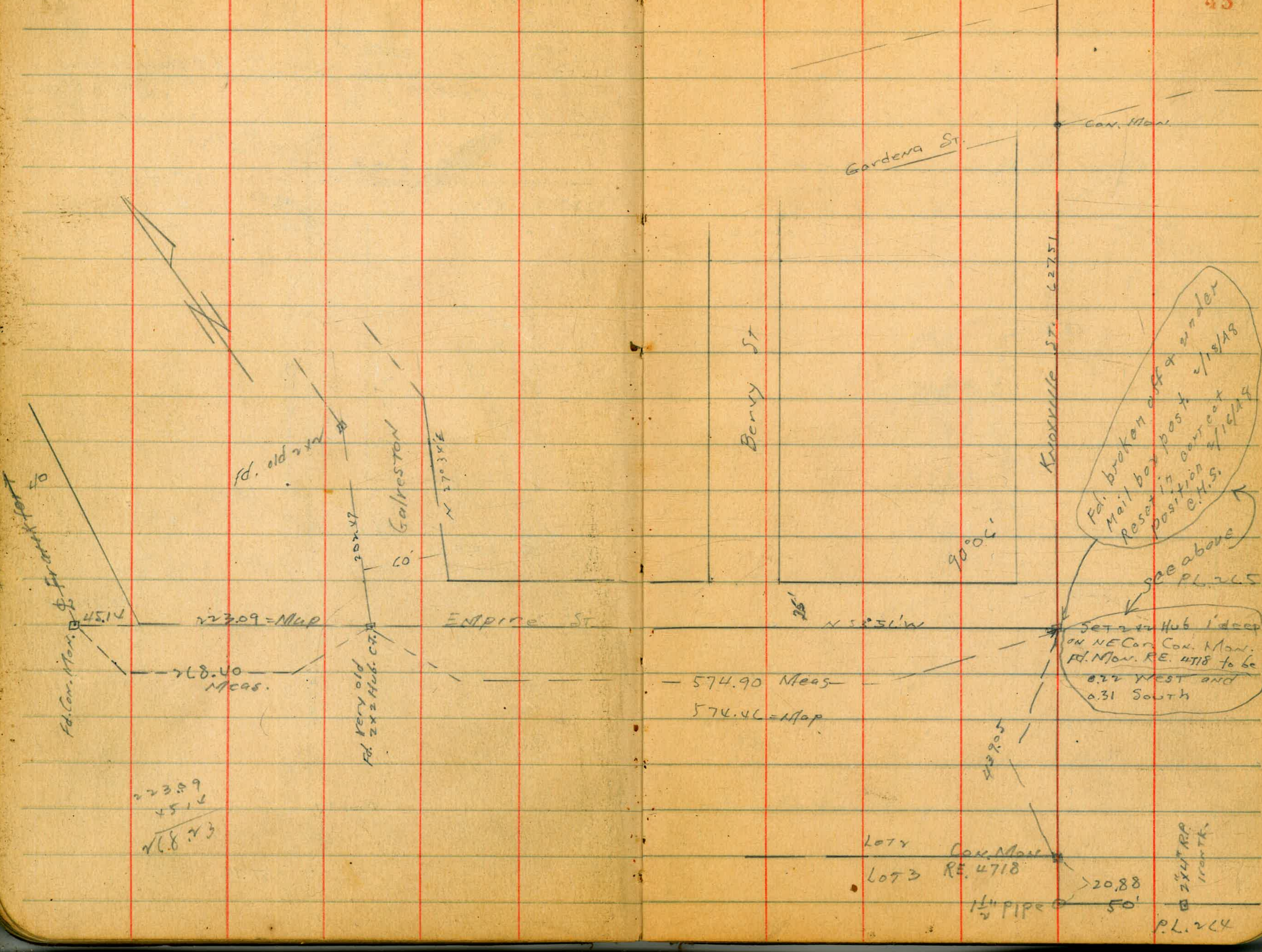
℄ Ditch

Mon.

