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.

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)÷2 or 2 ft. added to 30.6 =32.6. For slopes of 1 on 1½ see inside of back cover.

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to page # 78

except page # 2, 4, 6, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 46, 54, 55, 56, 76,

This Field Book is manufactured of a High Grade 50% Rag Paper having a WATER RESISTING SURFACE, and is sewed with Bing Special Enamel Waterproof thread.

Made in U. S. A.

INDEX

Cont'd from G.B. 236-76
Trunk Sewer #2

W.O. 60208

150		5.3	10.5	
135	8" "T" eastside	5.1	10.7	7.10 8.72 5.05 C 3.67
174		5.4	10.4	
175		5.7	10.1	
173+51.34	M.H. #46 Bunker Hill St.	Cont'd From G236-78		8" stub NE. Side 7.00
173+25				
B.M.	520	15.82	10.62	

IN other Book.

Artukovitch Co.

(M.H. R.P.s G.B. 236-30
B.M.s " " -79)

F.L.

523	
10.59	
5.36	
C 5.23	
522	
10.60	
5.05	
C 5.55	
519	
10.63	
5.52	
C 5.11	
517	
10.65	
5.49	
C 5.16	
515	
513	

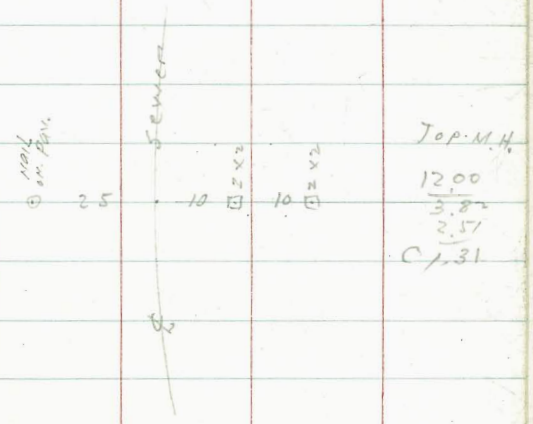
chisel ⊠ S.E. Cor. Gas M.H.
at Bunker Hill St.

Inspector's Page

						F.L.
176+25	8" "T" East side		5.0	10.8	7.20 8.62 4.78 C 3.84	5.37 10.45 4.78 C 5.67
176			5.1	10.7		5.35 10.47 4.65 C 5.82
+75			5.0	10.8		5.33 10.49 4.76 C 5.73
+50			5.6	10.2		5.31 10.51 5.14 C 5.37
175+25	8" "T" East side		5.8	10.0	7.10 8.72 5.45 C 3.27	5.29 10.53 5.45 C 5.08
175			5.8	10.0		5.27 10.55 5.53 C 5.02
174+75			5.8	10.0		5.25 10.57 5.40 C 5.17
		158.2				

						F.L.
178	1°49.9		4.3	11.5		5.51 10.31 4.45 C 5.86
175	1°27.1		4.7	11.1		5.49 10.33 4.82 C 5.51
150	1°04.2		5.2	10.6		5.47 10.35 4.89 C 5.46
	0°41.3 Rt.					
125	8" "T" eastside		5.0	10.8	7.30 4.73 C 2.57	5.45 10.37 4.73 C 5.64
177	0°19.5 Rt.		4.6	11.2		5.43 10.39 4.58 C 5.81
.9148 = 1'						
176+79.82	(B.C. Rt.)		4.9	10.9		5.41 10.41 4.63 C 5.78
176+50			4.7	11.1		5.39 10.43 4.60 C 5.83
		158'				

	4° 16.0 Rt.					FL.
+60	6" T" EAST S.L.	10.6	13.9	7.50	5.64	
	4° 16.4			17.03	18.89	
				6.25	6.25	
	9.15			C 10.78	C 12.64	
+50	4° 07.2	10.8	12.7		5.63	
					18.90	
					6.75	
					C 12.15	
+25	3° 44.3	11.7	12.8		5.61	
					18.92	
					7.15	
					C 11.77	
179	3° 21.4	11.9	12.6		5.59	
					18.94	
					9.00	
					C 9.94	
+75	2° 58.5	12.5	12.0		5.57	
					18.96	
					9.62	
					C 9.34	
T.P.	11.22 24.53	2.5	13.31			
	M.H. #47					
178+50.6	8" Stub N. EAST Side	3.7	12.1	7.40	5.55	
	2° 35.7			8.42	10.27	
				2.51	2.51	
				C 5.91	C 7.76	
178+25	2° 12.8 Rt.	3.6	12.2		5.53	
					10.29	
					3.24	
	15.82				C 7.05	



Top. M.H.
12.00
3.82
2.57
C 1.31

181	6°24.3 ✓		11.4	14.8	
175	6°01.4 ✓		11.6	14.6	
T.P.	2.40	26.15	0.78	23.75	
	5°47.5' Rt				
160	6" "T" opposite		9.5	15.0	7.60 16.93 0.78 C 16.15
150	5°32.5 ✓		11.2	13.3	
125	5°15.7 ✓		11.5	13.0	
180	4°52.8 ✓		11.5	13.0	
179+75	4°29.9 ✓		10.2	14.3	
		24.53			

F.L.

5.75
20.40
4.88
C 15.52

5.73
26.42
4.76
C 15.66

5.72
18.81
0.78
C 18.03

5.71
18.82
2.57
C 16.25

5.69
18.86
2.92
C 15.92

5.67
18.86
2.63
C 16.23

5.65
18.88
4.61
C 14.27

181

1

T. F.

10

1

12

180

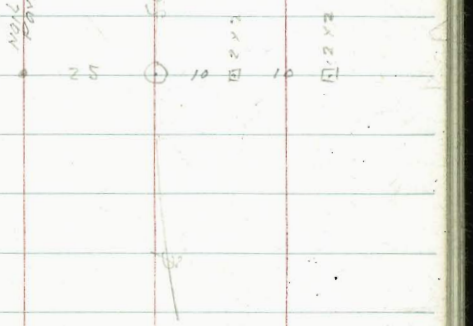
179

F.P. check to By 4.	C.I	21.14	11.62	14.53	14.52 (0.01)
182+75	9°04.3 ✓		11.1	15.1	
+50	8°41.5 ✓		11.9	14.3	
+25	E°18.6 ✓		11.7	15.0	
182	7°55.7	✓	12.7	14.0	
M.H. #46					8" STUB east side
181+73.97	7°32.0 R	✓	12.5	13.7	7.66 18.55 7.89 C 10.66
+50	7°10.0	✓	11.5	14.7	
181+25	6°47.1 R	✓	12.2	13.9	
		26.15			

F.L. chisel ☐ Hwy Island

5.89		
20.26		
10.00		
C 10.26		
5.87		
10.28		
9.80		
C 10.48		
5.85		
20.30		
9.87		
C 10.48		
5.83		
20.32		
9.51		
C 10.81		
5.81	Top M.H.	
20.34	13.60	
7.89	12.55	
C 12.45	7.89	
	C 4.66	
5.79		
20.36		
7.00		
C 13.36		
5.77		
20.38		
6.08		
C 14.30		

E Pacific S.L. Magnolia



						F.L.
184+25			2.8	17.3		6.01 15.13 3.75 C 11.48
183+90	C "T" eastside		4.6	16.5	7.90 13.24 4.02 C 9.22	5.98 15.16 4.02 C 11.14
+75			5.0	16.1		5.97 15.17 3.95 C 11.22
+50			5.3	15.8		5.95 15.19 4.33 C 10.86
183+21.95	E.C.	9°47.5	5.9	15.2		5.93 15.21 4.21 C 11.00
183	9°27.7 ✓		5.6	15.5		5.91 15.23 4.63 C 10.60
182+90	= C "T" eastside 9°18.0 ft. ✓	21.14	5.6	15.5	7.80 13.34 4.88 C 8.46	5.90 15.24 4.88 C 10.36

F.L.

G. 234-19

NE Cor. Balboa and Pacific

B.M.B.P.			21.02	S. end Con. Base	Union Gas Co. Gas Pump Island					
check to B.M. Above		3.52	21.05	21.07 / 0.03	error in 1½ Miles					
T.P.	7.82	24.57	4.39	16.75						
	See G.B. 234-11									
End Jct M.H. #119				8" Stub North						
185+00.5	8" Stub N. Side	3.7	17.9	1.90 / 13.24 / 2.69 / C 10.55	6.07 / 15.07 / 2.69 / C 12.38	6" Stub East Side 8.00 / 13.14 / 2.69 / C 10.45	16.30 / 4.84 / 2.69 / C 2.15	Top M.H. Subject to Lower grade		
175		3.4	17.7		6.05 / 15.09 / 3.05 / C 12.04					
184+50		3.6	17.5		6.03 / 15.11 / 3.21 / C 11.90					
	21.4									

INSPECTOR'S

PAGE.

