

W
338

SHIFFER
LEAVE BOOK

No. 410

EUGENE DIETZGEN CO.

DRAWING MATERIALS, MATHEMATICAL and SURVEYING INSTRUMENTS
Chicago New York San Francisco New Orleans Pittsburg Toronto

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

Roadway 16 feet wide. Side Slopes 1 on 1.
For Single Track Embankment.

MICROFILMED

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	H
0	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	0
1	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	1
2	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	2
3	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	3
4	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	4
5	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	5
6	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	6
7	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	7
8	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	8
9	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	9
10	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	10
11	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	11
12	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	12
13	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	13
14	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	14
15	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	15
16	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	16
17	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	17
18	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	18
19	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	19
20	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	20
21	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	21
22	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	22
23	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	23
24	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	24
25	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	25
26	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	26
27	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	27
28	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	28
29	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	29
30	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	30
31	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	31
32	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	32
33	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	33
34	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	34
35	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	35
36	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	36
37	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	37
38	46.0	46.1	46.2	46.3	46.4	46.5	46.6	46.7	46.8	46.9	38
39	47.0	47.1	47.2	47.3	47.4	47.5	47.6	47.7	47.8	47.9	39
40	48.0	48.1	48.2	48.3	48.4	48.5	48.6	48.7	48.8	48.9	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 30.6. For same slopes but other widths of roadbed, correct above figures by one-half difference in width of roadbed; thus in example above, for 20 ft. roadbed distance will be $30.6 + (20 - 16) \div 2$ or 2 ft. added to $30.6 = 32.6$. For slopes of 1 on $1\frac{1}{2}$ see inside of back cover.

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of a high grade 50% Rag Paper
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March 11, 1937

Soper
Isbell
Remmen

Bench levels from Hodges Spillway to 395 Contour.

0+00 (Super-Hodges Dam) = intersection of 395 contour

with 150.00 below and parallel to axis of Hodges Dam

B.M. 315.00

2.75 317.75

TP 0.06 317.69

12.78 330.47

TP 0.46 330.01

12.26 342.27

TP 0.33 341.94

12.61 354.55

TP 0.84 353.71

12.38 366.09

TP 2.01 364.08

13.00 377.08

TP 0.34 376.74

12.68 389.42

TP 0.78 388.64

10.07 398.71

TP 0.46 398.25

x on spillway lip of Hodges Dam

Set B.M. "A" Edge of old road, 100' RT 0+25.

398.25

12.60 410.85

TP 0.26 410.59

12.76 423.35

1.95 421.40

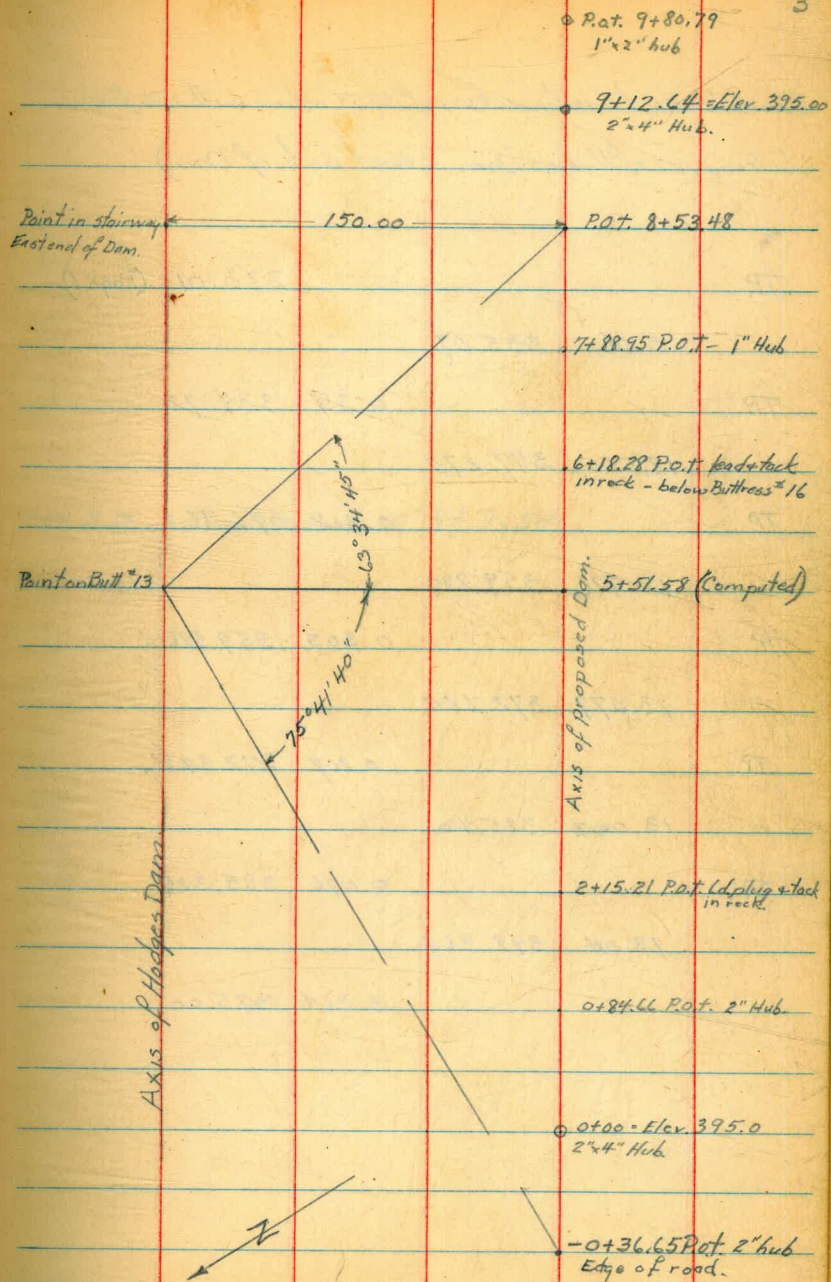
B.M.

8.31 398.25

406.56

11.56 395.00

2
Set B.M. "B" Point on rock 35' Rt. sta. - 0+75



Bench levels, to intersection of 395 Contour with 150 feet
below axis of Hodges Dam. (East side of Dam)

TP 330.01 (Page 1)

5.06 335.07

TP 0.35 334.72

12.555 347.275

TP 0.312 346.963

12.926 359.889

TP 0.303 359.586

13.079 372.665

TP 0.267 372.398

13.002 385.40

TP 0.076 385.324

13.04 398.364

3.364 395.00

4
Set B.M. Point on rock C.Rt. 8+54

March 18-1937.

Saper T
156 ft. rod
Remmon type

5

Profile levels over axis of proposed Dam.

B.M. "B" 421.40

1.01 422.41^v

-1+15 1.2 21.2^v

-1+00 10.9 11.5^v

-0+88 16.1 06.3^v

-0+79 16.5 05.9^v

-0+78.6 11.7 10.7^v

-0+75 9.6 12.8^v

-0+69 5.3 17.1^v

Flowline of 48" Culvert,

top of culvert headwall

Edge of County Road.

Profile - cont'd.

422.41

-0+50 6.2 416.2 ✓

-0+40 7.0 15.4 ✓

-0+37 6.2 16.2 ✓

TP 12.83 409.58 ✓

0.14 409.72

-0+25 0.6 09.1 ✓

TP 12.68 397.04 ✓

0.28 397.32

0+00 2.32 395.0 ✓

TP 12.68 384.64 ✓

0.87 385.51

Edge of County Road.

Profile cont'd.

7

385.51[✓]0+25 6.0 379.5[✓] vTP 12.98 372.53[✓]0.20 372.73[✓]0+45 7.5 65.2[✓] v0+50 7.7 65.0[✓] vTP 13.10 359.63[✓]0.95 360.58[✓]0+55 2.2 58.4[✓] v0+65 7.9 52.7[✓] v0+75 11.5 49.1[✓] vTP 13.02 347.56[✓]0.79 348.35[✓]

Profile cont'd.

348.35^v

0+81 2.7 345.6 ✓

0+89 4.9 43.4 ✓

0+95 9.5 38.8 ✓

1+00 11.0 37.3 ✓

1+07 14.2 34.1 ✓

TP 12.95 335.40^v

1.03 336.43^v

TP 13.04 323.39^v
322.36 ✓

0.33 323.72^v
322.69

1+16 10.3 13.4 ✓

1+24 10.8 12.9 ✓

Profile cont'd.

323.72[✓]
322.69

5.95 317.77[✓]
316.74

ck. on the Elev 317.69 (Page 1)

TP (Page 1)

317.69

5.95 323.64[✓]

TP

13.05 310.59[✓]

0.36 310.95

TP

12.71 298.24[✓]

0.33 298.57[✓]

TP

12.84 285.73[✓]

2.75 288.48[✓]

1+30

1.5 87.0[✓]

1+70

3.9 84.6[✓]

1+92

7.8 80.7[✓]

1+95

13.6 74.9[✓]

Profile cont'd.