37L74

P.L. 263

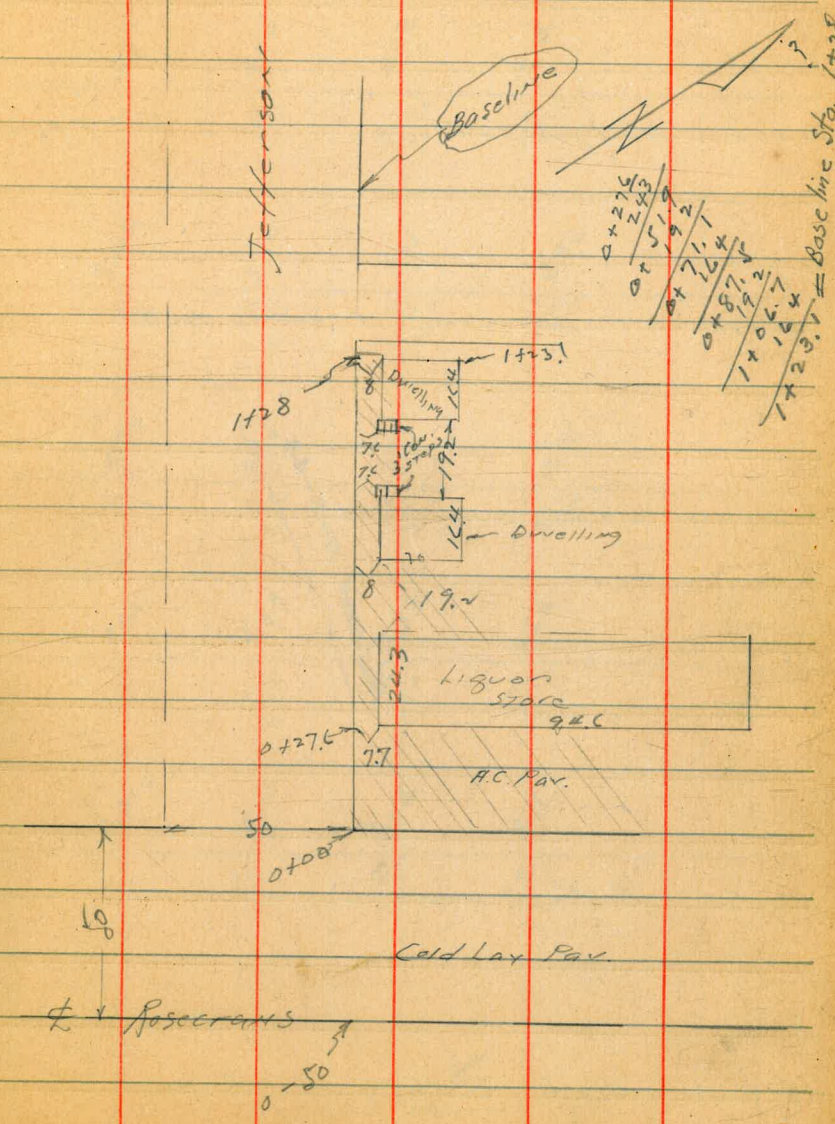
Mon.


Gardena St.
Con. Mon.
Berry St
Knoxville St. 627.51
Fd. broken off & under Mail box post. Reset in correct position 1/16/48 C.H.S.
see above P.L. 265
Set 2x2 Hub 1' deep on NE Cor. Con. Mon. Fd. Mon. RE. 4718 to be 0.22 West and 0.31 South
90°00'
25'
Empire St.
223.09 = Map
45.14
268.40 Meas.
574.90 Meas.
574.46 = Map
Fd. Con. Mon. & Ext. 40
Fd. old 2x4
Galveston
60'
Fd. very old 2x2 Hub. C.T.
223.59
+45.14
268.73
Lot 2
Lot 3
Con. Mon. RE. 4718
20.88
50'
1½" Pipe
2x4" R.P. Iron Tk.
P.L. 264

Index card
C.S.K.

Levels on Private Pav.
around Bldgs. on the
Nly Cor. of Jefferson
and Rosecrans

C. Hodge
Junior Engineer
W.F.K.
11-1-44.



0+00	P.W.L., Rosecrans		
0-11	= Present Line of Valley Gut.		
-0-20	C6. Line		
0-35			
0-50	℄ Rosecrans		
T.P. P.41 This Book	4.01	8.30	d.c

Reduced 11-2-44

Baseline = N/Y Jefferson

Rt.

3.87	4.25	4.02	4.14
4.43	4.25 / 30	4.28 / 65	4.16 / 100
3.42	3.70	3.81	3.92
4.88	4.60 / 30	4.49 / 65	4.38 / 100
3.70	3.95	4.08	4.21
4.60	4.35 / 30	4.22 / 65	4.09 / 100
4.44	4.49	4.53	4.66
3.86	3.81 / 30	3.77 / 65	3.64 / 100
5.01	5.00	5.02	5.11
3.29	3.30 / 30	3.28 / 65	3.19 / 100

8.30

Baseline

Rt.

0 + Co = Gr. Brk.

0 + 40 = Gr. Brk

0 + 27.6 Front of Bldg.

0 + 25

0 + 20

0 + 10

8.30

8.30

		3.96	3.91	
4.01				
4.29		4.34 / 3.5	4.35 / 7.7	
4.01		4.11	4.22	
4.29		4.19 / 3.5	4.08 / 7.7	
4.05	4.27	4.37	4.43	4.53
4.35	4.03 / 7.7	3.93 / 30	3.87 / 65	3.77 / 100
4.07	4.22	4.32	4.33	4.41
4.23	4.08 / 7.7	3.98 / 30	3.97 / 65	3.89 / 100
4.05		4.24	4.26	4.36
4.25		4.04 / 30	4.04 / 65	3.96 / 100
4.04		4.17	4.15	4.25
4.26		4.13 / 30	4.15 / 65	4.05 / 100

← ℄ Baseline

Rt.