From 1839-70 (now in office)

Lister Mly to R.R. Crossing

6-3-48

				Q EL.		FL.	
150			5.9	4.8		-0.68	
						11.34	
						5.75	
						C 5.59	
125			5.7	5.0		-0.70	
						11.36	
						5.74	
						C 5.62	
100			5.6	5.1		-0.72	
						11.38	
						5.77	
						C 5.61	
175			5.0	5.7		-0.74	
						11.40	
						5.66	
						C 5.74	
150			5.1	5.6		-0.76	
						11.42	
						5.27	
						C 6.15	
125			4.3	6.4		-0.78	
						11.44	
						5.31	
						C 6.13	
99+00			3.4	7.3		-0.80	8.10
						11.46	
						5.37	
BM. Spike Pole Lister ST.	0.39	10.66		10.27	1939-40	C 6.09	

				Elev.	
					F.L.
f25			5.0	5.7	-0.54 11.20 4.97 C 6.23
102			5.4	5.3	-0.56 11.22 5.22 C 6.00
f75			5.4	5.3	-0.58 11.24 5.36 C 5.88
f50			5.6	5.1	-0.60 11.26 5.67 C 5.59
f25			5.7	5.0	-0.62 11.28 5.56 C 5.72
107			6.0	4.7	-0.64 11.30 5.60 C 5.70
100 f75			5.8	4.9	-0.66 11.32 5.68 C 5.64
		10.66			

				E.L.		F.L.
104			6.2	8.4		- 0.40 15.01 5.54 C 9.47
175			5.6	9.0		- 0.42 15.03 5.25 C 9.78
150			4.9	9.7		- 0.44 15.05 5.23 C 9.82
Check B.M. Kane St. Spike in tree	2.23	(14.61)	1.40	11.28	(11.28)	
T.P.	3.46	12.68	1.44	9.22	8" stub E. side	
M.H. #29						
103+18.14 Kane St.	4 3°41	130' Lt	2.1	8.6	+ 1.40 9.26 1.44 C 7.82	- 0.47 11.13 1.44 C 9.69
103			3.4	7.3		- 0.48 11.14 3.15 C 7.99
175			4.1	6.6		- 0.50 11.16 4.29 C 6.87
102+50		10.66	4.5	6.4		- 0.52 11.18 4.37 C 6.81

						F.L.
				Ω		
+75			5.4	9.2		−0.26 14.87 4.94 C 9.93
+50			5.7	8.9		−0.28 14.89 4.54 C 10.35
+25			6.0	8.6		−0.30 14.91 5.35 C 9.56
10S			4.4	10.2		−0.32 14.93 3.93 C 11.00
+75			6.3	8.3		−0.34 14.95 4.13 C 10.82
+50			6.0	8.6		−0.36 14.97 5.03 C 9.94
10Y+25			5.9	8.7		−0.38 14.99 5.43 C 9.56
		14.61				

				Elev.		F.L
					8" Stub E. side	
	MH 430					
107+59	@ 326 Lt		1.1	13.5	+1.70	-0.12
	Hilbert St				12.91	14.73
					0.90	0.90
					C 12.01	C 13.83
+25			2.1	12.5		-0.14
						14.75
						1.66
						C 13.09
107			2.6	12.0		-0.16
						14.77
						2.20
						C 12.57
+75			3.0	11.6		-0.18
						14.79
						2.98
						C 11.81
+50			3.5	11.1		-0.20
						14.81
						3.40
						C 11.41
+25			4.3	10.3		-0.22
						14.83
						4.23
						C 10.60
106			4.8	9.8		-0.24
						14.85
		1461				4.80
						C 10.05

				Elev.		F.L.
+25			3.9	14.8		+0.02 18.65 3.36 C15.29
109			4.2	14.5		0.00 18.67 3.55 C15.12
+75			4.8	13.9		−0.02 18.69 3.61 C15.08
+50			4.5	14.2		−0.04 18.71 3.75 C14.96
+25			6.0	12.7		−0.06 18.73 4.76 C13.97
108			4.9	13.8		−008 18.75 4.37 C14.38
107+75			5.3	13.4		−0.10 18.77 5.03 C13.74
check to B.M. Mon. Sub. G. Jellett Montana	7.26	(18.67) 14.61	3.20	11.41	11.41 ✓	

				Elev.	
111			5.4	14.2	
+75			4.3	15.3	
+50			3.9	15.7	
TP	4.66	19.55	3.78	14.89	
+25			3.0	15.7	
110			3.4	15.3	
+75			3.2	15.5	
109+50			3.5	15.2	
		18.67			

FL.

0.16
19.39
5.04
C 14.35

0.14
19.41
5.25
C 14.16

0.12
19.43
5.16
C 14.27

0.10
18.57
3.78
C 14.79

0.08
18.59
3.67
C 14.92

0.06
18.61
3.56
C 15.05

+ 0.04
18.63
3.61
C 15.02

				℄ Elev.		F.L.
112 + 63.6	Spec. Joint		7.3	9.5		0.29 16.55 5.95 C 10.60
112 + 58	End Jack		6.5	10.3		0.28 16.56 4.5-0 C 12.06
111 + 86	Beg. Jack		9.4	7.4		0.23 H 16.84 Rd 16.61 .52 C 8.09
111 + 83.6	Spec. Joint		11.10	5.7		0.27 16.62 8.99 BM Rec'd 14.34
check to BM	2.52	16.84	5.23	14.32	14.32	
MH #31 111 + 65.6 Inguit St.	50° 2' 30" Lt.		10.6	9.6	12" STUB E. side 2.00 17.55 4.84 C 12.71	+ 0.21 19.34 4.84 C 14.50
+ 50			5.6	14.0		+ 0.20 19.35 4.85 C 14.50
111 + 25			5.5	14.1		+ 0.18 19.37 4.95 C 14.42
		19.55				

5+~~43~~ 33 - end		23.02
5+~~33~~ 23		22.50 Pav.
5+~~50~~ 40		19.99 Pav.
T.P.	18.45	
~~5+00~~ 4+90 on Paving N.W. edge	12.80	15.01 Paving.

				Elev.
+50			5.4	6.6
+25			5.4	6.6
114			5.4	6.6
+69			5.3	6.7
T.P.	5.62	(11.99)	10.47	6.37
MH #32				
113+40.7	@ 44°45 Rt.		10.5	6.3
+20			8.6	8.8
113			5.9	10.9
		16.84		

F.L.

0.44
11.55
4.66
C 6.89

0.42
11.57
4.55
C 7.02

0.40
11.59
4.49
C 7.10

0.38
11.61
4.45
C 7.16

0.35
16.49
9.57
C 6.92

0.34
16.50
7.00
C 9.50

0.32
16.52
6.58
C 9.94

Wright St.

Walker 3/2/50

Cont. P-36

Station		℄ True Elev.	
1+93 = ℄ Garage on Lt Dirt Floor	2.6 40	~~2.6~~	
1+50	2.7	3.1	3.6 40
1+25 = End exist. Paving on Lt.	2.79 40 Paving	2.9	3.4 40
1+00	2.74 40 Pav.	2.8	3.2 40
0+50	2.56 40 Pav.	2.6	2.8 40
0+13 = E.C. Cb Ret.	2.78 40 on Pav. 2.40 26 on cb.	2.3	2.80 26 on cb.
Note: Pav. Grades for Portion this st. P54			
0+00		2.30	
0-08		2.35	
0-25 on Paving		2.68	

2.78

Chisled Square
B.M. SELY Ret. Wright & Pacific
FB 1602-54

				℄ EL.		F.L.
+25			3.5	8.5		0.58 11.41 1.69 C 9.72
116			3.5	8.5		0.56 11.43 2.21 C 9.22
+75			3.9	8.1		0.54 11.45 2.09 C 9.36
+50			4.1	7.9		0.52 11.47 2.17 C 9.30
+25			4.2	7.8		0.50 11.49 2.88 C 8.61
115			4.8	7.2		0.48 11.51 3.72 C 7.79
114 +75			5.0	7.0		0.46 11.53 4.31 C 7.22
		11.99				

Wright Street

Cont. P. 32

Cont. P. 34

	Lt	℄	Rt
		Trk Elec.	
4+78.6 = E. Rail Santa Fe		14.85	
4+18.6 = ELY Rail Santa Fe.		14.31	
T.P. 12.80 Santa Fe RR.			
3+63.9 = WLY Rail Spur Track.	12.56 40 Rail	12.80 Rail	12.96 Rail
3+37.5 = ℄ Kurtz.	6.9 10.0 140 40	11.1	11.0 11.0 40 140
3+12 = WLY cb Line Kurtz. 5.68 1.92 on cb	8.51 9.3 92 40 on cb	9.9	10.0 40
T.P. 2.36			
3+00 = WLY Kurtz.	8.9 40	8.8	9.8
2+50	5.3 40	5.6	6.7 40
2+30 - ℄ 4' Dirt Walk	4.1 40		
2+03 = ℄ 2' Conc Walk on Lt.	2.93 40 on walk		
2+00	2.8 40	3.8	4.6 40
2.78			

				E.L.	
Check to BM. ch. 58. Hwy Island 1839-80			5.31	6.38	6.39 / 0.01
T.P.	4.51	11.69	4.81	7.18	
Cont'd. in F.B. 1839					6-4-48. NO PIPE
M.H. #33 147+08.90	5°30'30" Lt.				
+75					
116+50			3.8	8.2	
		11.99			

F.L.	37
0.64	
0.67 / 11.37 / 0.99 / C 10.38	
0.60 / 11.39 / 2.18 / C 9.21	

Const Paved ditch & drain
Pac. B. Dr. to Reed,
E of Mission Blvd

F.L.

7+50			-4.08	
			4.16	
			8.24	
			5.12	
			C 3.12	

1			-4.23	
			4.16	
			8.39	
			4.50	
			C 3.89	
0+56.4	Δ cleanout		-4.37	
			4.16	
			8.49	
			5.65	
			C 2.84	
0+28.0	C+R. P.B.D.C.		-4.42	
			4.16	
			8.58	
			5.80	
		C	-2.78	
0+00	Ex. Box drain Pac. B. Drive		-4.50	
			4.16	
			8.66	
			6.44	
		C	2.22	
NEBP	5.89	4.16	-1.73	BM
Pac. B. Dr: Mission Blvd.				