288.48[✓]

2+00 12.7 275.8[✓]

2+15.2 13.7 274.8[✓]

TP 12.88 275.60[✓]

0.52 276.12[✓]

TP 12.80 263.32[✓]

0.28 263.60[✓]

4.42 259.18[✓]

ck on D.M. Elev. 259.18. Rock in headwall beginning of concrete flume.
Set, March-1937 for trestle repair work.

& Profile continued -

2+15[±] 0.47 275.27 274.8

2+20 1.7 73.6

2+23 9.3 66.0

2+48 12.8 62.5

2+49 7.8 67.5

2+57 12.0 63.3

2+64 10.2 65.1

2+68 10.9 64.4

TP 0.17 262.42 13.02 262.25

2+85 8.8 53.6

9.3 53.1

5.5 56.9

TP 0.28 249.66 13.04 249.38

3+11 20.0 29.7

10/9/42
Super
Kerrig

11

Note: Elevations are backed up from B.M., 175' Rt of 5+00

Top of 36" Wood Stave Pipe at outlet of Dam

" " 36" " " " " beginning of beached section

249.66

3+25 17.4 232.3

3+45 11.3 38.4

3+49 6.4 43.3

3+64 13.4 36.3

3+68 10.9 38.7

TT 0.04 236.59 13.11 236.55

3+88 6.4 30.2

TT 0.33 224.34 12.58 224.01

4+01 5.5 18.8

4+18 7.4 16.9

TT 2.74 214.33 12.75 211.59

4+28 6.5 207.8

4+41 16.7 197.6

4+75 14.7 199.6

5+00 12.2 202.1

214.33

5125

~~7.7~~ 206.6

see page 14 for $\frac{1}{4}$ profile (bottom of canyon covered with broken rock)

5150

~~4.6~~ 209.7

B.M.

4.82 209.51

Point on rock 175' Rt 5700 (set in 1937)

2.5 211.8

On topog. point 63' Rt of 576

Profile of axis cont'd.

March 18 1937

Soper
Isbell
Remmen

14

B.M.			259.18
	4.42	263.60	
TP		12.89	250.71
	0.47	251.18	
TP		12.90	238.28
	0.59	238.87	
TP		12.81	226.06
	0.31	226.37	
TP		12.91	213.46
	0.65	214.11	
		4.60	209.51
5+25		8.3	05.8 ✓
5+50		4.9	09.2 ✓
5+75		4.5	09.6 ✓
5+92		4.7	09.4 ✓
6+00		9.1	05.0 ✓

Set B.M. Point on rock 175' ± Rt sta. 5+00

Profile cont'd.

15

214.11

6+04 11.0 203.1 ✓

6+25 12.4 01.7 ✓

+50 14.2 199.9 ✓

+70 12.6 201.5 ✓

TP 0.51 213.60

11.65 225.25

7+00 10.1 15.1 ✓

+20 +6.5 31.7 ✓

TP 0.29 224.96

12.82 237.78

TP 0.15 237.33

12.75 250.08

Profile cont'd.

250.08

7+25 1.8 248.2 ✓

TP 0.335 249.745

12.73 262.475

7+38 2.8 59.7 ✓

TP 0.113 262.362

12.45 274.812

7+50 6.7 68.1 ✓

TP 0.039 274.773

13.094 287.867

7+69 6.7 81.2 ✓

7+75 1.1 86.8 ✓

March 19 1937

Soper T
15 bell-rod
Remmen-tape

16

Profile cont'd.

17

287.867

TP. 0.05 287.817

12.71 300.527

TP. 0.117 300.410

12.75 313.16

8+00 8.6 304.6 ✓

TP. 0.061 313.099

12.96 326.059

8+25 3.2 22.9 ✓

TP. 0.057 326.002

12.785 338.787

TP. 0.02 338.767

9.71 348.477

8+50 6.0 42.5 ✓

TP. 1.525 346.952

ck on B.M. Elev. 346.96 (Page 4)

Profile cont'd.

18

B.M. 346.963

13.036 359.999

TP 0.09 359.909

12.713 372.622

8+75 11.1 61.5 ✓

TP 0.22 372.402

12.952 385.354

8+89 9.0 76.3 ✓

9+00 0.9 84.4 ✓

TP 0.03 385.324

12.832 398.156

9+12.64 3.155 395.001 ✓

ck on 395.00 hub

TP 0.10 398.056

12.252 410.308

410.308

9+25

5.8 404.5 ✓

TP

0.15 410.158

12.985 423.143

TP

0.107 423.036

12.158 435.194

9+50

10.9 24.3 ✓

TP

0.436 434.758

13.062 447.820

9+75

3.0 444.8 ✓

9+80.79 Rot.

0.1 447.7

0.77 447.05

19
Set B.M Point on rock 12' lt 9+80

Pipe line loc. from Pacific Beach reservoir
 along Tourmaline St. to 16" main from Torrey
 Sta Detlec.

8+12.0 41°41'R

7+34.5 46°L

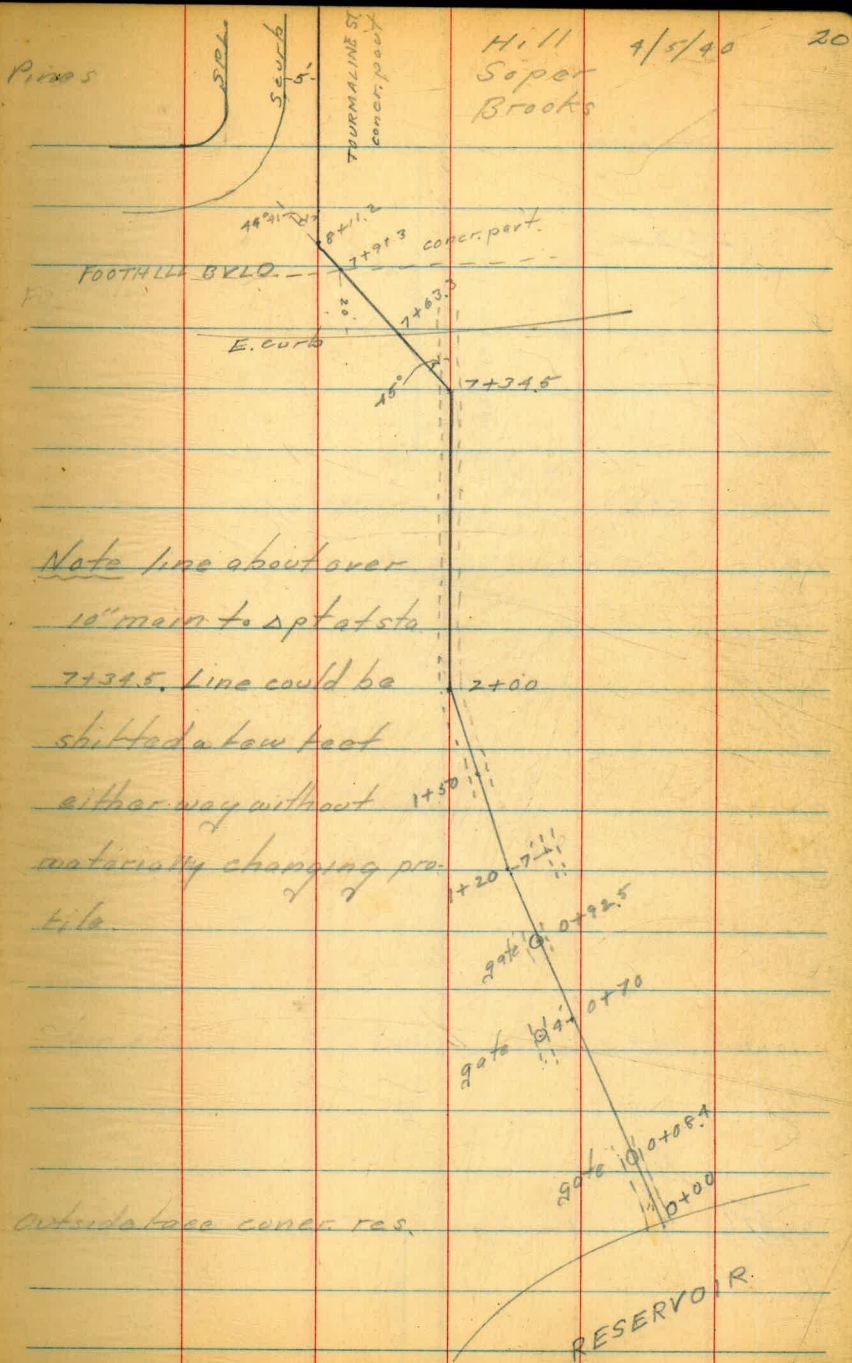
2+00 17°06'R

1+20 37°03'R

0+00 P.O.T.

2+00

Pipes



Sta. Dallas

15+94.5

15+54.5 P.O.T.