1+28

4.03 | 3.79 | 3.80
4.27 | 4.51 | 4.50
3.3 | 7.7

1+00

4.01 | 3.86 | 3.90
4.29 | 4.44 | 4.40
3.5 | 7.7

0+80

4.06 | 3.91 | 4.06
4.24 | 4.39 | 4.24
3.5 | 7.7

0+61.5

3.97 | 3.91 | 3.91
4.33 | 4.39 | 4.39
3.5 | 7.7

8.30

8.30 ✓

Sketch P. 44.

Levels on Knoxville St. C Strm 1-19-45.

Reduced & Plotted 24-45 C.D.H.

√ 100				
1 + 50				
1 + 00				
0 + 50				
0 + 00 ℄ 20' Strip Pav. on Moreno Blvd.				
T.P.	4.67	14.07	4.35	9.40
B.M. B.P. Top Inlet North Tecolote Culv. on Moreno Blvd.	3.71	13.75		10.04

LT. Pueblo Line RT.

50

8.5	8.7	9.0	8.0	7.9
5.6 / 60	5.4 / 30	5.1	6.1 / 8	6.7 / 30
8.4	8.5	8.9	8.3	7.9
5.9 / 60	5.6 / 30	5.7	5.8 / 4	6.7 / 30
8.4	8.4	8.4	8.0	8.0
5.7 / 60	5.7 / 30	5.7	6.1 / 7	6.1 / 30
8.0	8.3	8.4	8.1	
6.1 / 60	5.8 / 30	5.7	6.0 / 30	
9.32	9.2	9.1	9.0	
4.75 / 60	4.9 / 30	5.0	5.1 / 30	

14.07 ✓

					LT			PL.			RT
					9.7 5.7	5.6	10.6 12.4 14.9	12.8	13.0	10.6	9.8
4+50					8.7 12.7	12.8	7.8 3.5	5.C	5.C	7.8	8.C
					73 C7	37	35 30 23	18	C		30
TP,	7.11	18.41	2.77	11.30					18.41		
					5.4 10.1	10.6	13.9	9.6	9.4	10.6	9.7 9.7
4+20					8.3 4.0	3.5	0.7	11.5	4.3	3.5	4.4
					C5 C0	55	47	38	30		30
					5.6	9.9	14.1	9.1	9.4	9.9	9.4 9.3
4+00					8.5	4.7	0.0	5.0	4.7	4.7	4.8
					79	7C	C0	5C	30	8	30
					dirty		Top Dyke				
							8.9	9.0	9.6	8.7	8.6
3+50							5.7	5.1	4.5	5.C	5.5
							C0	30		7	30
							8.9	8.9	9.3	8.4	8.4
3+00							5.C	5.C	4.8	5.7	5.7
							C0	30		8	30
							8.6	8.6	9.1	8.1	8.1
C+50							5.6	5.5	5.0	6.0	6.0
							C0	30		10	30
		14.07							14.07		

	Lt				Pt.					
5+00	9.8	9.8	12.1	14.4	14.8	5.9	5.8	12.9	15.1	12.4	10.3
	8.6	8.6		4.0	3.6	12.5	12.6	5.5	3.3	6.0	8.1
	60	34	30	20	4 deck		20	25	30	37	50
4+89	10.2	10.7	13.9	13.2	13.6	14.4	6.1	14.8	5.8		
	8.2	7.7	4.5	5.2		4.0	12.3	3.6	17.6		
	60	44	40	35	30	22	21	deck Bridge			
4+88	10.2			10.8	14.0	13.5	12.1	6.1	5.8	5.8	14.2	14.2	11.8	10.4
	8.2			7.6	4.4	4.9		12.3	12.6	12.6	4.2	4.2	6.6	8.0
	60			47	40	32	30	21		14	22	27	30	34
4+87									5.6	5.6	14.4	13.1	11.1	
									12.8	12.8	4.0	5.3	7.3	
										17	17	22	30	
4+81	10.2			14.4		13.5	9.9	5.6	14.4	14.1	11.2			
	8.2			4.0		4.9		12.8	4.0	4.2	7.2			
	60			45		36	30	23		19	30			
4+45	9.7			9.7	5.2	5.9	6.0		14.4	14.3	11.1	9.9		
	8.7			8.7	12.8		12.4		4.0	4.1	7.3	8.5		
	60			57	49	30	22		18		8	30		

1841

1841

7+00				
6+50				
T.P.	7.10	18.00	7.51	10.90
5+93.13	Pueblo Line to West			
5+50				
5+10				