W.O. 2029

Moore
Sharman
Bunch
1-10-49

					Inv.	Top grate
3+22.6	℄ Curb Inlet End Pipe Sc 6 Oliver St.		Offset 13'		-3.50	-2.26
					4.16	4.16
					7.66	6.42
					5.14	5.14
					C 2.52	C 1.28

(Set 2x2 10'x20' RP to property corner pipe)

3			-3.64	
			4.16	
			7.80	
			5.18	
			C 2.62	✓
7+50			-3.79	
			4.16	
			7.95	
			5.56	
			C 2.39	
2			-3.93	
			4.16	
			8.09	
			5.66	
			C 2.43	
1+78	Valley C.B.		-4.00	
			4.16	
			8.16	
			4.32	
		4.16	C 3.84	

	+	H.I.	−	℄	
T.P	2.54	(2.27)	3.34	c 1.19	
				−0.27	
4+00		1' error		−2.04	5.11
				5.37	3.34
				8.41	
				5.61	
				C 2.80 C	1.77
	5.69	5.37			
		4.16	4.18		TP
TP					−0.32
3+82 C	Δ	P+V 50'		−2.10	5.17
				4.16	3.40
				6.26	
				C 4.48	
				1.78	
3+62 C				−2.15	5.27
				4.16	3.60
				6.31	
				4.96	
				C 1.35 C	
3+52 C				−2.18	−2.18
				4.16	5.25
				6.34	4.36
				5.43	
				C 0.91	C 0.89
3+27 C				−2.21	
				4.16	
				6.40	
				5.00	
		4.16		C 1.40	
				−1.73	

	℄	
	1.19	
6	−1.53	3.80
	5.37	2.07
	6.90	
	5.17	
	C 1.73	C 1.73
5+50	−1.66	3.93
	5.37	2.33
	7.03	
	5.43	
	C 1.60	C 1.60
5+17.7 ℄ alley	−1.76	4.03
	5.37	2.25
	7.13	
	5.34	
	C 1.79	C 1.78
5+00	−1.80	4.07
	5.37	2.26
	7.17	
	5.35	C 1.81
	C 1.82	
4+65	−1.88	
4+50	−1.92	4.19
	5.37	2.48
	7.29	
	5.52	C 1.71
	C 1.77	
	5.37	
	(2.27)	

			6.32	-1.73	B.M.
T.P.	3.61	4.59	4.39	+0.98	
		To Railroad Rail		Flat	
6+72.6		-0.66	2.98	-1.20	
		5.37	2.51	5.37	
		6.03	0.47	6.57	
		C 5.62		5.62	
		0.41		C 0.95	
				dip	
6+52.6	S.L. Road	-0.45		-1.20	3.67
				5.37	1.95
				6.77	C 1.72
				5.06	
				C 1.71	
		(2.27)			
		5.37			

L 727C

Paving Grades

Alley Blk. 47 Park Villas

W.O. 31352

Moore
Begg
Sherman

3-11-49

Sketch - 1539-1V

0+80				31.87		31.92
				3.82		3.77
				2.80		3.19
				C 1.02		C 0.58
0+50				31.88		31.86
				4.25		4.23
				3.64		3.98
				C 0.61		C 0.25
0+20	BRK.			31.00	30.75	31.00
				4.69		4.63
				4.40		4.63
				C 0.29		C 0.00
0+00	M.L. Myrtle			330.72	330.37	330.58
				4.97	5.32	5.11 ✓
B.M. SWBP	534	335.69	330.35	32nd & Myrtle		

LT & Rt. 41

					1r	2	Pr	x2
1+20					33.89 5.56 5.06 C 0.50	33.73	34.06 5.39 5.34 C 0.05	
2+00	B.V.C.				33.62 5.83 5.47 C 0.36	33.44	33.76 5.69 5.32 C 0.37	
1+70					33.18 6.27 5.97 C 0.30		33.30 6.15 5.92 C 0.23	
T.P.	5.11	339.45	3.56	333.74				
1+40					32.74 4.56 4.04 C 0.52		32.84 4.46 4.06 C 0.40	
1+10					32.31 4.99 4.37 C 0.62		32.38 4.92 3.75 C 1.17	
T.P.	5.29	337.20	3.68	332.01				
		335.49						

					Lt	℄	Rt
3+40					34.82 5.21 4.15 C 1.06		35.07 5.01 4.94 C 0.07
3+10					34.64 5.39 4.71 C 0.68		34.84 5.19 5.07 C 0.12
2+80	EVC				34.45 5.58 4.98 C 0.60	34.30	34.65 5.38 5.32 C 0.06
T.P.	5.55	340.03	4.97	334.48			
2+60					34.31 5.14 4.40 C 0.74 NAIL	34.16	34.51 4.94 4.73 C 0.21
2+40					34.12 5.33 4.91 C 0.42	33.96	34.30 5.15 4.97 C 0.18
		339.45					

					L7		P2	
4+90					35.76 5.73 5.47 C 0.26		35.96 5.53 5.32 C 0.21	
4+60					35.57 5.92 5.01 C 0.91		35.77 5.72 5.15 C 0.57	
T.P	5.17	341.49	4.87	336.37				
4+30					15 35.39 5.80 5.13 C 0.67		35.59 5.60 5.33 C 0.27	
4+00					35.20 5.99 5.42 C 0.57		35.40 5.79 5.37 C 0.42	
3+70					35.01 6.18 5.31 C 0.87		35.21 5.88 5.79 C 0.09	
T.P	5.57	341.19 +0.03	4.41	335.19				

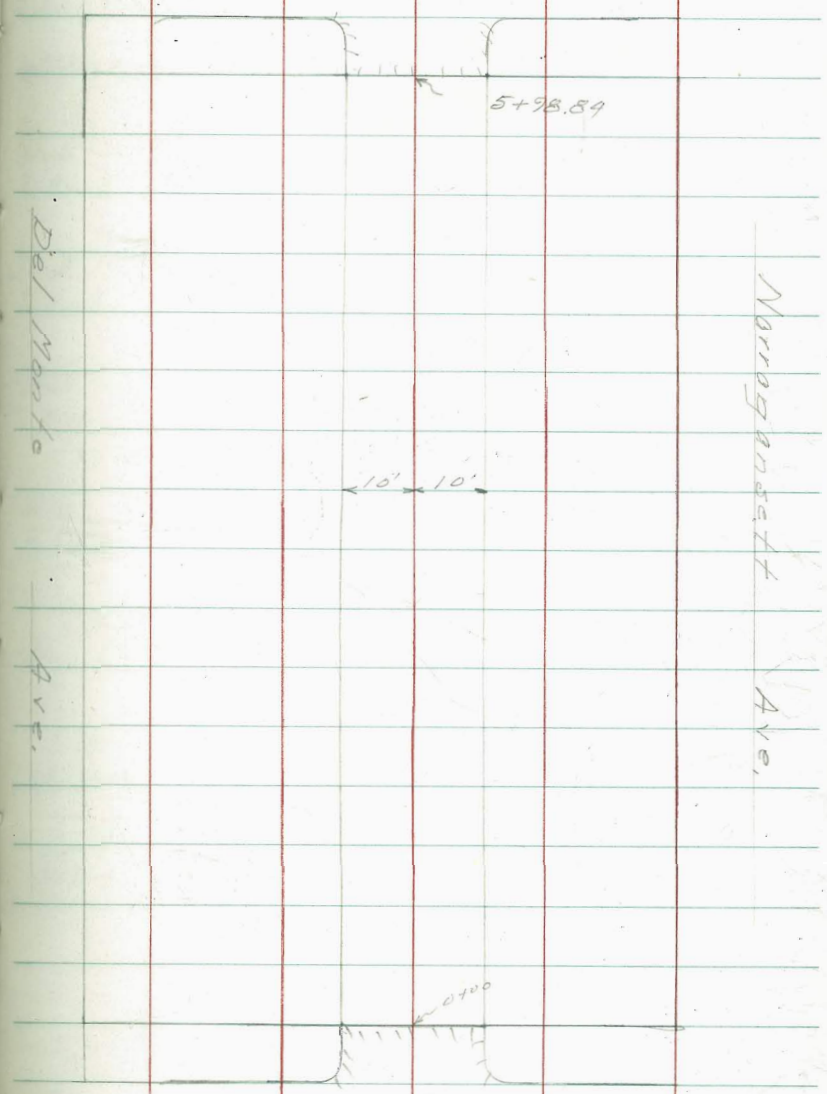
						Lt	℄	Rt
			770	333.35	333.37 0.02 diff.			
6+00.5	S.L. Dwight					333.30 7.75 7.62 from C 0.13 ← Top curb	3311 7.94	3325 7.80 7.70 From Top C 0.10 ← curb
+80						34.56 6.49 4.94 C 1.55	3434	34.60 6.43 4.71 C 1.72
T.P.	4.7x	341.05	518	336.31				
+60						35.41 6.08 4.57 C 1.51	35.23	35.55 5.94 4.94 C 1.00
+40						35.88 5.61 5.03 C 0.58	35.69	36.00 5.49 4.86 C 0.63
5+20	B.V.C.					35.95 5.54 4.93 C 0.61	35.80	36.15 5.34 4.52 C 0.82
		341.49						