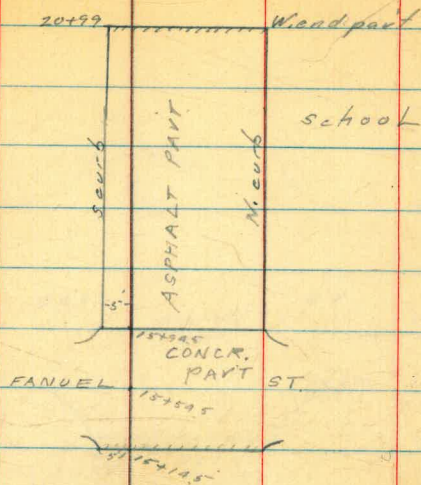
15+14.5

12+22.5

10+90.5

9+37.3 P.O.T. Wind pare on Terminal line (mud)

21



12+22.5

10+90.5

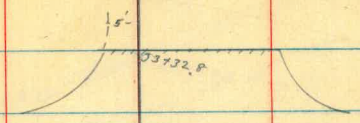
5. curb
Mag. 17 N. 20.0 W.

Sta. Detloc

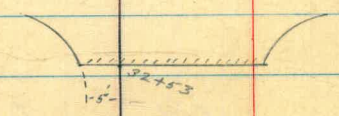
32432.8

32459.9 P.O.T.

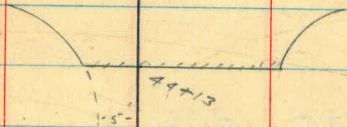
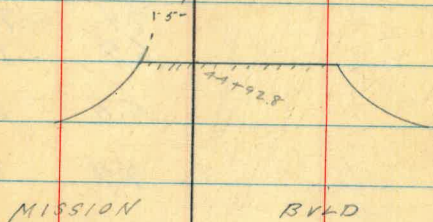
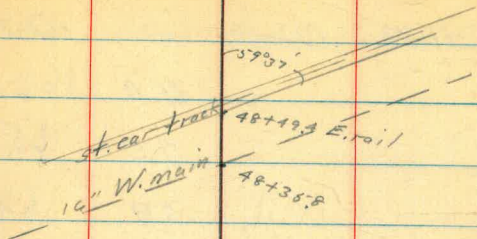
32445.3



CASS Asphalt part. ST



Note Distance along Foot hill
 Blvd + Turquoise st from Tour-
 maline to Mission Blvd = 0.72 miles
 To 16" main crossing Turquoise = 0.87 miles
 Above distances speedometer
 readings.



Levels over pipe line loc. - Pac. Beach res. 4/5/40
to 16" main from Torrey Pines

B.M.	11.72	173.00	✓	161.28
15+00		11.0		162.0
14+00		7.5		65.5
13+00		3.9		691
12+00		0.6		724
IP	7.80	179.47	✓	171.67
11+00		5.0		74.5
10+60		6.2		73.3
10+00		4.6		74.9
9+37.1		7.4		72.1
9+00		6.7		72.8
8+11.2		5.0		74.5
8+00		4.4		75.1
B.M.		0.00	✓	179.47
	8.48	187.95	✓	179.47
7+63.3		11.6		76.4
7+63.3		11.1		76.9
7+34.5		8.4		79.6
7+31		4.2		83.8

B.M. Top of fire hydrant S.E. Cor. Faruel & Tourmaline

Edge of pavement

Top fire hydrant at Tourmaline & Foothill Blvd.

Pavement

Top of curb

		187.95		
IP	12.70	200.25	0.40	187.55
7+00			11.2	89.1
6+50			1.3	99.0
IP	12.81	212.53	0.53	199.72
6+40			11.1	201.4
6+00			10.3	02.2
5+50			12.1	00.4
5+00			10.0	02.5
4+50			3.1	09.4
IP	12.63	224. ⁸² 84	0.34	212. ¹⁹ 21
4+35			11.0	13.8
IP	11.58	235. ⁹² 94	0.48	224. ³⁴ 76
4+09			6.3	29.6
4+00			6.1	29.8
3+68			7.9	28.0
3+50			7.0	28.9
4.37			5.8	30.1
+28			1.3	24.6
B.M.			3.84	232. ⁰⁸ 70
IP	12.06	247. ⁸³ 85	0.09	235. ⁸³ 85

Top of Five Hyd. Tourmaline and Windsor Dr.

		^{.83} 247.85		
3+23			6.4	241.4
3+00			0.5	47.3
TP	12.32	^{.93} 259.75	0.22	^{.61} 247.83
TP	12.58	^{.02} 272.84	0.49	^{.44} 259.74
2+50			11.0	61.0
2+20			2.3	69.7
TP	7.02	^{.44} 278.76	0.60	^{.42} 271.74
2+00			5.1	73.3
1+50			4.5	73.9
1+20			5.1	73.3
1+00			3.0	75.4
TP	11.90	^{.78} 288.80	1.56	^{.88} 276.70
0+50			8.5	80.3
0+32			3.0	85.8
TP	12.18	^{.40} 300.78	0.56	^{.22} 288.74
0+15			4.9	95.5
B.M			4.81	295.59
0+00			3.4	97.0
0-09.5			6.8	93.6
			15.1	85.3

Top of stem of 10" Gate Valve, Sta 0+92.5

Top of stem of Gate Valve Sta 0+08.4

Rim of concrete reservoir.

End of 10" pipe at automatic gate - Flow line

Bottom of reservoir

.40
300.42

B.M. 4.25 296.15

Check Levels to Fouvel St

B.M.	0.40	296.58		296.15	
R	0.17	284.18	12.58	283.99	
	3.43	276.81	10.88	273.28	
	0.18	263.91	12.98	263.73	
	0.29	251.21	12.99	250.92	
	0.52	239.29	12.64	238.55	
	0.34	226.45	12.98	226.14	
	0.50	213.91	13.04	213.74	
	0.24	201.17	12.98	200.93	
	0.38	189.15	12.40	188.77	
	0.31	179.76	9.70	179.45	Rec.
	1.72	174.55	7.93	171.81	
	0.19	162.47	12.27	162.28	
			0.19	162.28	161.28 Rec.
15+145			1.7	59.8	
+34 ⁵			2.5	59.0	
+54 ⁵			2.6	58.9	

Set B.M. Cross on concrete gate post foundation ^{N. side of gate}

ok on B.M. Tourmaline and Foothill Blvd.

ok on B.M. Fouvel & Tourmaline
Part.

	161.47			
15+75		3.4	58.1	
15+94.5		3.2	58.3	
16+00		3.2	58.3	
17+00		6.2	55.3	
18+00		10.1	51.4	
TP	0.26	148.98	12.75	148.72
19+00		1.2	47.8	
20+00		4.9	44.1	
21+00		8.9	40.1	
22+00		12.1	36.9	
TP	0.28	136.31	12.95	136.03
23+00		2.4	33.9	
24+00		6.0	30.3	
25+00		9.9	26.4	
TP	0.46	123.79	12.98	123.33
26+00		1.2	22.6	
27+00		4.2	19.6	
28+00		5.4	18.4	
29+00		8.7	15.1	
30+00		8.1	15.7	

		123.79 ✓		
TP	1.74	117.25 ✓	8.28	115.51 ✓
31+00			3.7	13.6
32+00			5.1	12.2
+53			6.8	10.5
B.M.			7.18	110.07 ✓
+67			7.0	10.3
33+00			6.5	10.8
+328			6.9	10.4
34+00			7.7	09.6
35+00			10.7	06.6
TP	1.31	107.94 ✓	10.62	106.63 ✓
36+00			4.1	03.8
37+00			7.5	100.4
38+00			9.8	98.1
39+00			12.7	95.2
TP	1.87	97.64 ✓	12.17	95.77 ✓
40+00			3.5	94.1
41+00			4.6	93.0
42+00			5.4	92.2
43+00			7.3	90.3

Part.

B.P. S.E. Cor. Townline & Cass

97.64 ✓

44+00			9.7	87.9
44+13			10.4	87.2
B.M	0.40	91.96	6.68	91.56 ✓
44+43			4.4	87.6
44+83			5.0	87.0
44+92 ^B			4.8	87.2
45+00			4.6	87.4
46+00			5.2	86.8
47+00			8.0	84.0
47+93			10.1	81.9
48+00			11.3	80.7
R	1.49	82.13	11.32	80.64 ✓
48+35 ^B			5.6	76.5
			9.1	73.0
48+49 ^A			2.0	80.1

Check Levels

10.32	101.88 ✓		91.56 ✓	
7.81	108.51	1.18	100.70	
		1.21	107.30	107.58 Rec.

Part

Top of Fire Hyd. N.E. Cor of Tourmaline and Mission Blvd

Top of 16" water main 40' Lt 48+35

Top of East Car Rail,

Top Fire Hyd. N.E. Cor. Tourmaline & Mission Blvd.

Top Fire Hyd. S.E. Cor. Turquoise & Mission Blvd.

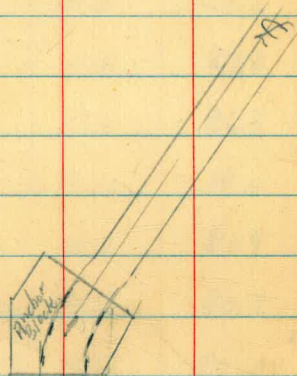
Location of existing 20" wood stave pipeline
 from Torrey Pines Reservoir to Serrano Pump Plant.
 T.P.