18.41

	Lt				C.L.				Rt				
7+00	11.3	12.2	11.9	10.7	13.0	10.2	6.6	6.7	10.0	10.6	14.3	11.9	
	6.7 / 60	5.8 / 35	7.3 / 30 / 13		5.0 / 8	7.8	11.4 / 5	11.3 / 21	8.0 / 23	7.4 / 30	3.7 / 35	6.6 / 40	
6+50	11.0	11.8	11.2	11.4	11.6	11.3	6.3	6.4	11.6	15.3	11.0		
	7.0 / 60	6.2 / 41	6.8 / 40 / 30		6.4 / 17	6.7	11.7 / 5	11.6 / 21	6.4 / 29	2.7 / 36	7.0 / 42		
	Moved 30' West of P.I.												
					18.00								
5+93.13	10.3	11.3	11.6	11.6	10.8	11.3	10.8	10.6	6.6	6.7	11.2 / 14.4	11.3	
	8.1 / 60	7.1 / 42	6.8 / 30 29		7.5 / 27	7.1 / 4	7.6	7.8 / 5	11.8 / 7	11.7 / 23 30	4.0 / 35	7.1 / 47	
5+50		10.1	10.9		11.1	11.8	11.8	6.5	6.2	10.1	15.9	10.9	
		8.3 / 60	7.3 / 30		7.3 / 24	6.6	6.6 / 2	11.7 / 8	12.7 / 23 30	2.5 / 38	7.5 / 47		
5+10	9.5	10.5	10.6		12.9	13.4	6.1	6.1	10.1 / 14.0		11.4		
	8.9 / 60		7.8 / 30 / 28		5.5 / 27	5.0	12.3 / 8	12.3 / 25 30	4.4 / 35		7.0 / 45		
	9.4	10.2	10.2		14.0	14.1	13.6	7.0	5.8	5.9	13.7 / 14.3	10.6	
	9.0 / 60	8.2 / 30	7.9		4.4 / 27	4.3 / 3	4.8	11.4 / 5	12.5 / 9	12.5 / 23	4.7 / 30	4.1 / 36	7.8 / 50

18.41

	L7									
	13.4	10.7	9.7	10.3	13.6	13.0	12.6	8.2	8.4	16.0	12.5
9+00	4.6 / 38	8.3 / 30	7.7 / 27	4.4 / 13	5.0 / 5	5.4 / 5	9.8 / 7	9.6 / 23	2.0 / 32	5.5 / 39	
	11.5	10.1	9.7	10.0	13.7	14.0	13.0	7.7	8.6	15.8	12.2
+80	6.5 / 37	8.3 / 30	8.0 / 28	4.3 / 15	4.0 / 10	5.0 / 3	10.3 / 3	9.4 / 22	2.2 / 28	5.8 / 36	
	12.3	12.7	9.6	9.9	12.0	11.9	7.7	8.0	16.0	12.3	
+50	5.7 / 60	5.3 / 30	8.4 / 24	8.1 / 14	6.0 / 11	6.1	10.3 / 1	10.0 / 22	2.0 / 30	5.7 / 36	
	12.1	12.3	12.3	9.6	12.4	12.0	12.0	7.4	7.4	15.6	11.9
+25	5.9 / 60	5.7 / 30	23	8.4 / 15	5.6 / 10	6.0	6.0 / 5	10.6 / 6	10.6 / 22	2.4 / 30	6.1 / 37
	11.6	11.9	12.0	10.6	12.9	11.6	1.5 ~~8.4~~	7.6	15.4	11.9	
8	6.4 / 60	6.0 / 30	7.4 / 20	7.4 / 14	5.1 / 10	6.4	10.5 / 4	10.4 / 22	2.6 / 28	6.1 / 35	
	11.9	11.8	11.7	12.0	9.6	9.4	7.3	7.2	11.9	15.2	11.6
7+50	6.1 / 60	6.3 / 30	18	6.0 / 10	8.4 / 4	8.6	10.7 / 7	10.8 / 20	6.1 / 21	2.8 / 28	6.4 / 35

18.00

18.00

	L.	R.	R.
+50	14.2 15.2 15.4 / 7.6 6.6 6.4 / 6.4 6.1	12.8 13.6 14.1 / 9.0 8.4 7.7 / 13 15	12.0 9.7 9.7 14.7 / 9.8 12.1 12.1 7.1 / 22 26 41 45
E.L. Rd			
11+00	14.6 14.7 14.8 12.3 12.5 12.7 14.0 15.8 15.1 12.1 9.5 9.8 15.6 13.4 / 7.2 7.0 9.5 9.1 7.8 6.0 6.7 9.7 12.3 12.0 6.2 8.4 / 87 60 50 43 30 23 3 5 9 15 37 40 45
E.L. Rd. 85 / 70			
10+80	13.1 14.2 14.5 13.7 / 8.7 7.6 7.3 / 93 91 64	12.2 12.1 13.3 14.1 16.5 17.3 12.5 9.7 9.7 15.8 13.8 / 9.5 9.7 8.5 7.7 5.3 4.5 8.3 12.1 12.1 6.0 8.0 / 35 30 23 10 4 5 12 28 37 47
E.L. Rd.			
10+50	12.8 14.0 14.1 / 9.0 7.8 7.7 / 104 100 80	11.8 11.8 11.8 12.5 12.8 13.7 14.6 13.2 9.6 9.6 15.7 13.7 / 10.0 10.0 9.3 8.1 4.2 8.6 12.2 12.2 6.1 8.1 / 60 48 34 30 17 8 6 24 32 38
E.L. Rd.			
T.P.	5.01. 21.75 12.6 15.74	21.75	
10	14.1 13.6 11.6 11.0 11.0 12.3 12.5 / 3.9 4.4 6.4 7.0 7.0 5.7 5.5 / 117 109 101 91 85 75 60	12.7 12.9 13.0 11.9 12.0 14.0 14.0 13.0 9.4 9.4 13.3 12.5 / 5.3 5.0 6.1 6.0 4.0 4.0 5.0 8.5 8.6 4.7 5.5 / 40 30 22 15 6 3 3 6 23 25 40
9+50 The ditch on Rt. 15 Present Channel.	13.3 13.3 10.9 / 4.7 4.7 7.1 / 117 104 85	11.0 10.9 14.3 14.5 14.5 11.4 10.0 13.0 12.0 9.5 9.6 15.0 12.7 / 7.0 7.1 3.7 3.5 6.6 8.0 5.0 6.0 8.5 8.4 3.0 5.3 / 40 35 30 29 23 4 6 8 25 32 38
	E.L. of Present Rd.	
	18.00	18.00