Grade Stakes

Johnson
Clark
Gregory
Moore
10-26-49
W.O. 31495

Alley 35 OCEAN Beach

Sunset Cliffs Blvd



Grade Stakes - Alley 3d
Between Ebers & Sunset Cliffs
Ocean Beach

						Left		Right	
						Finis Grade	℄	Finis Grade	
					Cross	C 5.55 / 5.51 / 4.99		F 5.49 / 4.67	
1+85	Brk			Y10 31485	2' Back	53.50		53.20	2' Back
				Levels Run on Stakes by Walker - 10-26-49	2' Back	C 0.56 / 2.22 / 2.78 / 55.11		F 1.39 / 4.46 / 3.07 / 54.81	2' Back
1+60	"								
T.P.	1.46	57.89	931	56.43	Stub 2' Back	C 1.03 / 7.91 / 8.94 / 56.80	57.89 ℄	F 0.07 / 9.31 / 9.24 / 56.50	Stub 2' Back
1+35	Brk PVC								
					Stub 2' Back	C 1.28 / 5.94 / 7.22 / 58.52 / 58.80		F 2.36 / 7.85 / 7.49 / 58.25 / 58.60	Stub 2' Back
1+10									
					Stub 6' Back	C 2.94 / 4.92 / 4.86 / 59.88 / 60.12		F 0.71 / 6.31 / 6.10 / 59.64 / 59.92	Cross 2' Back
0+90									
					Stub 2' Back	F 0.15 / 4.65 / 4.50 / 61.24 / 61.12		F 0.45 / 5.16 / 4.71 / 61.03 / 61.24	Cross 2' Back
0+70									
					2' Back	C 0.60 / 2.54 / 3.14 / 62.60 / 62.72		F 0.10 / 3.22 / 3.32 / 62.42 / 62.56	Cross 2' Back
0+50									
					Stub 085 Back	C 2.35 / 1.43 / 1.78 / 63.96 / 64.02		0.00 / 1.93 / 1.93 / 63.81 / 63.88	2' Back
0+30									
T.P.	3.07	65.74	892	62.67	091 Back	C 1.88 / 4.99 / 6.27 / 65.32	65.74	C 0.17 / 6.22 / 6.39 / 65.20	0.30 Back
0+10	Brk								
						C 0.02 / 5.57 / 5.59 / 66.00		F 0.05 / 6.07 / 6.02 / 65.57	
0+00 = Edge Existing Pavement							71.59 ℄		
B.M.	0.33	71.59 / 3		71.26		Lot T. Scr Cor. Del Monte & Ebers St.			

Grade Stakes - Alley - 35
Between - Ebers & Sunset Cliff
Ocean Beach

					Left		Right	
					Finis Grade		Finis Grade	F.073
					C 0.71 → 3.34 4.05		4.58 4.35	
4+80	F.V.C.				2' Back 37.80		37.50	
					C 0.86 2.40 3.26		C 0.97 2.59 3.56	Nail on Line
4+55	Brk.				2' Back 38.54		38.29	
TP	2.72	41.85	11.50	32.13		41.85	C 0.11 11.24 11.35	
4+30	Brk.				2' Back 39.58		39.28	
					C 0.89 9.00 9.89		C 0.97 9.62 10.19	Nail
4+05					2' Back 40.74		40.44	0.2' Back
					C 0.87 7.66 8.53		C 0.40 8.43 8.83	
3+80	=P.I.C.				2' Back 42.10		41.80	2' Back
					C 0.72 6.06 6.78		C 0.12 6.96 7.08	
3+50					2' Back 43.85		43.55	2' Back.
TP	5.38	50.63	12.64	45.25		50.63	C 0.25 12.64 12.89	1' Back
3+25					2' Back 45.30		45.00	
					C 1.27 8.43 9.70		C 0.45 9.56 10.00	1' Back
2+75					2' Back 48.19		47.89	
					C 1.32 5.49 6.81		C 0.22 6.89 7.11	2' Back
2+25	=F.V.C.				2' Back 51.08		50.78	
					C 1.26 4.57 5.83		F 0.01 6.24 6.23	
2+10	Brk.				2' Back 51.96		51.66	
		57.89				57.89		

Grade Stakes - Alley - 35'
Between Ebers & Sunset Cliff.
Ocean Beach.

	Left Finis Grade	℄	Right Finis Grade	
				50
5+98.84 / 18+66.17		003		
		34.32		
Chk Topeb on Rt 99	7.56	34.29		
	7.60 = Existing Pav.		7.71 = Existing Pav.	
5+98.84 = Edge Existing Pavement	7.57		7.68	
	34.28		34.17	
	C 1.13		C 0.99	
Nail in Hedge	5.42		6.16	
0.5 in	6.85		7.15	
5+80 Bk	Alley 35.00		34.70	1' Back
	C 0.38		C 0.56	
	5.07		5.19	
	Stub. 5.45		5.75	
5+30	1' Back 36.40		36.10	1' Back
			36.15	
41.85				
		41.85		

~ KELLOGG PARK ~ PAVING

Plan 1392-D WO 20-426

Grades Shown on opposite page are Finish Paving.

Note: First set of Stakes Were Set to Subgrade - 0.15 below Finish.

On Calle Frescota & Kellogg Park

IP		2.71	4.83	
TP	5.81	7.54	562	1.70
	2.20	7.32	5.12	

BM. SW Fire Hyd Vallecitos & Dol Oro F8181 58

5+71.81 — 216 232 240 250 260 277 (30, 30) — -283 × 40 × 50 × 60 × 5445 →

5+26 — 194 218 237 260 288 304

4+76 — 187 201 240 264 298 304

4+26 — 184 224 244 268 298 312

3+76 — 185 227 247 273 303 319

3+26 — 184 230 251 277 308 323

2+76 — 187 233 254 281 313 327

2+26 — 185 235 257 285 318 342

1+76 — 188 237 260 288 323 350

1+26 — 191 232 255 283 318 348

0+76 — 196 227 250 278 313 342

← 284 × 40 × 50 × 60 × 5445 →

0+26 — 194 222 246 273 307 323

0+00 — 219 240 256 261 276 283 (30, 30)

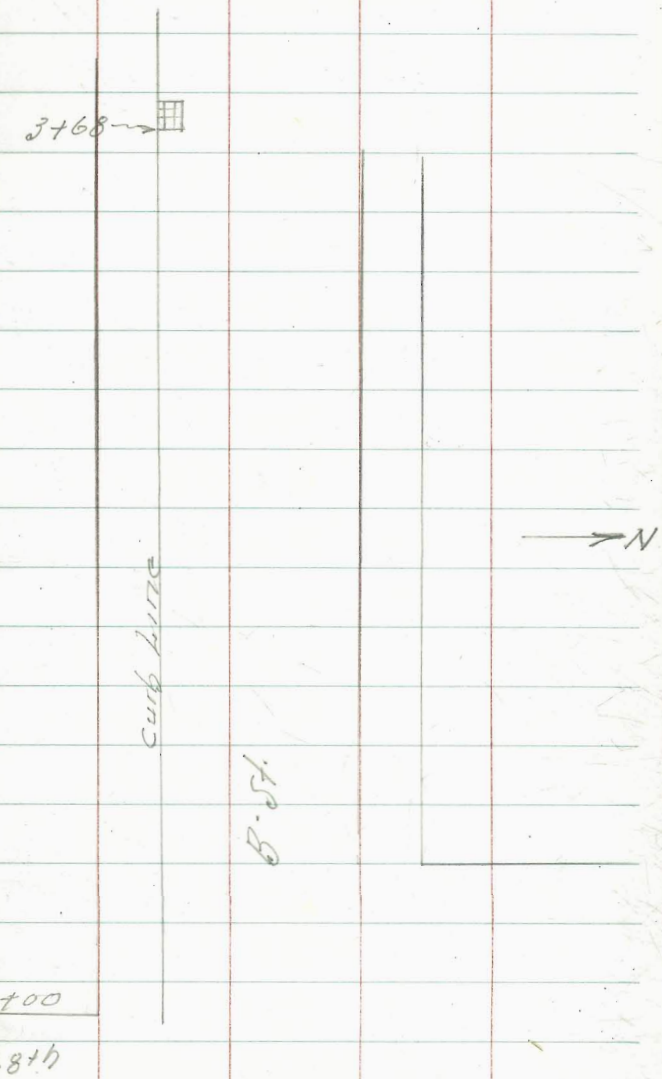
Camino Del Oro

Vallecitos

Walker
Gregory
Pope
K. Bissiori
12-3049

"B" Street
Gutter Grades
on South Side for St. Dept.

		Rods	Flow line
3+68 = Exist. Grading		5.19	195.79
+50		5.16	195.82
+25		5.12	195.86
3+00		5.08	195.90
2+75		5.04	195.94
2+50		5.00	195.98
2+25		4.96	196.02
2+00		4.92	196.06
1+75		4.88	196.10
1+50		4.84	196.14
1+25		4.80	196.18
1+00		4.76	196.22
0+75		4.72	196.26
0+50		4.68	196.30
0+25		4.64	196.34
0+00		4.60	196.38
	4.01	20.98	196.97

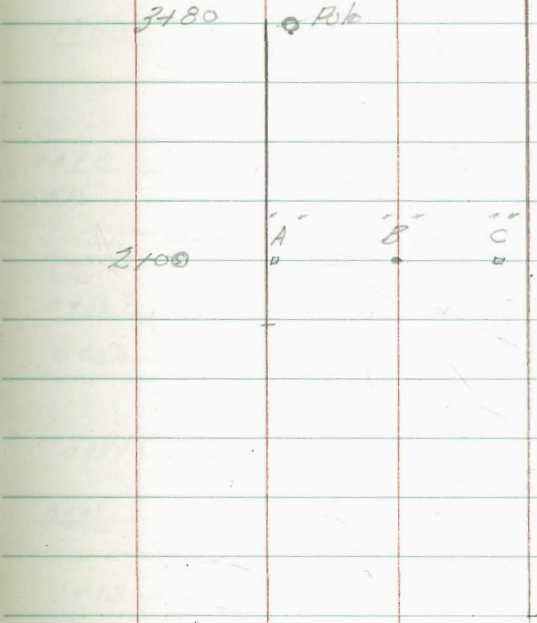


B.M. NW. SP "B" = 2.7+h

Walker
F. Gregory
G. Pope
R. Sisson
12-30-49

B- Street
Levels to Determine
Settlement of Fill
West of 28th St.