2+38 Gate Valve

X

⊕

0+21⁶³ 45° 41' RT.



0+08⁶ inside of coping

0+06⁶ top of batter section

6" wall

0+00 = end of pipe
 of Torrey Pines Res.

⊕

3/10/42

Super
 Bowlin
 Davis

8+57⁶⁴ P.O.T.

194° @ 35° 39' = 8+57⁶⁴

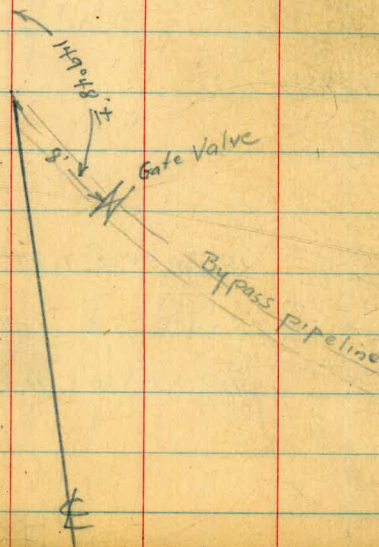
160° @ 35° 10' = 8+30⁸ (Anchor wall)

60° @ 35° 22' = 7+48⁹ (Anchor wall)

7+00 P.O.T.

6+70 P.O.T.

2+59⁶³ 0° 54' RT.



$$193^{\circ} @ 24^{\circ} 32' = 12+817^3$$

$$110^{\circ} @ 28^{\circ} 13' = 12+03.09$$

11+06¹⁶ P.O.T.

$$138^{\circ} @ 31^{\circ} 54' = 11+06¹⁶$$

$$91^{\circ} @ 36^{\circ} 10' = 10+62^5 \text{ - end of wood stove and } \\ \text{beginning of cast iron}$$

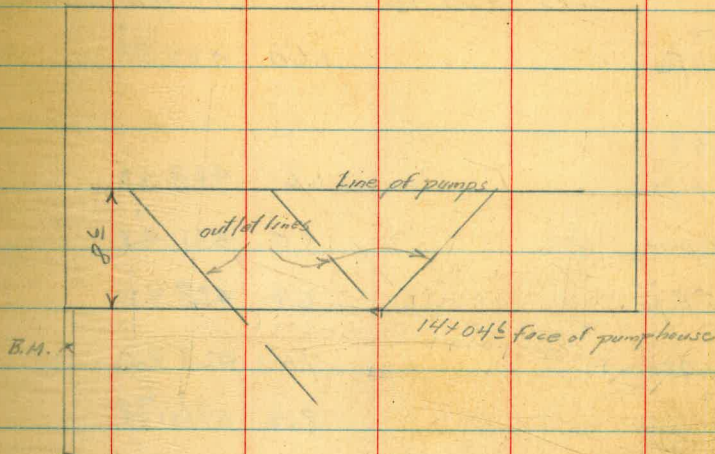
$$82^{\circ} @ 35^{\circ} 43' = 10+55^6 \text{ (Anchor block)}$$

9+89⁰⁰ P.O.T.

$$+1^{\circ} \text{ horiz} = 9+89^{\circ} \text{ P.O.T.}$$

$$157^{\circ} @ 34^{\circ} 12' = 9+87^{49} \text{ (Anchor wall)}$$

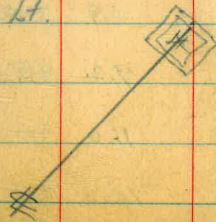
$$92^{\circ} @ 34^{\circ} 30' = 9+33^{46} \text{ (Anchor wall)}$$



$$13+89^{\circ} @ 18^{\circ} 30' = 14$$

$$12+817^3 @ 51^{\circ} 19' = 14$$

Nail in 4" G.V. box (4" line to Sorrento)



3/10/42
Soper
Bowlin
Davis

33

	+	II	-	El.
	3.93	434.93 [✓]		431.00
0400 Top pipe			1.60	433.33 [✓]
0419 ⁹ Top pipe			1.6	433.33 [✓]
" ground			3.5	431.43 [✓]
1400 pipe			6.9	428.93 [✓]
" gr.			7.4	427.53 [✓]
1420 pipe			8.2	426.73 [✓]
" gr.			8.2	426.73 [✓]
2400 gr.			12.4	422.53 [✓]
TP	0.53	422.39 [✓]	13.07	421.80 [✓]
2+38 Top of G.V. stem			0.53	421.86 [✓]
2+38-gr.			2.2	420.19 [✓]
2+59 gr.			4.1	418.29 [✓]
2+63 pipe			5.4	416.99 [✓]
" gr.			4.4	417.99 [✓]
3+00 gr.			5.9	416.49 [✓]
4+00 gr.			9.2	413.19 [✓]
4+20 pipe			11.0	411.39 [✓]
" gr.			10.0	412.39 [✓]

Top of curbing, from Reservoir map

	+	HI	-	Σ1
		422.39 ✓		
TP	1.89	412.10 ✓	12.18	410.21 ✓
5400 gr			1.5	410.60 ✓
5452 pipe			4.1	408.0 ✓
" gr			3.5	408.6 ✓
6400 gr			5.1	407.0 ✓
6440 gr			7.7	404.4 ✓
6470 gr			11.8	400.3 ✓
TP	0.09	399.20 ✓	12.99	399.71 ✓
6490 gr			4.0	395.2 ✓
7403 gr			9.7	389.5 ✓
7403 pipe at vert. 6			9.7	389.5 ✓
TP	0.50	386.61 ✓	13.09	386.11 ✓
TP	0.05	373.62 ✓	13.04	373.57 ✓
TP	0.53	361.59 ✓	12.56	361.06 ✓
7448 pipe			6.5	355.09 ✓
7448 gr			6.5	355.09 ✓
74489 Top concrete wall			6.09	355.50 ✓
TP	0.49	349.20 ✓	12.88	348.71 ✓
TP	0.14	336.44 ✓	12.90	336.30 ✓
TP	0.09	323.63 ✓	12.90	323.54 ✓

3/12/42

Saper
Bowlin
Davis

34

		323.63			
TP	0.23	311.01	12.85	310.78	
8425-Top pipe			11.2	299.81	
8430 ⁸			12.81	298.20	
Top anchor wall					
TP	0.28	298.30	12.99	298.02	
TP	0.15	285.59	12.86	285.44	
TP	1.72	274.36	12.95	272.64	
TP	0.25	261.76	12.85	261.51	
TP	0.35	249.18	12.93	248.83	
TP	0.37	236.61	12.94	236.24	
9430-Top pipe			11.8	224.81	
9433 ⁴⁵			11.94	224.67	
Top of anchor wall					
TP	0.30	224.06	12.85	223.76	
TP	0.08	211.30	12.84	211.22	
TP	0.32	198.69	12.93	198.37	
9487 ⁵			11.15	187.54	
Top anchor wall					
TP	0.44	186.33	12.80	185.89	
TP	0.25	173.67	12.91	173.42	
TP	0.06	160.79	12.94	160.73	
TP	0.15	148.36	12.58	148.21	
10455 ⁵			9.75	138.61	
Top anchor block			9.8	138.50	
10456-9r					

3/14/42

36

Super
Benton
Darin

		148.36 ✓		
TP	0.17	135.62 ✓	12.91	135.45 ✓
10+62 [±]				
Top of wire pipe			4.00	131.62 ✓
10+62 [±] gr.			4.5	131.12 ✓
10+77 gr.			7.1	128.52 ✓
TP	0.27	122.86 ✓	13.03	122.59 ✓
10+94 gr.			0.3	122.56 ✓
11+15 gr.			10.3	112.56 ✓
TP	0.15	110.28 ✓	12.93	109.93 ✓
TP	0.42	97.43 ✓	13.07	97.01 ✓
TP	0.17	84.68 ✓	12.92	84.51 ✓
TP	0.29	72.07 ✓	12.90	71.78 ✓
12+00 gr.			4.5	67.57 ✓
TP	0.38	59.54 ✓	12.91	59.16 ✓
TP	0.27	46.83 ✓	12.98	46.56 ✓
12+44 gr.			1.0	45.83 ✓
12+70 gr.			9.0	37.83 ✓
12+81 ² gr.			10.3	36.53 ✓
12+81 ²				
Top of stand 4" 6.4/1			12.9	33.93 ✓
13+01 gr.			11.3	35.53 ✓
13+50 gr.			10.0	36.83 ✓

46.83^v

13+63 gr.			11.2	35.63 ^v	
14+00 gr.			10.4	36.43 ^v	
14+04 ^E			10.4	36.43 ^v	
set B.M.			5.04	41.79 ^v	✓
TP	5.37	40.79 ^v	11.41	35.42 ^v	
			6.37	34.92 ^v	
			6.29	34.50 ^v	
			6.37	34.42 ^v	
			3.35	37.44 ^v	
			3.47	37.32 ^v	
			3.62	37.17 ^v	
TP	5.09	41.03 ^v	4.85	35.94 ^v	
			+ 0.90	41.93 ^v	✓

41.93 City Datum
 6.12
 48.05 USGS "
 Levels from Del Mar
 FB 864 pp 35-37
 Make this Elev 47.95
 Batty 2/25/55

x on concrete retaining wall 2' from building

Top of 8" Gal. pipe at S.V. Westerly outlet

" " " " " " center outlet

" " " " " " Easterly outlet

Base of Byron Jackson pump (westerly)

" " Ellis Chalmers " (center)

" " " " " (Easterly)

Mark on of influent and effluent gauge, at Sorrento filter plant, marked elev 48^E U.S.G.S.