	Lt	Ctr	Rt
+20	16.2 16.1 16.6 16.1	16.5 17.3	16.5 16.7
	7.1 6.7 7.2 6.8	6.0	6.8 6.6
	60 30 25 22	3	13 30
T.P.	5.58 v3.24 4.07 17.68		
	23.26		
14	16.1 16.4 16.5 15.8	16.2 17.4	16.6 16.6
	5.7 5.3 6.0 5.6	4.4	5.7 5.7
	60 30 25 22	3	5 30
+50	15.7 16.0 16.8 15.3	16.0 17.1	16.5 16.4
	6.1 5.8 6.5 5.8	4.7	5.3 5.4
	60 30 25 22	3	7 30
13	15.4 15.7 15.0 15.4	16.7	15.9
	6.4 6.1 6.8 6.4	5.1	5.9
	60 35 30	3	30
+50	15.6 15.5 14.7 14.8 14.8 15.7 16.3	14.8 16.0	14.4
	6.4 6.3 7.1 7.0 6.1 5.5	7.0 5.8	7.4
	60 50 47 30 20 18 10	3	30
12+00	14.5 14.3 14.6 15.4 15.4 15.4	13.4	13.3 13.2
	7.3 7.4 6.4 6.4	8.4	8.5 8.6
	60 38 35 30	8	15 37
	Lt L Rd. Rt L Rd		Lt. edge Channel
	21.75	21.75	

	L7		P.L.		R7
+50	17.8	17.8	16.9	17.1	17.6	17.6
	5.5	5.5	6.4	6.2	5.7	5.7
	30	25	22	3		30
+10	17.8	17.7	16.9	16.9	17.3	17.3
	5.5	5.6	6.4	6.4	6.0	6.0
	30	24	22	30		30
+5			16.9	16.9	17.5	17.4
			6.4	6.4	5.8	5.9
			30	3		30
14+10,99 S.L EMPIRE ST			16.8	16.9	16.9	17.1
			6.5	6.4	6.4	6.2
			60	30		30
+55	16.6	16.9	16.9	16.3	17.1	17.1
	6.7		6.4	7.0	6.2	6.2
	60	30	26	27		30
14+30			16.7	16.8	16.9	16.8
			6.6		6.5	6.5
			60	30		30
23.26						

Change to P.L.

	Lt	P.L.	Rt
	18.7 L 4.5 5 23.8		
1+67 ℄ 8' Con. walk			
	18.6 4.7 30	18.7 5.1	18.3 5.0 30
1+50			
	18.6 R 5.10 30		
1+36 ℄ ~.8 Con. walk			
	18.7 5.1 30	18.1 5.7	18.2 5.1 30
1+7			
	18.3 5.0 30	18.0 5.3 24	17.7 5.6 24	17.6 5.7 3	18.1 5.7	18.3 5.9 30
1+50						
	17.9 5.4 30	18.1 5.7 24	17.3 6.0 22	17.5 5.8 3	17.8 5.5	18.1 5.7 30
1+00						
23.6					23.6	

	Lt	Pk.	Rt
+50	19.6 19.6 / 3.7 3.7 / 30 28	18.9 / 4.4 / 26	19.1 / 4.2 / 8	19.2 / 4.1	19.0 / 4.3 / 30
19	19.2 19.2 / 4.1 4.1 / 30 26	18.7 / 4.6 / 24	18.8 / 4.5 / 6	19.0 / 4.3	19.1 / 4.2 / 30
+50	18.9 19.0 / 4.4 4.3 / 30 25	18.5 / 4.8 / 23	18.6 / 4.7 / 6	19.0 / 4.3	19.2 / 4.1 / 30
+21 & 3' Conc. kick		18.66 ✓ / 4.60 / 24.5			
18+09 & 10' Conc. drive		18.66 ✓ / 4.60 / 28.5			
17+92 & 9' Conc. drive		18.52 ✓ / 4.74 / 32.2	18.7 / 4.6 / 30	18.6 / 4.7 / 20	18.5 / 4.8