Check Starting B.M.		4.01	196.97
Set B.M.		3.06	197.92
	Nail on Stake		
"C"	1" N Ch. Line	5.110	195.870
"B"	on large Nail	4.304	196.676
"A"	on Nail in Stake	4.490	196.490
B.M. N.W. B.P. B- 27th	4.01	200.980	196.97

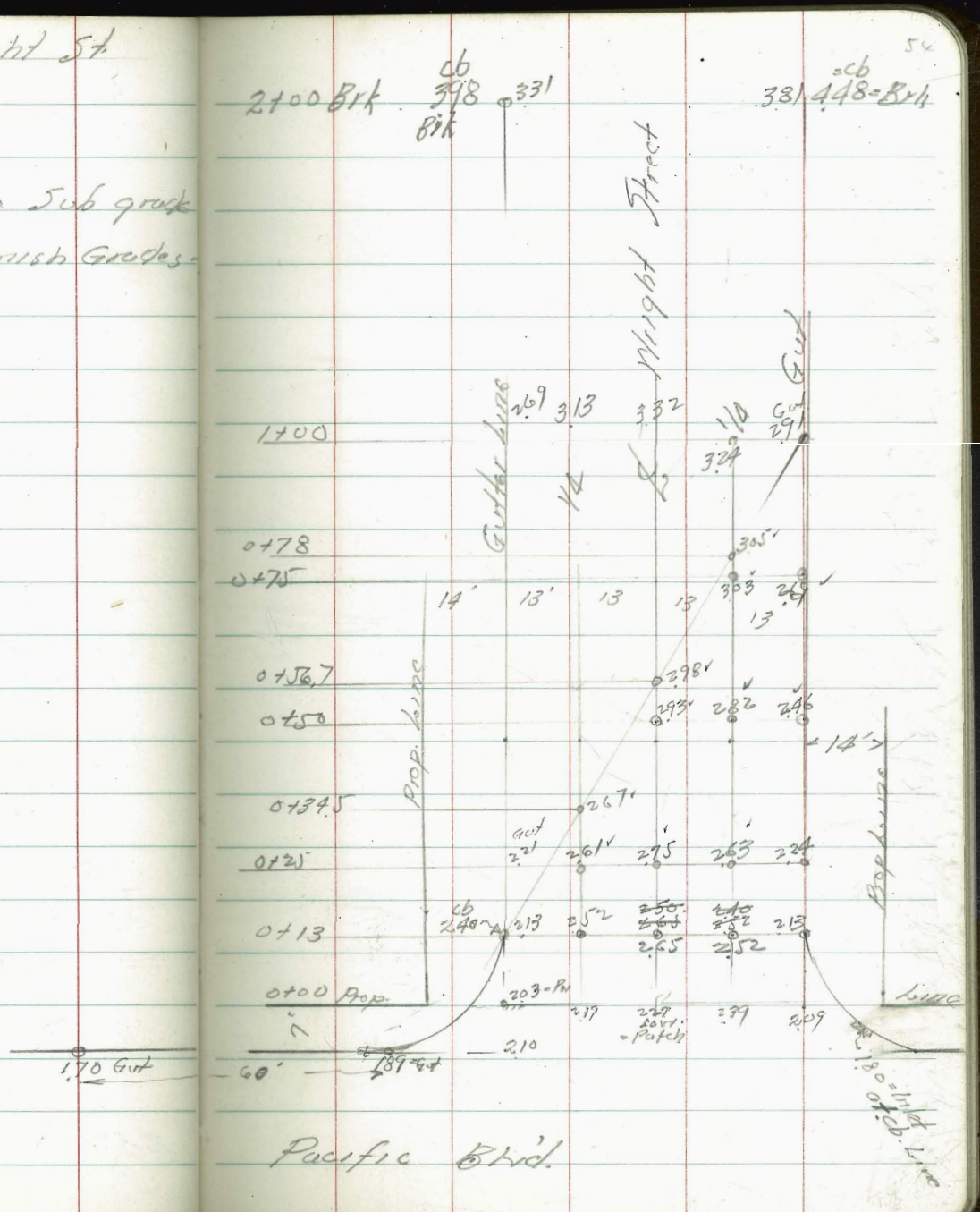


Paving Grades - Wright St

Walker
Pope
CORTA
7-27-50

Per Sketch

Note: Stakes set to Sub grade
which is 0.33 below finish Grades
which are shown in Sketch.



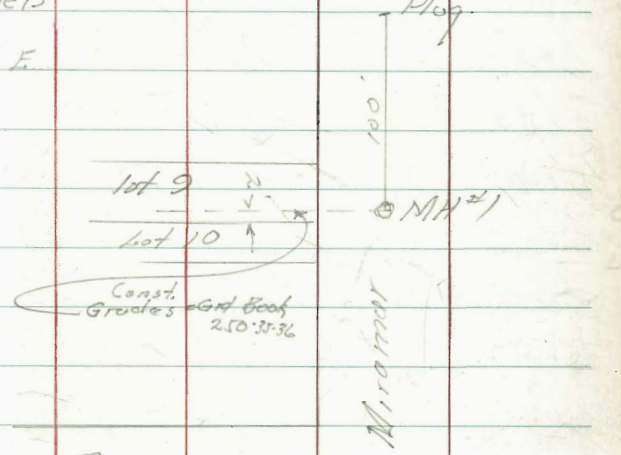
Walker
F. Gregory
Pope
Re Session
(1-30-49)

GRADES - SEWER.
IN MIRAMAR AVE
North of Pearl St.

Plan 3841-B WO 20601

Grd Book 250
Check Grd Stake 1+50 10.21 159.20

				Elev. Invert	Cuts	Offsets
			160.28			
1+00 = Plug End			2.13	158.15	156.40	3.88	3' E.
+70			8.08	161.33	156.19	5.14	"
+35			5.98	163.43	155.94	7.49	"
0+00 = MH #1			3.28	166.13	155.70	10.43	"
T.P.	7.49	162.41	0.25	161.92			
T.P.	12.47	162.87	6.30	156.40			
T.P.	13.01	156.70	0.22	143.69			
T.P.	11.84	143.91	0.11	132.07			
			5.04	127.14			
T.P.	12.12	132.18	0.67	120.06			
	5.56	120.73		115.17			



PEARL

BM SW SP PEARL & HIGH

BM SE SP PEARL & 3rd

GRADES - Sidewalks 11' from CL

Diamond St.

Stations from Cass to Dawes.

Cont'd. P. 59

	North Prop. Line	North Elev. South edge Walk	Elev. N. edge Sidewalk	South Prop. Line
		← 9' →	← 9' →	
2+40		4.38	4.98	
		48.66	48.06	
2+00		4.92	5.53	
		48.12	47.51	
1+60		5.46	6.08	
		47.58	46.96	
1+20		6.00	6.63	
		47.04	46.41	
1+00			46.14	
			6.90	
0+80		6.54	45.87	
		46.50	7.20	
0+60			45.53	
			7.51	
0+40		7.08	45.22	
		45.96	7.82	
0+06 - E.C. 20' CB R		7.43	44.86	
		45.61	8.38	
0+00			44.56	

4407 BM
5.97
53.04

5304

897 5304 4407

BM on SE BP Cass & Dawes.

Diamond St.

Sidewalk Grades

→ Cont. P. 60

T.P.	952	61.12	144	51.60	
4+88.7 = BC 30' Radius at Dawes St.					
4+60					
4+30					
3+90					
3+50					
3+49					
3+10					
2+80					
		53.04			

N Prop. Line	5. edge Walk	N edge Walk	South Prop. Line
	← 9' →	← 9' →	
		1.58	
		51.46	
		1.96	
		51.08	
		2.37	
		50.67	
		2.92	
		50.12	
		3.47	
		49.57	
	Curb Sidewalk or Const. → 50.37		
	2.82		
	~~50.22~~		
	3.36		
	~~49.68~~		
	~~3.43~~	4.02	
	~~49.61~~	49.02	
	3.84	4.43	
	49.20	48.61	
	53.04		

Diamond St.
Sidewalk Grades from Dowes to Everts.