Pipeline location from end of C.I.P. above Sorrento
to Turrey Pines.

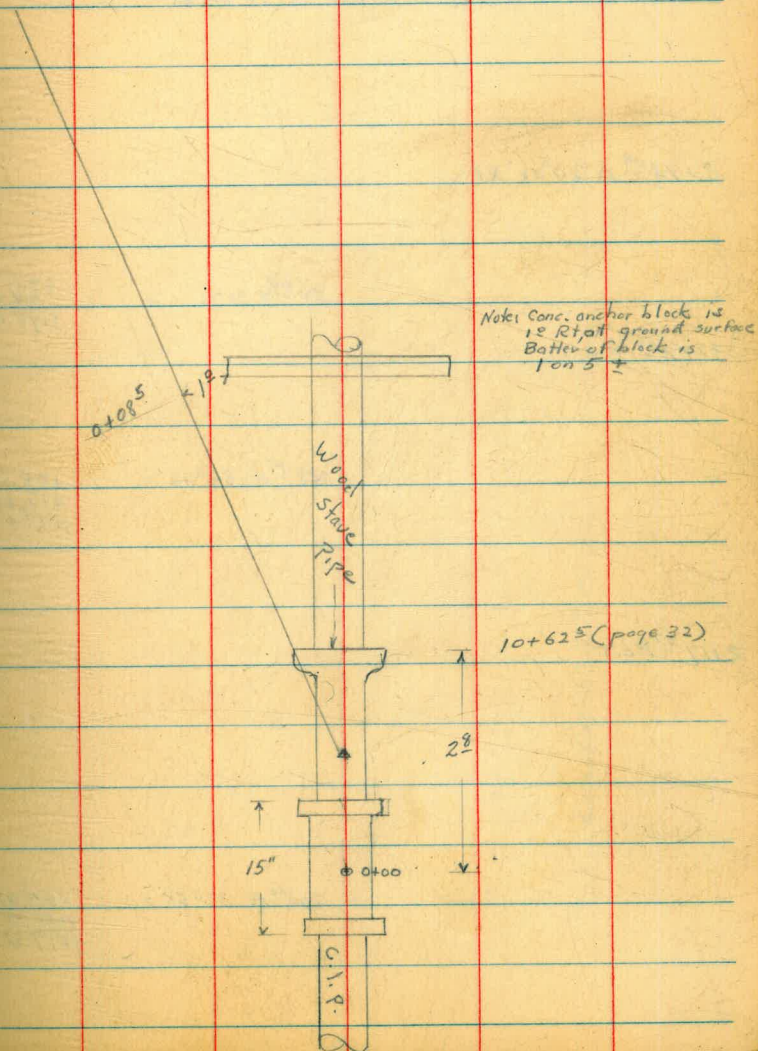
0+51⁵⁰ Δ 30°09' Rt.

0+01⁵⁰ Δ 30°00' Lt.

0+00 = center of existing C.I. sleeve.

9/4/42
Soper
King
Davis

38



6+30⁵⁰ Previous line (page 31)

4+48⁰⁸ & existing W. Stake line Δ 30°00' LT

3+98⁰⁸ Δ 30°00' RT

58⁴⁴ @ 22°16' =

344.00
54.08
398.08

3+44° P.O.T.

158⁴⁴ @ 36°48' =

126.63
217.37
344.00

2+17³⁷ P.O.T.

200° @ 33°58' =

165.87
1151.50
2+1737

⊕

← 25° →

⊕ existing W. S. Pipe.

← 25° →

⊕

9/4/42

40

Soper
King
DavisTop W. Steel Pipe
of 104635
(Page 36)

	12.40	144.02		131.62
0+00 Top C.I. sleeve			17.4	129.6 [✓]
0+00 ground.			14.6	129.4 [✓]
0+12			8.0	136.0 [✓]
TP	12.64	156.53 [✓]	0.13	143.89 [✓]
TP	12.61	168.88 [✓]	0.26	156.27 [✓]
0+32			12.3	156.6 [✓]
0+51 ⁵			0.0	168.9 [✓]
TP	12.52	181.17 [✓]	0.23	168.65 [✓]
TP	13.04	193.96 [✓]	0.25	180.92 [✓]
0+74			8.0	186.0 [✓]
TP	12.97	206.68 [✓]	0.25	193.71 [✓]
1+00			2.9	203.8 [✓]
1+00 - 4' RT			6.0	200.7

266.68

TP	12.68	218.90 [✓]	0.46	206.22 [✓]
1420			3.6	215.3 [✓]
1+20 - 7' Rt			5.8	213.1 [✓]
TP	13.00	231.60 [✓]	0.30	218.60 [✓]
Set B.M.			9.43	222.17 [✓]
1+39			9.3	222.3 [✓]
TP	12.92	244.39 [✓]	0.13	231.47 [✓]
1+68			3.2	241.2 [✓]
TP	12.78	257.12 [✓]	0.05	244.34 [✓]
1481			6.0	251.1 [✓]
TP	12.76	269.58 [✓]	0.30	256.82 [✓]
TP	12.97	282.50 [✓]	0.05	269.53 [✓]
2+17			3.4	279.1 [✓]
TP	12.87	295.27 [✓]	0.10	282.40 [✓]
TP	12.86	308.01 [✓] 309.01	0.12	295.15 [✓]
Set B.M.			9.90	298.11 [✓]
2+54			1.3	306.7 [✓]
TP	12.69	320.48 [✓]	0.22	307.79 [✓]
TP	12.81	333.25 [✓]	0.04	320.44 [✓]

Cor. of anchor wall - 11' Rt 1+30

on center of anchor wall 25' Rt 2+42

9/8/42
Super
King
Davis

42

333.25

TP 12.75 345.90^v 0.10 333.15^v

3400 8.0 337.9^v

TP 12.67 358.25^v 0.32 345.58^v

3420 8.6 349.7^v

TP 13.08 370.99^v 0.34 357.91^v

TP 12.77 383.62^v 0.14 370.85^v

3443 9.2 374.4^v

TP 12.84 396.31^v 0.15 383.47^v

3477 4.9 391.4^v

TP 12.68 408.75^v 0.24 396.07^v

3495 11.7 397.1^v

3498⁰⁸ 11.2 397.6^v

4498⁰⁸ 3.4 405.4^v

4498⁰⁸ 5.2 403.6^v

Top of existing Wood Stake P.L. (21" O.D)

408.75

R 13.16 421.80^v 0.11 408.64^vck on B.M. +0.01 421.81^v Rec. 421.86

Top of G.V. Stem (page 33)

Survey To Locate Anchor Walls
& Anchor BIRs. Sorrento

Byler
King
O'Hara
Stevens
3-10-44

0+99²⁶

0+96²⁶

0+92²⁶

100' @ 34° 09' = 0+82²⁶ slope from 0+00

0+77²⁶

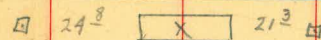
0+09²⁶

0+00 = 0+00 Previous Line (page 38) = 10+60²⁶

0+00

44

± Anch. BIR



End C.I. Section

C.I. Section

± Anch Wall



± Anch BIR



Previous Line (page 31)

1+44⁹⁴

1+33⁹⁴

57.0 @ 32° 28' 30" = 1+30⁹⁴

9920
1170
1170
510 feet from
0+82⁹⁴

1+18⁰¹

1+11⁶¹

1+06⁹⁶

45
collar

collar

collar

Anchor dia

Ref. $\square 29^8 \square * \square 21^3 \square$ Ref.

collar

2400 ²⁵

1+98 ²⁵

1+85 ⁶³

1+83 ⁶³

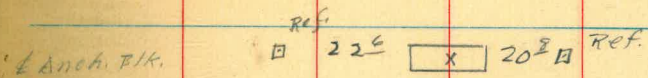
1+80 ⁶⁰

1+73 ²³

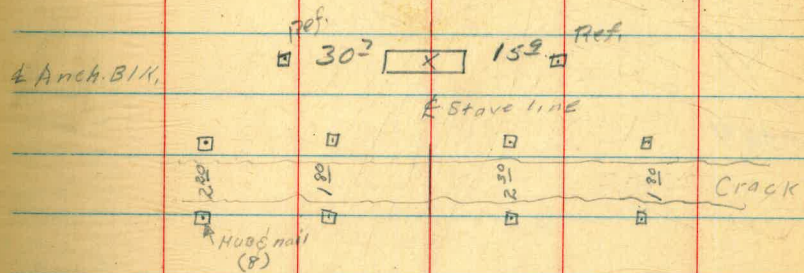
97° @ 32° 39' = 1+64 ⁶³ (Sliped from 0+82 ⁷⁶)