23.26

23.26

check to orig. B.M.		4.26	10.01	10.04	
				003	
T.P.	2.35	14.27	7.07	11.92	
T.P.	1.31	18.99	5.58	17.68	
No. +98.5	SL Garden St on deag.				
+50					
No too					
		23.26			

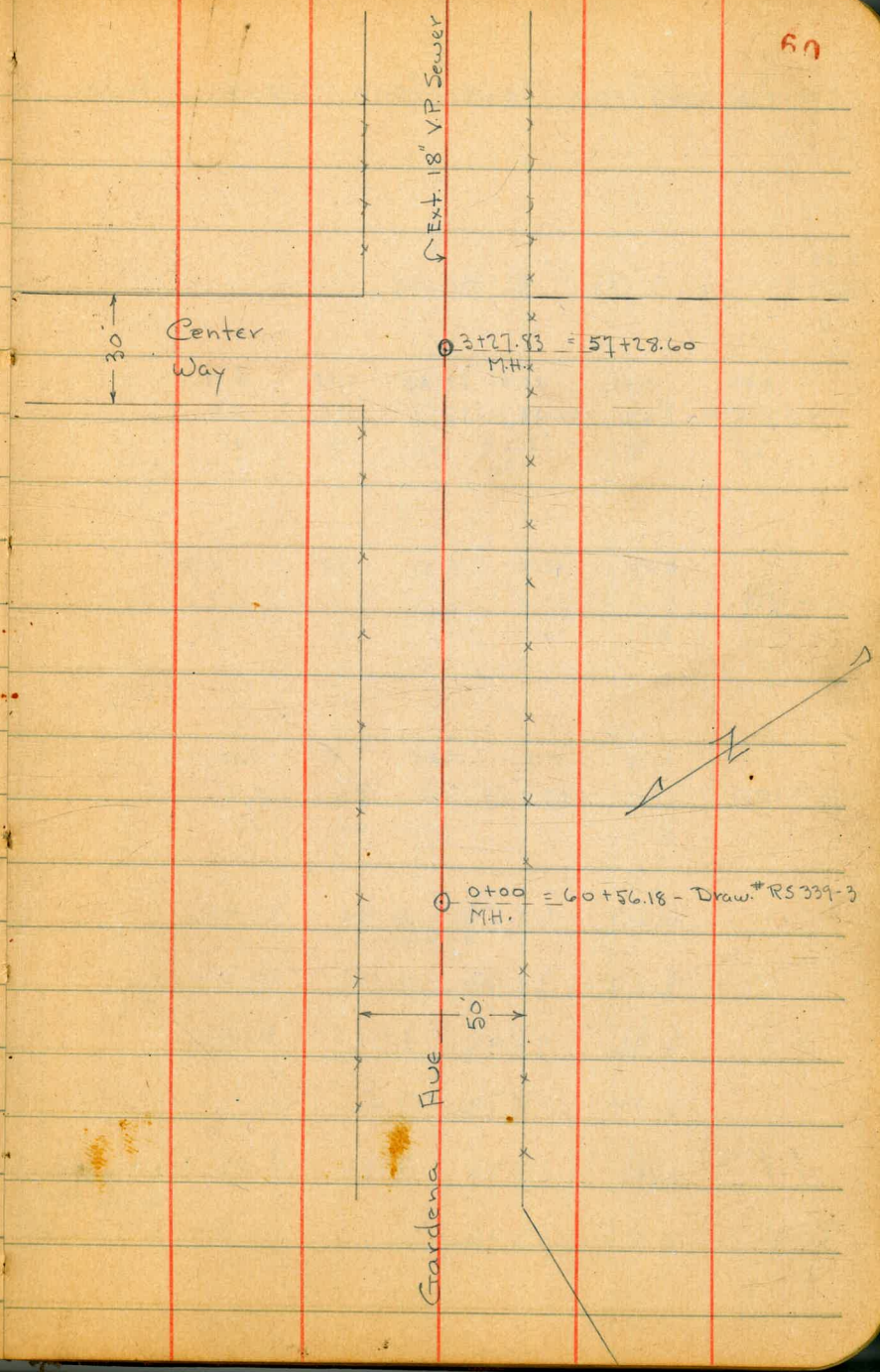
21.3	21.1	20.1	20.5	20.2
2.0	2.2	3.2	2.8	3.1
30	15	5		30
20.2	19.8	19.4	19.8	19.7
3.1	3.5	3.9	3.5	3.6
30	28	11		30
19.7	19.0	19.3	19.8	19.7
3.6	4.3	4.0	3.5	3.6
30	28	10		30
		23.26		

Indexed
C.S.I.R.

Survey for Prop. Connections to
18" Trunk Sewer on Gardena Ave.

#957 4-4-47 - Osborne
Hardin
Smith
Worrell

W.O. 279



Levels on Prop. Sewer Conn. - Gardena Ave.