	N. Prop.	S. edge Walk	N edge	S Prop Line
		← 9 →		← 9 →
1+90		4.78 v 56.34		5.47 v 55.65
1+60		5.29 v 55.83		5.95 v 55.17
1+30		5.80 v 55.32		6.43 v 54.69
1+00		6.31 v 54.81		6.91 v 54.21
0+70		6.82 v 54.30		7.39 v 53.73
0+50		7.16 v 53.96		7.71 v 53.41
0+30		7.43 v 53.69		8.03 v 53.09
0+10 = ~~E.C.~~ BC. 30 Cb R		7.71 v 53.41 Walk		8.35 52.77 = Walk
0+00 = Ehline Dowes		8.10 53.62 = Cb Return		52.50 = Cb

6112 = from P. 59

6112

Diamond St.
Grades - Sidewalks

SE. 7' Copper Disc Diamond & Dowel
T.P. 865 52.47

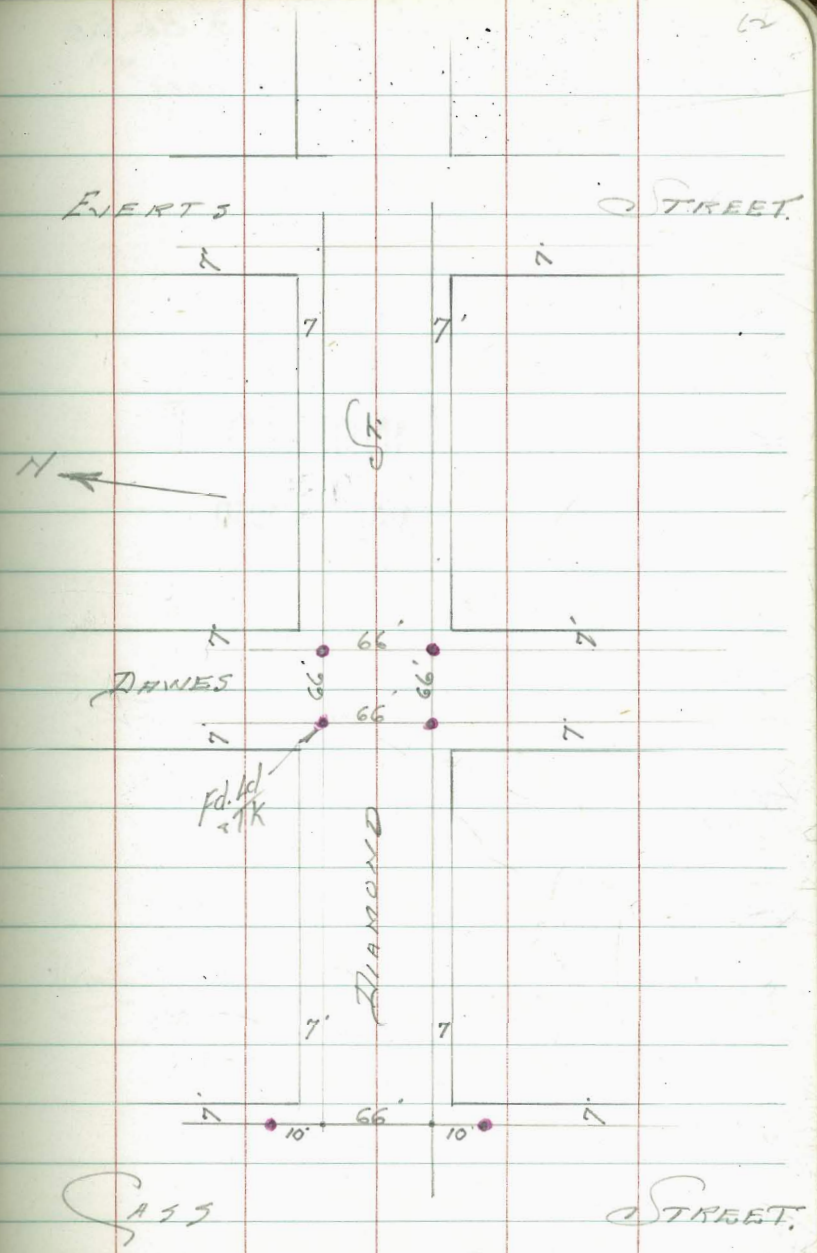
	N Prop. Line	S. edge Walk (9')	N. edge Walk (9')	South Prop. Line
4+11.3 = Exist. cb.		1.04 6008	1.99 5913	
3+90 Bk		1.38' 5974	2.27' 5885	
3+70		1.72' 5940	2.59' 5853	
3+40		2.23' 5889	3.07' 5805	
3+10		2.74' 5838	3.55' 5757	
2+80		3.25' 5787	4.03' 5709	
2+50		3.76' 5736	4.51' 5661	
2+20		4.27' 5685	4.99' 5613	

6112

Walker
F. Gregory
G. Pope
K. Dission
12-2-49

DIAMOND ST.
~ TIES ~

Set in Conc. Sidewalk
• = Copper Disc Ld & Tack



Grades Curb - 3' Bk. Cb.
Diamond St.
Stations from Cass to Dawes

Stations			North Prop	North Curb
				3.72 ✓
2+00				46.01
				4.26 ✓
1+60				47.47
				4.80 ✓
1+20				46.93
~~1+00~~				
				5.34 ✓
0+80				46.39
~~0+60~~				
				5.88 ✓
~~0+40~~				45.85
				6.23 ✓
0+06	E.C. 20' Cb. Rad.			45.50
				51.73
0+00				
	7.66	51.73	44.07	B.M. S.E. BP. Cass & Diamond

Curb Grades
Diamond St.

64

3+49 — 1.62 ↓ Ck.
50.11 Exist.

3+10 — 2.14 ↓
49.57

2+80 — 2.64 ↓
49.09

2+40 — 3.18 ↓
48.55

DIAMOND ST. - PAVING
from Cass to Davis
— Gutter Grades —

	Lt.	Rt.
1+75	46.93 46.86 6.17	46.55 ~~46.48~~ ~~6.55~~ 6.48
1+50	46.59 6.44	46.21 6.82
1+20	46.18 6.85	45.80 = Brk 7.23
1+00	45.91 7.12	45.52 = Brk 7.51
0+80	45.64 7.39	45.21 = Brk 7.82
0+60	45.37 7.66	44.89 = Brk 8.14
0+40	45.10 7.93	44.54 = Brk 8.49
0+06 = E.C. 20°6R	44.83 8.20	43.93 = Brk 9.10
0+00 = E. Line Cass	733 45.70	
	5303 from P-66	

5303

E. T. Line
Set BM 3' N ML - Diamond on Copper Disc.

Diamond St. - Paving

Gutter Grades Cont. from P65

						Lt. Gutter			Rt. Gutter
4+00									49.63 3.40 ~
3+75									49.29 3.74 ~
3+50						47.42 3.61	~	Ck.	48.95 4.08 ~
3+25						49.00 4.03 ~			48.61 4.42 ~
3+10						48.75 4.28 ~			
3+00						48.62 4.41 ~			48.26 4.77 ~
+75						48.28 4.75 ~			47.92 5.11 ~
2+50						47.94 5.09 ~			47.58 5.45 ~
+25						47.60 5.43 ~			47.24 5.79 ~
2+00						47.27 5.76 ~			46.89 6.14 ~
	8.96	5303		44.07	S.E. B.P. Coss + Diamond P-58			5303	

RT
Gutter

4+88.9 - B.C. 30' R on RT

50.85
2.18↑

4+75

50.66
2.37↑

4+50

50.32
2.71↑

4+25

49.98
3.05↑

53.03

Diamond St.

Gutter Grades

from Davies to Everts

					N. Gutter.		S. Gutter.
1+75					55.22 5.90		54.80 6.32
1+50					54.80 6.32		54.40 6.72
1+25					54.37 6.75		54.00 7.12
1+00					53.95 7.17		53.60 7.52
0+70					53.44 7.68		53.12 8.00
0+50					53.13 7.99		52.80 8.32
0+30					52.88 8.24		52.48 8.64
0+10					52.66 8.46		52.16 8.96
0+00					52.54 8.58 Ck	61.12	52.00 9.12 Ck
	8.65	61.12		52.47			

SE L&T Davies & Diamond Pg 61

Diamond St.
Gutter Grades
Centerline P-68

	N Gutter	South Gutter
4+11.2	59.27 1.85 ↑ CK	58.59 2.53 ↑ CK
3+90	58.88 2.24 ↑	58.24 2.88 ↑
3+75	58.62 2.50 ↑	58.00 3.12 ↑
3+50	58.20 2.92 ↑	57.60 3.52 ↑
3+25	57.77 3.35 ↑	57.20 3.92 ↑
3+00	57.35 3.77 ↑	56.80 4.32 ↑
2+75	56.92 4.20 ↑	56.40 4.72 ↑
2+50	56.50 4.62 ↑	56.00 5.12 ↑
2+25	56.07 5.05 ↑	55.60 5.52 ↑
2+00	55.65 5.47 ↑	55.20 5.92 ↑

Diamond Street

Curb Returns Grades

Cor Cass & Diamond

S.E. Return

0+31.42	45° E.C. on Diamond		5.81		44.72 ~~44.55~~	→ Curb const. to this Elev.
0+25.33	36°17'		5.96' ~~6.08'~~		44.57' ~~44.45~~	
0+15.71	22°30'		6.21' ~~6.24'~~		44.32 ~~44.29~~	
0+07.85	11°15'		6.42 ~~6.39'~~		44.11 ~~44.14~~	
0+00 B.C. on Cass		50.53	6.54		43.99	

N.E. Return

Def. Δ

0+31.42	45° E.C.				45.50
0+25.33	36°17'		5.08		45.45
0+15.71	22°30'		5.13		45.40
0+07.85	11°15'		5.07		45.46'
0+00 B.C. on Cass			5.01'	45.52	45.52
	4.83	50.53		45.70	

BM. Cap. Disc. SE. Cass & Diamond P-65

PAVING GRADES ~ ALLEY, BLK. 4

Walker
F. Gregory
G. Pope
R. Sisson 1-6-50

Ocean Beach
Between Santa Monica & Newport
from Froude to Guizot St.
WO 31700
Plan 7633-L

Stations

					East Prop. Line	West Prop. Line	
0+80 = Blk							
1.5' Back					111.13 8.26 7.06 C 1.20	111.13 8.26 8.02 C 0.24	0.60' Back Nail
0+60 = Blk							
2' Back					108.51 10.88 10.13 C 0.75	108.51 10.88 10.29 C 0.59	0.62' Back
0+40 = Blk.							
2.17' Back					105.66 13.73 12.11 C 1.62	105.66 13.73 14.17 F 0.44	2' Back
T.P.	12.93	117.39	0.57	106.46			
0+20 = Blk							
1.09 Back					102.69 4.34	102.69 4.34 2.49 C 1.85	4.69 Back
0+00 = S Line Froude							
					99.50 7.53	99.81 7.22	
	2.72	107.03		104.31			

11939

BM B.P. S.W. Froude & Newport

Alley Block 4 - Cont. from P-71

Cont. on P-73

2 + 60 = Brk

T.P.	12.44	142.53	1.17	130.09

2 + 40 = Brk.