1+49 ⁰⁷

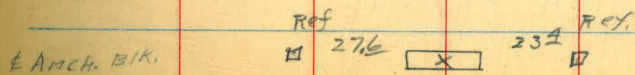
collar



collar



collar



3+07³⁵

2+89⁰⁵

55' @ 35° 10' 30" = 2+83¹⁵ (sloped from 2+3622)

2+54²⁰

90° @ 36° 42' = 2+36²⁰ (sloped from 1+6453)

2+34⁴⁹

2+15²


47.

collar

collar

collar

collar

Arch Wall □ Ref. 240  □ Ref. 293

collar

3+61⁸⁹

Slope length of pipe from
end of G.I. PIPE line near 0+00
to G.I. Bend at 3+61⁸⁹ = 339.70

3+56⁸⁰

G.I. Bend

3+45²⁹

Collar

3+31⁸⁰

Collar

Collar

✓

98⁵⁰ @ 39° 51' = 3+17²⁰(Sloped from
2+36²⁸)3+16⁰

Couch Wall

Ref
□ 28⁰31⁶Ref
□

$5+65^{39} = \text{STA. } 5+00 \text{ Previous Line (page 31)}$

$4+13^{39}$

$64^{\circ} @ 31^{\circ} 31' 30'' = 3+70^{39} \left(\begin{array}{l} \text{Slope from} \\ 3+172 \end{array} \right)$

0.19
 Levels on Anchor Wall's pipeline
 Above Sorrento Pump Sta.

3	0.05	421.86		421.81
TP	3.25	417.55	7.56	414.30
TP	1.20	413.28	5.97	411.58
TP	1.07	404.37	9.98	403.30
			10.04	394.33
	0.19	394.52		
34612			4.92	
TP			12.54	381.98
	1.82	383.80		
TP			12.31	371.49
	0.87	372.36		
TP			12.39	359.97
	0.37	360.34		
3416			4.84	
			6.99	
TP			12.75	347.59
	0.71	348.30		
TP			12.33	335.97
	0.61	336.58		
TP			13.02	323.56

Byler
 King
 Stevens
 3-13-44

50

C.J. Bend

Anchor wall Top
 Top hole for pipe

Note - all shifts on pipe
 holes taken on
 Down hill side

178 20
173 5

323.56

0.83 324.39

TP 12.76 311.63

0.38 312.01

- 10.19 301.82

0.21 302.03

2434² 3.82 298.21

6.90

TP 11.25 290.78

0.63 291.41

TP 12.55 278.86

1.47 280.33

1498²⁵ 9.35 270.98

11.22

TP 13.03 267.30

0.00 267.30

1483⁶³ 7.35 259.95

9.18

TP 12.60 254.70

0.94 255.64

Top anch. Wall

Top of hole for pipe

Top anch. BIK.

TOP PIPE hole

Top Anch. BIK

Top of PIPE hole

		255.64		
TP			13.01	242.63
	0.22	242.85		
			10.78	230.07
TP			11.78	231.07
		230.42		
	0.35	231.42		
				224.22
1499 ^{ca}			6.20	225.22
			9.35	
				217.62
TP			12.80	218.62
		218.26		
	0.64	219.26		
1411 ^{ca}			6.81	
			9.17	
				206.21
TP			13.05	206.21
		206.89		
	1.08	207.89		
0499 ²⁰			3.05	
			5.59	
				195.21
TP			11.68	196.21
		195.94		
	0.73	196.94		
0477 ²⁰			8.36	
			11.31	
				194.18
TP			11.76	195.18
		185.17		
	0.99	186.17		

Top Anch. Wall

Top of Pipe hole

Top Anch BIK.

Top of pipe hole

Top Anch. Wall

Top pipe hole

Top Anchor BIK.

Top of hole in BIK.

		195.17		172.13
		186.17		
TP			13.04	173.13
		173.96		
	1.33	174.46		
TP			11.08	162.38
		164.17		
	1.79	165.17		
TP			12.41	151.76
		159.54		
	0.78	153.54		
TP			10.83	141.71
		145.53		
	3.82	146.53		
0+092			6.90	138.63
			9.91	
TP			6.90	138.63
		140.46		
	1.83	141.46		
0+028			8.85	131.61

Top Anch. BIK. check on notes page 35
STA. 10+55.5 El. 138.61

Top pipe hole

Top old stave line check on notes page 36
STA. 10+62.5
El. 131.62

Alignment Tarrey Pings Pl.
Thru Camp Callan

9-6-44

Byler
King
Otter
Stoppers

11+20

11+03

9+96

9+52

7+05

6+66

0+11 16" G.V. on Wood stake line

0+00 16" G.V.

0-99

0-68

0-81

0-83¹

54

edge of oil shoulder

edge conc. pav.

edge conc. pav.

oil shoulder

v ?

x ?

wood stake line

toe of res. embankment

Top " " "

RES. FENCE

X — X — X

See Conc. Wall of
Res.

17+42

15+90

15+68.00 End of Venturi tube

15+60.5 End of Venturi tube

14+72

14+13

14+03

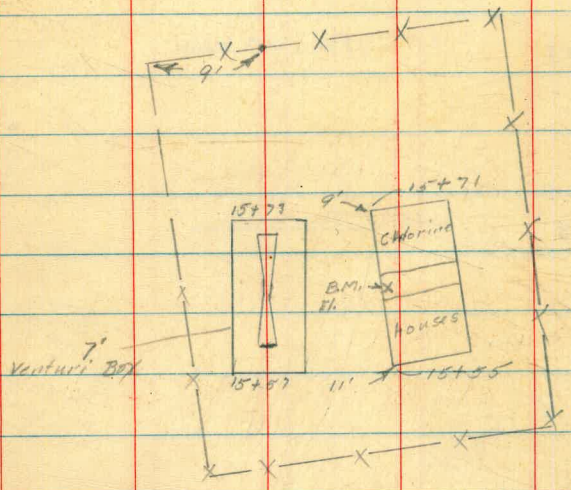
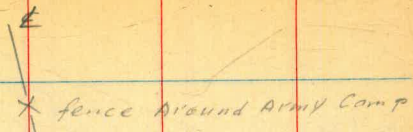
13+51

12+45

12+17

12+13

11+64



2' ☉

☉ 3'

oil shoulder

edge conc. pav.

edge conc. pav.

oil shoulder

☉ 4'

5' ☉

+86

+80

+73

21+28

20+23^E E.C.

A 83°20'
R 90'
L 130.9
T 80.1

18+92^L B.C. curve Rt.

56

2.5' wide edge of drainage ditch
2' water

edge walk Asphalt

edge pav. (Conc.)

edge pav. (Conc.)

29+05 B.O.

27+76²³ E.C.

27+33

27+26

27+00

+82

+72

 $\Delta 90^\circ$
 R 90'
 L 191.37
 T 90'

26+65

26+35³⁵ B.C. curve Lt.edge pav.

gutter

E west st.

gutteredge pav.back edge walk

4

4' Asphalt walk

25' Brick walk

11' \circ Sewer M.H.
 12' \circ Stub 9" V.C. P.P. #634
 11' \circ 44485
 4' 18" X 18" Wood drain

41492 \circ F.H.
8'9' \circ Stub 9" V.C. P.P. #6594' 18" Wood drain
15" X 3'

A

edge asphalt pav.

edge asphalt pav.

2' X 4' Asphalt drain ditch

18" X 3' Terminal
Box #7 \square

12'

46+23

45+92

45+86

44+21

44+16⁵ A.V.

39+86

39+59

39+56⁵ L. 1°45' Lt.

36+67

36+00

35+39

32+89

61+52⁵ B.O.

61+00

59+96

58+03

57+23

55+41

51+56

50+95

50+69

50+44

49+67

48+72

47+10

46+49

±

59

± Sewer disposal
15' Plant
135' Sewer M.H.

6' □ 1'x3' Conc. Terminal Box 2/6

2'x4' Wood drain

11' ○ Sewer M.H.

F.H.
○ 8'

± 4' Asphalt walk

F.H.
○ 8'

± 4' Asphalt walk

± 2' Asphalt walk

11' ○ Sewer M.H.

± 18" x 2' Wood drain

± 4' Asphalt walk

F.H. ○ 8'

67+89

67+63

67+37

66+76

66+35

65+72

65+00

64+81

63+75

62+92

62+61

45
20
19

70

60

± 30" Asphalt walk

± 6' Asphalt walk

F.H.
○ 8'

± 4' Asphalt walk

± 18' Asphalt drive

± 16' Asphalt drive

11' ○ Sewer M.H.

± 6' Asphalt walk

± 3' Asphalt walk

F.H.
○ 8' 11' ○ Sewer M.H.

± 18' X 2' Wood drain

75+55

11' ○ Sewer Mt.

74+11

± 18" X 3' Wood drain

72+52

○ Sewer Mt.

72+37

± 26' Asphalt drive

71+85

○ F.H.
8'

71+57

± 28' Asphalt drive

71+32

± 4' Asphalt walk

69+99

Fire Control
cable

69+58

± 18" X 2' Wood drain

68+72

11' ○ Sewer Mt.

81+00 A.V.