0+43 - 56.7 Rt. - ℄ House

0+00 = ℄ Ext. Sewer

0 - 50

0 - 100 - for profile of st.

	6.67	28.59	6.40	21.92	
	4.50	28.38	0.10	23.82	
	6.96	23.92	1.76	16.96	
	6.44	18.72	3.46	12.28	
	6.99	15.74	3.31	8.75	B.P. in Headwall Tecolote Creek + Morena Blvd.
B.M.	2.02	12.06		10.04	

19 1-

℄ = ℄ 18" Sewer

Lt. - N.				Rt. - S.	
					22.87 5.72 56.7 floor
23.6 5.0 25	22.7 5.9 10	23.08 5.51 Rim	15.72 -12.87 F.L. 18" U.P.	22.6 6.0 10	22.8 5.8 25
23.3 5.3 25	22.1 6.5 10	22.3 6.3	22.3 6.3 10	22.3 6.3 25	
22.5 6.1 25	21.7 6.9 10	21.9 6.7	21.9 6.7 10	22.0 6.6 25	

28.59

2+01 - 17.2 Rt. = ℄ P. pole

2+00

1+81 - Prop. Lat. to Rt.

1+63 - Prop. Lat. to Lt.

1+50

0+97 = Lat. to Lt.

0+79 = Line of prop. Lat. to Rt.

0+50

	Lt.		℄		Rt	
	24.5	23.8	24.0	23.5	23.9	
	4.1	4.8	4.6	5.1	4.7	
	25	10		10	25	
			23.9	23.5	24.0	22.8
			4.7	5.1	4.6	5.8
				10	25	75
24.5	24.6	23.6	23.7			
4.1	4.3	5.0	4.9			
75	25	10				
	24.6	23.4	23.6	23.3	23.7	
	4.2	5.2	5.0	5.3	4.9	
	25	10		10	25	
24.3	24.2	23.2	23.3	23.0	23.3	
4.3	4.4	5.4	5.3	5.6	5.3	
50	25	10		10	25	
			23.2	23.0	23.2	22.5
			5.4	5.6	5.4	6.1
				10	25	75
	24.2	22.9	23.1	22.7	23.0	
	4.4	5.7	5.5	5.9	5.6	
	25	10		10	25	

28.59

2+01- 17.2 Rt. #P 4681
Set B.M. = Spike in Pole 4.00 24.59

4+00 = end

3+77- 73.5 Lt. = ℄ Conc. found. for Prop. House

3+59- 51' Rt. = ℄ House

3+50

3+27.83 = ℄ Ext. Sewer M.H. = ℄ Center Way

2+83 = Prop. Lat. on Lt.

2+50 = 63' Rt. = ℄ House

2+26 = Prop. Lat. on Lt.

2+25- 153' Lt. = ℄ House

	Lt.				℄	Rt.	
	26.0 2.6 25	25.0 3.6 10	25.2 3.4	25.0 3.6 10		25.0 3.6 25	
27.18 1.41 73.5 Top found.							26.18 2.41 51 floor
	25.5 3.1 25	24.7 3.9 10	25.1 3.5	24.6 4.0 10		24.9 3.7 25	
27.2 1.4 125	26.3 2.3 75	25.5 3.1 25	24.8 3.8 10	25.31 3.28 Rim	17.94 10.65 F.L. 18" U.P.	24.6 4.0 10	
	24.9 3.7 75	25.5 3.1 25	24.5 4.1 10	24.6 4.0	24.2 4.4 10	24.6 4.0 25	
		25.1 3.5 25	24.1 4.5 10	24.4 4.2	23.9 4.7 10	24.3 4.3 25	24.67 3.92 63 floor House
	24.5 4.1 50	25.0 3.6 25	24.0 4.6 10	24.2 4.4			
28.0 0.60 153 floor				28.59			

Continue Levels along Prop. Sewer - Tecolate Canyon - from Book 2133 - P. 79

	Lt.	℄	Rt.
39+00	9.2 25.0 20	9.2 25.0	1.7 32.5 15
38+50		8.2 26.0	
38+00	9.0 25.2 20	8.9 25.3	2.8 31.4 15 / 5.0 29.2 25 old Dirt Reservoir / 4.4 29.8 40
37+50		6.3 27.9	
37+00	8.3 25.9 30	6.4 27.8	0.0 34.2 30
36+50		7.6 26.6	
36+00	9.7 24.5 30	8.8 25.4	8.5 25.7 30 Toe / 0.4 33.8 45
35+50		9.1 25.1	
35+00		10.0 24.2 34 21	9.4 24.8 25 Toe / 0.5 33.7 40