2 + 20 = E.V.C

1 + 86

1 + 53

T.P.	12.45	131.26	0.58	118.81

1 + 20 = E.V.C

1 + 00 = Brk

119.39

0.5' Back on Wall	12.67			12.67	2' Back
	12.86			12.86	
	10.47			12.81	
	C 2.39	142.53		C 0.05	
2' Back	12.78			12.75	2' Back
	3.51			3.51	
	2.84			3.10	
	C 0.67			C 0.41	
2' Back	12.576			12.576	2' Back
	5.50			5.50	
	4.76			4.40	
	C 0.74			C 1.10	
2' Back	122.32			122.32	2' Back
	8.94			8.94	
	8.45			9.15	
	C 0.49			F 0.21	
				F 0.39 = Reject	
2' Back	118.98			118.98	2' Back
	12.28			12.28	
	11.73			11.75	
	C 0.55	131.26		C 0.53	
2' Back	115.64			115.64	2' Back
	3.75			3.75	
	~~3.34~~			3.55	
	~~C 0.41~~			C 0.20	
	C 0.38 = Reject				
2' Back	113.50			113.50	2' Back
	5.89			5.89	
	4.91			6.00	
	C 0.98	119.39		F 0.11	

Alley Block-4 · Cont. from P. 72

Cont. on P. 74

					East Line		West Line	
4+40 = Brk					2' Back 145.30		145.30	007 in Alley Nail
					7.83		7.83	
					826		643	
					F 0.43		C 1.40	
4+20 = Brk					2' Back 143.77		143.77	1' Back
					9.36		9.36	
					931		827	
					C 0.05		C 0.39	
4+00 = PVC					142.09		142.09	017 Bolt
TP	11.24	153.13	0.64	141.89	11.04		11.04	
~~FP~~					11.12	153.13	10.47	
3+66					F 0.08		C 0.57	
				8.78%	2' Back 139.11		139.11	
					3.42		3.42	
					3.15		4.37	
					C 0.27		F 0.95	
3+33					221' Back 136.21		136.21	2' Back
					Nail 6.32		6.32	
					4.97		7.11	
					C 1.35		F 0.79	
3+00 = PVC					2' Back 133.31		133.31	2' Back
					9.22		9.22	
					8.94		283	
					C 0.28		F 0.61	
2+80 Brk					2' Back 131.53		131.53	2' Back
		142.53			11.00		11.00	
					10.10	142.53	~~11.07~~	
					C 0.90		~~F 0.07~~	
							F 0.14 - Reset	

Alley Block 4 Cont. from p. 73

						East Line			West Line	
										74
5+29.67 = Mk. Guigot						154.57 4.79 4.81 F 0.02			155.34 4.02 4.06 F 0.04	
5+80 = Brk										
						2' Back 153.70 5.66 6.75 F 1.09			153.70 5.66 5.75 F 0.09	2' Back
5+46										
T.P.	8.26	159.36	2.03	151.10		2' Back 151.74 7.62 8.26 F 0.64		159.36	151.74 7.62 7.29 C 0.33	2' Back
5.77%										
5+13						2' Back 149.84 3.29 2.86 C 0.43			149.84 3.29 3.07 C 0.22	1' Back
4+80 = E.V.C										
						2' Back 147.93 5.20 4.27 C 0.93			147.93 5.20 4.82 C 0.38	5' Back
4+60 =										
		153.13				2' Back 146.69 6.44 5.43 C 1.01		153.13	146.69 6.44 5.79 C 0.65	2' Back

Walker-Gregory Page Tr-Session. 1-16-56

Alley Block 4 - Ocean Beach Grades - Sewer Laterals

WO 31700

3+60 = ℄ Lot #1			3.56	138.96	133.56	C 5.40	2' Back on ℄ Lot.
Chk 3+66 on Rt	P-73		4.36	138.76			
	3.14	142.52		139.38		BM on Stake 3+66 on Rt.	P-73
3+10 = ℄ Lot #2			4.27	133.78	129.19	C 4.59	2' Back on ℄ of Lot.
Chk 2+80			5.62	132.43			
	5.35	138.05		132.70		BM on Stake 3+00 on Rt	73
2+10 = ℄ Lot #3			3.48	125.94	119.78	C 6.16	2' Back on ℄ of Lot.
Chk 1+86	2' Back	P-72	6.60	122.82			
	2.56	129.42		126.86		BM Pin Stake 2+20 on Rt.	P-72
0+60 on Lt = #4			5.49	109.26	103.81	C 5.45	2' Back on ℄ of Lot
0+~~35~~ 40 on Rt = #5			9.84	109.91	100.95	C 3.96	3' West of Lot.
	7.47	14.78		107.28		BM on Station 0+40 on Lt = Nail	P-71

Walker
Hardin
Hufeh
Shepherd
8-15-50

Chelsea St. & Camino De La Costa

Curb Returns

Elev. Assumed 10.00 BC. on Lt

SWLy Ret

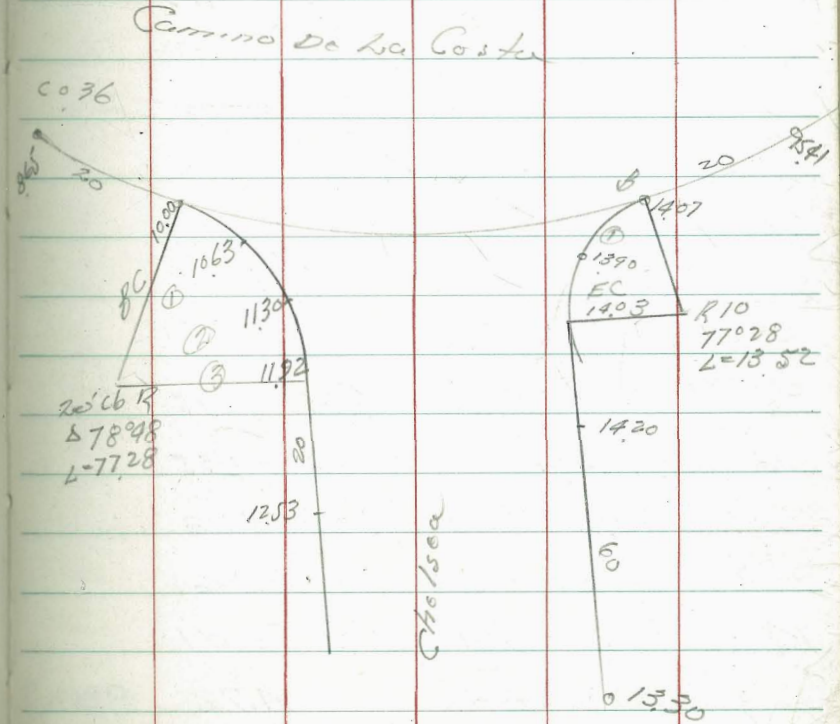
BC		10.00
①	10.64	10.63
②	11.19	11.30
③ = EC	11.36	11.92

SELy Return

BC		14.07
① = ℄	14.26	13.90
EC on Chelsea	14.73	14.03

F 0.11

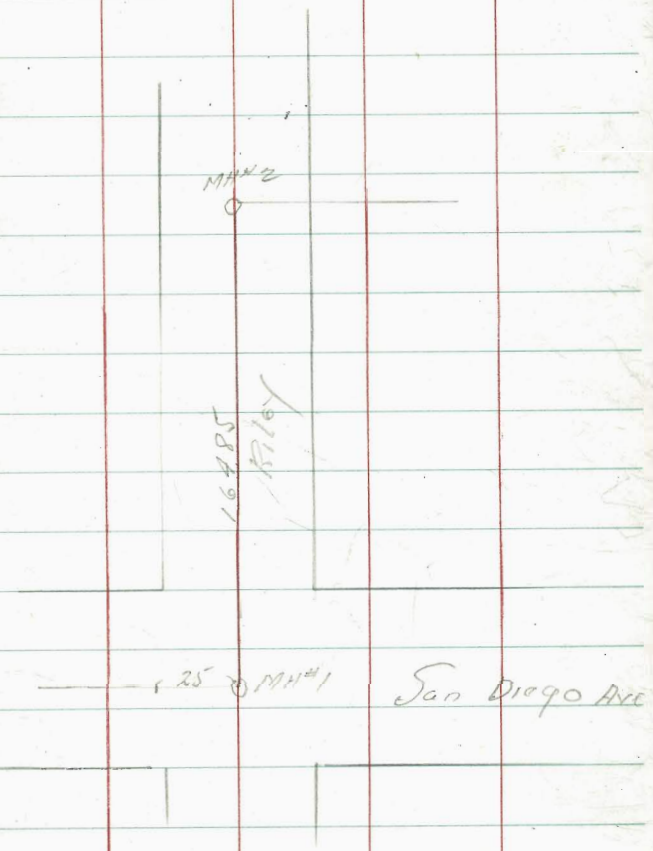
F 0.56



Walker
F. Gregory
G. Popo
K-Sission
2-17-50

Elevation on Existing Sewer
San Diego Ave & Riley St
Plan 7879-L
WO 62172

Chk Invert MH#2			799	-0.79	
Chk MH#1 invert			835	-1.15	
on Invert					
Chk Existing Sewer			855	-1.35	
T.P.	3.12	7.20	4.00	4.08	
T.P.	5.12	8.08	6.98	2.96	
T.P.	3.87	9.94	2.35	6.07	
	3.70	8.42		4.72	B.M.