80+49⁶⁵ E.C.

A 50.46

R 6.15

T 32.50

L 69.95

80+44⁶⁵

80+14

79+84² B.C. CURVE RT.

79+45

79+00

78+65

77+30

76+42

76+06

4 10' asphalt drive

12" G.V. to reservoir

4 3' asphalt walk

S. Edge pav. in 12th St.

N. Edge pav. in 12th St.

4 12' asphalt drive

F.H.
O 8'

4 1' asphalt walk

87+753

87+98

88+24 7' Walk

87+98

87+753

87+40⁶⁵ L 2° 35' 30" Rt.

86+20

85+84

85+50

84+63

83+90

83+49

83+27

89+11 7' Walk

7' L. F.H.

88+20

63

83' Brick Walk

83' Brick Walk

8 18" X 3' Wood drain

8 24' Asphalt drive

8 6' Asphalt walk

8 20' Asphalt drive

F.H.

0 9'

8 3' Asphalt walk

8 3' Asphalt walk

95+683 24" G.V.

+585

95+543

95+413

95+013

93+50

92+66

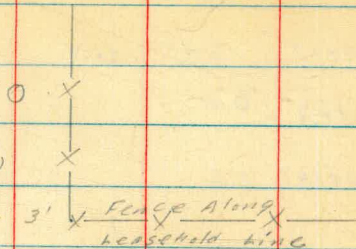
90+74

89+11

88+50

88+24

Size 9 G.V. 0
18



Edge Conc Pav in 8" St

Edge Conc Pav in 8" St

43' Asphalt Walk

43' Asphalt Walk

45' oiled drain ditch

47' Brick Walk

0 FH.
7'

47' BRICK WALK

15
65 55
83 55

131+17 24" G.V.

131+03 B.O.

130+83⁵ E.C.

130+71⁵

130+15⁰ B.C. Curve Rt.

130+11

129+80

128+89 xxx

129+78⁵ 6" Valve

127+37 A" Valve

125+52⁵ A.V.

123+97⁸ B.O.

121+26⁸ A.V.

100+05

97+29

65

X X X

X

± 18" W.I. Culvert

Sewer MH
O

182

X

X

X

X

X

X

X

2'0" gal Pole to Power Pole
428

± 36" Cor. I drain

End of pipe 1 1/2'

X

Profile Tarrey Pines Rd.
Thru Camp Callan

9-12-44

Byell
King
Giffen
Stephens

66

	5.35	436.25		431.0
0-83!			5.19	
0-81			5.3	
0-68			5.8	
0-48			13.0	
TP/B.M.	2.76	426.02	12.99	423.26
0+00			3.6	
+25			3.5	
1+00			4.7	
2+00			6.5	
3+00			8.0	
4+00			9.5	
5+00			10.6	
TP	1.50	419.16	11.36	414.66
6+00			4.6	
+66			5.0	
7+00			5.8	
+05			5.5	
8+00			8.2	
9+00			11.2	

B.M. top of curbing Tarrey Pines Rd. N. Side

Top curb So. Side

on ground by fence

Top of embankment.

top " "

set B.M. Top G.V. 0+00

on ground.

419.16

TP	1.77	408.09	12.84	406.32
9+52			1.8	
9+96			3.06	
10+00			3.2	
11+03			6.07	
11+27			6.8	
11+28			6.0	
11+65			6.2	
12+00			10.1	
12+17			11.2	
12+45			11.66	
TP	4.39	400.95	12.03	396.06
13+00			4.3	
454			4.71	
14+03			5.2	
15+00			4.8	
15+57			4.0	
15+57			3.26	
15+60 ⁵			5.96	
15+68 ⁶			5.80	

edge of oil

edge pav.

edge pav.

edge of oil

edge of oil

edge pav.

edge of pav.

edge of oil

on ground.

Top of Conc. Box N.W. Cor.

on pipe at end of venturi

on pipe at end of venturi.

		400.45			
TP/BM	5.56	402.82	3.19	397.26	✓
16+00			6.6		
17+00			5.7		
+12			5.4		
TP	2.13	499.89	5.06	497.76	
+12			2.5		
18+00			2.9		
+50			5.0		
+929	B.C.		4.6		
19+00			5.0		
+50			6.1		
20+00			7.5		
+23 ²	E.C.		8.3		
21+00			12.0		
TP	0.80	387.68	13.01	386.88	
+28			1.49		
+73			2.54		
+80			2.60		
+84			2.80		
+86			4.14		

Set B.M. "X" E. end of pav. betwn. chlorine houses
see sketch page 55

on ground under fence

edge of pav.

edge of pav.

Top Walk

Top of conc. ditch

Bottom of conc. ditch

	587.68			
22+00			3.4	
23+00			8.6	
TP	0.09	374.87	12.90	374.78
24+00			1.1	
25+00			6.3	
26+00			11.5	
26+35 ³⁵ B.C.			13.2	
TP	3.08	365.26	12.09	362.18
+65			5.4	
+72			5.71	
+82			6.8	
27+00			6.2	
+26			6.9	
+33			6.4	
+50			6.4	
+70 ⁷⁰ E.C.			6.6	
28+00			6.4	
29+00			6.3	
+05			5.50	
30+00			6.0	

Top Walk

edge pav.

gutter

west st.

gutter

edge pav.

Top E. edge B.O. stand pipe

365.26

31+00			5.5	
32+00			5.1	
TP	6.91	368.27	3.90	361.36
+87			7.5	
+89			8.7	
33+00			7.7	
34+00			7.1	
35+00			6.5	
36+00			6.60	
+10			6.1	
+67			6.20	
37+00			5.6	
38+00			5.4	
39+00			5.0	
TP	7.10	371.26	4.11	364.16
+56 ²⁵	A		7.3	
+59			8.5	
			6.75	369.51
40+00			7.0	
41+00			6.0	

364.57

70

on grade

bottom of ditch

edge pav.

edge pav

Fl. line drain

In Int. of 21st & West sts. El. 369.57

	371.26		
42+00		5.5	
TP/B.M.	3.62 371.94	2.94	368.32
43+00		6.4	
44+00		5.9	
+16 ^s		5.17	
		5.2	
+21		6.6	
		5.52	366.42
45+00		6.0	
		9.05	
+86		5.60	
46+23		5.8	
TP/B.M.	2.13 370.85	3.22	368.72
47+00		4.9	
+10		5.2	
48+00		5.2	
+70		5.6	
+72		7.1	
		5.71	365.14
49+00		5.9	
		6.60	
49+67		9.55	

Set B.M. Top F.H. # 20-1

Top cover ring A.V.

on grade

Fl. line drain

Int. 20th of West sts. El. 366.79

Fl. line D.E.

Top sewer M.H.

Druck Walk

Set B.M. Top F.H. # 19-1

on walk

Fl. line drain

Int. 19th of West sts. El. 369.60

TOP M.H. Ring

Fl. line sewer

	370.85			
50+00			6.4	
+44			5.9	
+69			5.9	
51+00			6.1	
+56			6.6	
52+00			6.8	
TP	4.53	368.00	7.38	363.47
53+00			4.5	
54+00			4.9	
55+00			6.0	
56+00			7.6	
57+00			8.1	
+23			7.78	
			10.90	
58+00			8.1	
+03			9.5	
			8.32	359.68
59+00			9.7	
TP	3.72	363.37	8.35	359.65
60+00			4.9	
61+00			4.7	

on Walk

on Walk

on Walk

Top M.H. Ring.

El. line sewer

El. line drain

Inter. 17th & West St. El. 359.30

		363.37		
61400		6.65		
		16.45		
+52 ⁵		5.54		
62400		5.7		
+59		5.9		
+61		7.4		
		9.82		
+92		9.52		
TP/B.M.	4.37	369.69	3.05	366.32
63400		6.2		
+75		5.9		
64400		5.9		
+81		5.6		
65400		5.5		
		5.78		
65400		9.52		
		5.28	359.41	
+72		5.4		
66400		5.1		
+35		4.8		
+76		4.3		
67400		4.0		
+63		3.6		

Top M.H. Ring
 Fl. line sewer

Top BA Cover ring.