43+00

42+50

42+00

41+53 - 7.5' Lt. = ℄ Tel. pole # J.PC. 4791

41+52 - 9.7 Lt. = ℄ Pole # C-4797

41+50

41+46.5 = Cross wire fence - Beg. planted field

41+00

40+60

40+30

T.R. 10.37 36.26 8.32 25.89

40+00

39+70 = Beg. Trash Dump

39+50

	Lt	℄	Rt
	8.3 (26.0) 15	7.8 (26.5)	6.1 (30.2) 15
		7.8 (26.5)	
	8.7 (27.6) 30 edge field	7.2 (24.1)	4.1 (31.7) 30
	12.1 (24.2) 40 in Ditch	8.5 (27.8) 3.5 = Bank of Ditch	6.8 (24.5) 4.0 (32.3) 40
	10.4 (25.9) 40	13.1 (23.2)	13.2 (23.1) 15 / 10.3 (26.0) 25 / 10.1 (26.2) 50
		13.9 (22.4)	
	13.8 (22.5) 25	13.8 (22.5)	10.5 (25.8) 10 / 10.7 (25.6) 40
		36.26	
	11.2 (23.0) 35	11.6 (22.6) 10	8.5 (25.7) / 8.2 (26.0) 30 = Toe
		8.9 (25.3)	
		34.21	

check Hub elev 5.26 31.00 35.96 = B2133: P.31

46+69.76 = end = Hub = 48+79.83 on "P" Line

	Lt.	℄	Rt.
		5.26 31.00 on Hub.	
46+00		5.7 30.6	
45+50		6.0 30.3	
45+00		6.3 30.0	
44+50		6.5 29.8	
44+00		7.2 29.1	
43+50		7.6 28.7	
		36.26 ✓	

Notes Reduced 2-28-51

Levels along ℄ of "B" Line = New line
Beg. at 77+61.05 on "P" Line - end at 96+00
on "P" line = Eq. - Sketch - B.2133 - P. 7
W.O. 20790 3-20-51 - T.O.

	Lt.	℄	Rt.
81+00 - 115' Lt. - ℄ Creek	47.7 14.9 115 ℄ Creek	55.1 7.5	
80+93' 21' Lt. = ℄ 24" Cottonwood.			
80+50		54.5 8.1	
~~80+00~~		55.4 7.2	
79+78-6 Lt. - ℄ 12" Oak			
79+50 - 35' Lt. = ℄ Creek	46.8 15.8 35 ℄ Creek	57.8 4.8	
79+04 = Cross wire fence			
79+00		56.7 5.9	
78+50		58.0 6.6	
78+00		55.6 7.0	
B.M. 7.62 62.57 ✓	54.95 Hub. 77+61.05	62.57 ✓	

					Lt.	℄	Rt.
85+80	± Wash - To E.					8.7 59.9	
85+70						5.5 62.6	
85+00						4.6 63.5	
84+50						4.6 63.5	
84+00						4.3 63.8	
83+50						5.1 63.0	
T.P.	6.33	68.06	0.84	61.73		68.06 ✓	
83+00	+ 155' Lt. = ± Creek				14.3 48.3 155' ±Creek	4.6 52.0 95	0.4 63.7
82+50							1.9 60.7
82+00							2.9 59.7
81+50							5.0 57.6
						62.57 ✓	

	Lt.	℄	Rt.
88+98 - 11' Lt. = ℄ 18" Euc.			
88+93 - 23.5' Lt. = ℄ 72" - 4 trunk Euc. Tree			
88+50		2.2 65.9	
88+00		6.0 62.1	
87+50		6.9 61.2	
87+17 = Bank		7.6 60.5	
87+08 = ℄ Wash		9.8 58.3	
87+00		7.9 60.2	
86+60		7.0 61.1	
86+27.10 = 86+38.83 on "P" Line = Ang. Pt.		5.22 on Hub 62.84	
86+00		5.3 62.8	
		68.06 ✓	

93+00	- 150' Lt. = ℄ Creek			
92+50				
92+00				
91+90	- 8' Rt. = ℄ 10" Pepper			
91+84	- 6' Rt. = ℄ 8" Pepper			
91+50				
91+00				
90+50				
T.P	6.84	73.36	1.54	64.52
90+00	- 110' Lt. = ℄ Creek			
89+50				
89+05	- 14.5' Rt. = ℄ 36" Euc.			
89+00				

Lt	℄	Rt
57.6	64.1	69.1
15.8	9.3	4.3
150	110	
℄ Creek		
		67.6
		5.8
		66.4
		7.0
		66.4
		7.0
		66.5
		6.9
		66.5
		6.9
		73.36
54.6	61.9	66.3
13.5	6.2	1.8
110	90	
℄ Creek		
		66.4
		1.7
		66.7
		1.4
		68.06

	Lt.	℄	Rt.
By 95+00			
check T.P. - B.2133 - P.40	1.03	72.33	72.31 = P.40
95+15.25 = 96+00 on "P" Line = end.			69.67 / 3.69 on Hub.
94+50			3.3 70.0
94+00			3.4 70.0
93+50			4.1 69.3
			23.36

593.13
417.93
1011.06

77+61.05 - 54.95

79+58.64 - 63.98

86+38.85 - 63.83

92+57.30 - 74.36

22 E 20+15.35

55

20+70

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.

528.3
98.2
626.5