B.M. S.E.B.P. Juan St & Taylor St

GRADES - CULVERT EXTENSION

IN AMALFI ST.

Near Torrey Pines Road

Walker
Hardin
Hatch
Shepherd

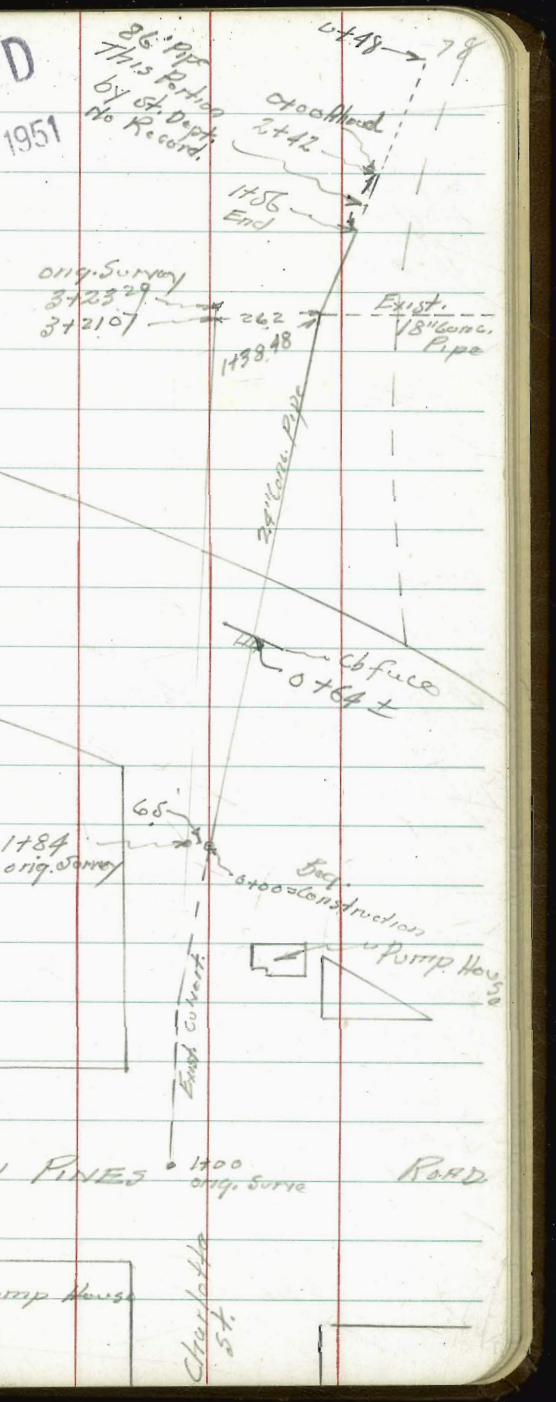
Plan # 4033-B WO 20625

24" Conc. Pipe

Aug. 15-1950

		Elev. Invert	Cuts	offsets
1+56 = End	88.76	84.80	3.96	10' Ahead on ℄ 2' Rt. on Pipe
T.P. 1+38.48 = Δ Rt. 6°20'20"	84.25			
	88.17	84.00	4.17	℄
1+05	83.58	81.18	2.40	15' Lt.
0+70	81.30	78.22	3.08	10' Rt.
0+64± cb inlet = cb face				
0+35	83.16	75.26	7.90	10' Rt.
0+00	84.53	72.30	12.23	16' Rt.
	86.02	BM.		

□ in Conc. N.E.Ly Cor Pump House
FB 1786-66



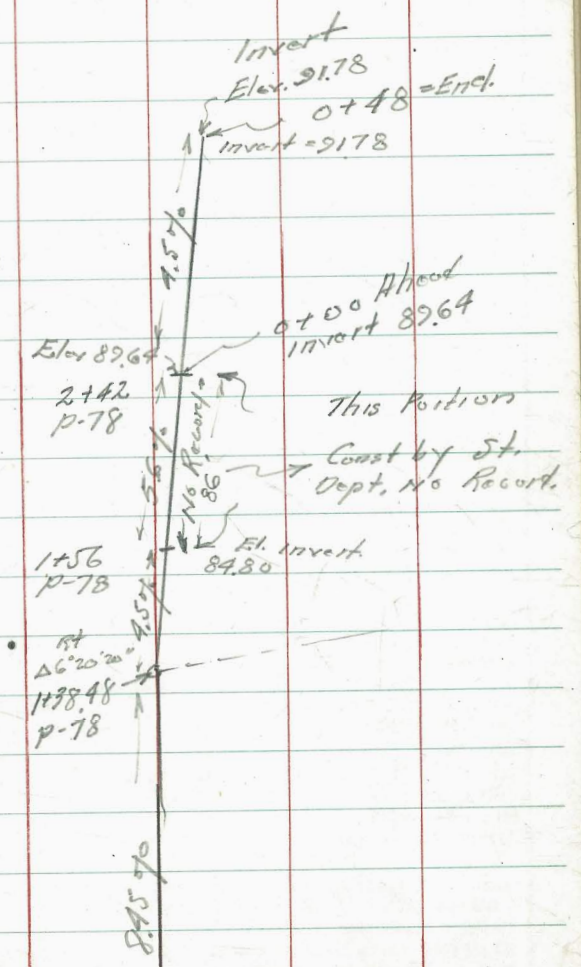
Grades for Extension Culvert Amalfi St.

Walker
Pope
Huffman
Kellio
10-3-51

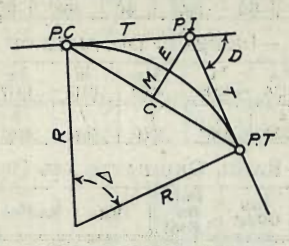
W.O. 20625

			Elev. Stakes	Elev. Invert
0+48		3.32	102.22	91.78
0+24		9.48	96.06	90.72
0+00 = End	Invert on Existing 24" Pipe	15.90		89.64
T.P.	9.01	10.54	3.75	96.53
T.P.	8.50	100.28	0.85	91.78
on invert box			15.50	77.13
on Grating CB Inlet			10.15	
	6.61	92.63		86.02

Cuts	offsets
10.44	7' Lt.
5.34	7' Lt.



DIETZGEN'S RAILROAD CURVE AND REDUCTION TABLES



CURVE FORMULAS

Radius=R=$\frac{50}{\text{sin. } D/2}$ (1) Degree of Curve=D and sin. $\frac{D}{2}=\frac{50}{R}$ (2)

Tangent=T=Rtan$\frac{\triangle}{2}$ (3) Length of Curve=L=100$\frac{\triangle}{D}$ (4)

Middle ordinate=M=R(1—cos. $\frac{\triangle}{2}$) (5)=Rvers $\frac{\triangle}{2}$ (6)

External=E=Ttan$\frac{\triangle}{4}$-(7)=R ÷ cos.$\frac{\triangle}{2}$—R(8)=Rexsec$\frac{\triangle}{2}$(9)

Long Chord=C=2 R sin.$\frac{\triangle}{2}$ (10) $\triangle$=Central Angle

EXPLANATION AND USE OF TABLES

Stations.—Given P. I.=Sta. 161+60.35 to find Sta. of P. C. and P. T. $\triangle$=62° 10′ D=8° 20′. From Table IV for 1° curve T=3454.1 and ÷8⅓=414.49 ft. From Table V correction=.36 or T=414.85 ft. P. C.=Sta. P.I.—T=157 +45.50. Also from (4) L=746.00 and P. T.=Sta. P. C.+L=164+91.50.

Offsets.—Tangent offsets vary (approximately) directly with D and with square of the distance. Thus tangent offset for Sta. 158 on above curve is 2.16 ft. found as follows. From Table III tangent offset for 100 ft.=7.27 ft. Distance=158—Sta. P. C.=54.50, hence offset=7.27 $(54.50 \div 100)^2$=2.16 ft. Also square of any distance divided by twice the radius equals (approximately) the distance from tangent to curve. Thus $(54.50)^2 \div (2 \times 688.26)$=2.16 ft.

Deflections.—Deflection angle=½ D for 100 ft., ¼ D for 50 ft., etc. For c ft.=(in minutes) .3 x C x D° or=defl. for 1 ft. from Table III x C. For Sta. 158 of above curve=.3 x 54.5 x 8⅓=136.2′ or 2° 16.2′, or=2.50 x 54.5=136.2′ from Table III. For Sta. 159 deflection angle=2° 16.2′ +8° 20′ ÷2=6° 26.2′, etc.

Externals.—May be found in similar manner to tangents. Thus E for curve above is 115.37. For from Table IV for 1° curve E=960.6 for 8° 20′=960.6 ÷8⅓=115.27 and from Table V correction=.10 or E=115.37 ft. Or suppose $\triangle$=32° and E is measured and found to be 42 ft. What is D? From Table IV E=230.9 and ÷42=5.5 or D=5° 30′.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

Roadway 16 feet wide. Side Slopes 1 on 1½

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	26.2	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) ÷ 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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