Fl. line drain
 Top M.H. Ring
 Fl. line sewer

Set B.M. Top F.M. # 15-1

on walk

on walk

Top M.H. Ring
 Fl. line sewer

Int. 15" West str. El. 358.60

in drive

in drive

		364.09		
+89			3.5	
68+00			3.9	
TP	5.20	367.86	20.3	362.66
+72			4.75	
			10.15	
69+00			7.0	
+55 ^s			5.6	
+58			6.7	
			5.78	362.08
70+00			6.2	
71+00			5.0	
+32			4.2	
+57			4.0	
TP/B.M.	40.1	370.86	0.91	366.95
72+00			6.9	
+37			7.2	
			6.66	
+52			11.46	
73+00			7.6	
74+00			7.0	
+09			7.1	
+11			8.6	

Top M.H. ring
Fl. line sewer

Int. 14th & West sts. El. 361.89

on walk

on & drive

Set B.M. top F.H. #

in driveway

Top M.H. ring
Fl. line sewer

Fl. line drain

	370.96			
		6.67	364.29	
75		5.9		
75+55		4.36 9.96		
76+00		4.9		
+06		4.6		
77+00		4.6		
+30		4.3		
78+00		4.6		
TP	5.16	372.29	4.13	366.83
+65		6.6		
79+00		6.3		
		5.50	366.79	✓
+45		5.9		
+89 ³	B.C.	5.6		
80+00		5.7		
+14		7.74	364.55	✓
+28		6.3		
+49 ⁶⁵	E.C.	6.3		
81+00		6.1		
81+00		6.08	366.21	✓

Int. 13¹⁴ & West sts. El. 364.20

Top M.H. ring
in line sewer

on walk

in drive

N. edge pav.

S. " "

Int. 12¹⁴ & West sts. El. 366.50

on walk

Top 12" gate valve

in & drive

on A.V. cover ring ✓

Found 5/22/56
West & party

	372.29			
		5.54	366.75	
82400		6.5		
83400		6.9		
+27		6.9		
+49		6.9		
TP/B.M.	2.25	370.15	4.39	367.90
84400		5.0		
+63		4.6		
85400		5.0		
+50		4.5		
+84		5.3		
86400		5.3		
+18		6.0		
+20		7.75		
87400		5.0		
+40 ⁶⁵ Δ		5.3		
		5.70	364.45	
+75 ⁵		5.3		
+99		5.3		
88400		5.3		

Int. 11th & West sts. El. 365.06

on walk

on walk

Set B.M. on top F.H. # 10-1

in & drive

on walk

in & drive

in drain

Int. 10th & West sts. El. 363.25

on walk

on walk

	370.15			
88+24			5.4	
+0			5.7	
89+00			5.8	
+11			5.7	
TP	361	367.03	6.73	363.42
90+00			3.8	
+69			5.3	
+74			6.2	
+79			5.4	
			4.75	363.28
91+00			5.2	
92+00			5.3	
+66			5.1	
93+00			5.1	
+50			5.0	
94+00			5.9	
+95			7.7	
95+01 $\frac{1}{2}$			9.0	
+04			9.2	
+20 $\frac{1}{2}$			8.8	

on walk

on walk

on walk

4 drain

Int. 9th West Sta. El. 364.50

on walk

on walk

edge pav.

gutter

4

367.03

+39 ⁵			9.2	
+41 ²			9.1	
TP	2.91	364.34	5.60	361.43
+54 ³			6.9	
+58 ¹			10.70	
+68 ³			9.12	
96+00			7.7	
97+00			8.2	
+29			10.10	
+50			9.3	
98			8.5	
+50			8.3	
99			8.2	
100			7.4	
+50			5.8	
101			4.9	
TP	9.08	373.00	0.42	363.92
102			12.7	
+50			8.5	
103			10.0	

Continued Book 676 Page 1

utter
edge pad

TOP G.V.
TOP 2 1" G.V.

Fl. line 36" drain

B.M. Top of curbing Ter. P's Res. N. side
Elev. 431.0 Top of pipe 433.33

B.M. Nail in Euc. tree 30' R of stg.
101456 La Jolla Shores Pt. El. 386.61

DIRECTIONS FOR USE OF TABLES

TABLE No. 1

Distance of slope stake from side or shoulder stake for any width roadway, slope $1\frac{1}{2}$ to 1. If ground is nearly level, the cut or fill at side stake is located by the double entry method in left column and top row. The number in body of table in same row and column gives distance from side stake to slope stake. If ground is not

IMPROVED TABLES

AND

INFORMATION

TABLE No. 2

To find Tangent and External for curve of any other degree, divide by degree of curve and add correction found in column of corrections. Degree of curve with a given L may be found by dividing tangent (or external), opposite L by given tangent (or external). The distance from a point on the tangent to the curve is very nearly the square of the tangent length divided by twice the radius.

Point on rock for topog -
 5+76 - 63 Rt = Approx - & BuH = 14

P.O.R. For Topog. 16 3/4 below
 2+32 - 75 Lt spillway

10+62.5
 2635.35
 141.52
 2776.72

92.28
 15
 77

10+65.3
 5+65.59
 371.26
 675
 367.57

61+50

280.24
 9.28
 270.96

313.29
 4.05
 309.24

302.29

458
 Road N. Site

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.
 Roadway 16 feet wide. Side Slopes 1 on 1 1/2
 For Single Track Embankment.

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	H
0	8.0	8.2	8.3	8.5	8.6	8.8	8.9	9.1	9.2	9.4	0
1	9.5	9.7	9.8	10.0	10.1	10.3	10.4	10.6	10.7	10.9	1
2	11.0	11.2	11.3	11.5	11.6	11.8	11.9	12.1	12.2	12.4	2
3	12.5	12.7	12.8	13.0	13.1	13.3	13.4	13.6	13.7	13.9	3
4	14.0	14.2	14.3	14.5	14.6	14.8	14.9	15.1	15.2	15.4	4
5	15.5	15.7	15.8	16.0	16.1	16.3	16.4	16.6	16.7	16.9	5
6	17.0	17.2	17.3	17.5	17.6	17.8	17.9	18.1	18.2	18.4	6
7	18.5	18.7	18.8	19.0	19.1	19.3	19.4	19.6	19.7	19.9	7
8	20.0	20.2	20.3	20.5	20.6	20.8	20.9	21.1	21.2	21.4	8
9	21.5	21.7	21.8	22.0	22.1	22.3	22.4	22.6	22.7	22.9	9
10	23.0	23.2	23.3	23.5	23.6	23.8	23.9	24.1	24.2	24.4	10
11	24.5	24.7	24.8	25.0	25.1	25.3	25.4	25.6	25.7	25.9	11
12	26.0	25.2	26.3	26.5	26.6	26.8	26.9	27.1	27.2	27.4	12
13	27.5	27.7	27.8	28.0	28.1	28.3	28.4	28.6	28.7	28.9	13
14	29.0	29.2	29.3	29.5	29.6	29.8	29.9	30.1	30.2	30.4	14
15	30.5	30.7	30.8	31.0	31.1	31.3	31.4	31.6	31.7	31.9	15
16	32.0	32.2	32.3	32.5	32.6	32.8	32.9	33.1	33.2	33.4	16
17	33.5	33.7	33.8	34.0	34.1	34.3	34.4	34.6	34.7	34.9	17
18	35.0	35.2	35.3	35.5	35.6	35.8	35.9	36.1	36.2	36.4	18
19	36.5	36.7	36.8	37.0	37.1	37.3	37.4	37.6	37.7	37.9	19
20	38.0	38.2	38.3	38.5	38.6	38.8	38.9	39.1	39.2	39.4	20
21	39.5	39.7	39.8	40.0	40.1	40.3	40.4	40.6	40.7	40.9	21
22	41.0	41.2	41.3	41.5	41.6	41.8	41.9	42.1	42.2	42.4	22
23	42.5	42.7	42.8	43.0	43.1	43.3	43.4	43.6	43.7	43.9	23
24	44.0	44.2	44.3	44.5	44.6	44.8	44.9	45.1	45.2	45.4	24
25	45.5	45.7	45.8	46.0	46.1	46.3	46.4	46.6	46.7	46.9	25
26	47.0	47.2	47.3	47.5	47.6	47.8	47.9	48.1	48.2	48.4	26
27	48.5	48.7	48.8	49.0	49.1	49.3	49.4	49.6	49.7	49.9	27
28	50.0	50.2	50.3	50.5	50.6	50.8	50.9	51.1	51.2	51.4	28
29	51.5	51.7	51.8	52.0	52.1	52.3	52.4	52.6	52.7	52.9	29
30	53.0	53.2	53.3	53.5	53.6	53.8	53.9	54.1	54.2	54.4	30
31	54.5	54.7	54.8	55.0	55.1	55.3	55.4	55.6	55.7	55.9	31
32	56.0	56.2	56.3	56.5	56.6	56.8	56.9	57.1	57.2	57.4	32
33	57.5	57.7	57.8	58.0	58.1	58.3	58.4	58.6	58.7	58.9	33
34	59.0	59.2	59.3	59.5	59.6	59.8	59.9	60.1	60.2	60.4	34
35	60.5	60.7	60.8	61.0	61.1	61.3	61.4	61.6	61.7	61.9	35
36	62.0	62.2	62.3	62.5	62.6	62.8	62.9	63.1	63.2	63.4	36
37	63.5	63.7	63.8	64.0	64.1	64.3	64.4	64.6	64.7	64.9	37
38	65.0	65.2	65.3	65.5	65.6	65.8	65.9	66.1	66.2	66.4	38
39	66.5	66.7	66.8	67.0	67.1	67.3	67.4	67.6	67.7	67.9	39
40	68.0	68.2	68.3	68.5	68.6	68.8	68.9	69.1	69.2	69.4	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 41.9. For same slopes but other widths of roadbed correct above figures by one-half difference in width of roadbed; thus in example above for 20 ft. roadbed distance will be $41.9 + (20 - 16) \div 2$ or 2 ft. added to 41.9 = 43.9. For slopes of 1 on 1 see inside of front cover.

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