C-244

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.

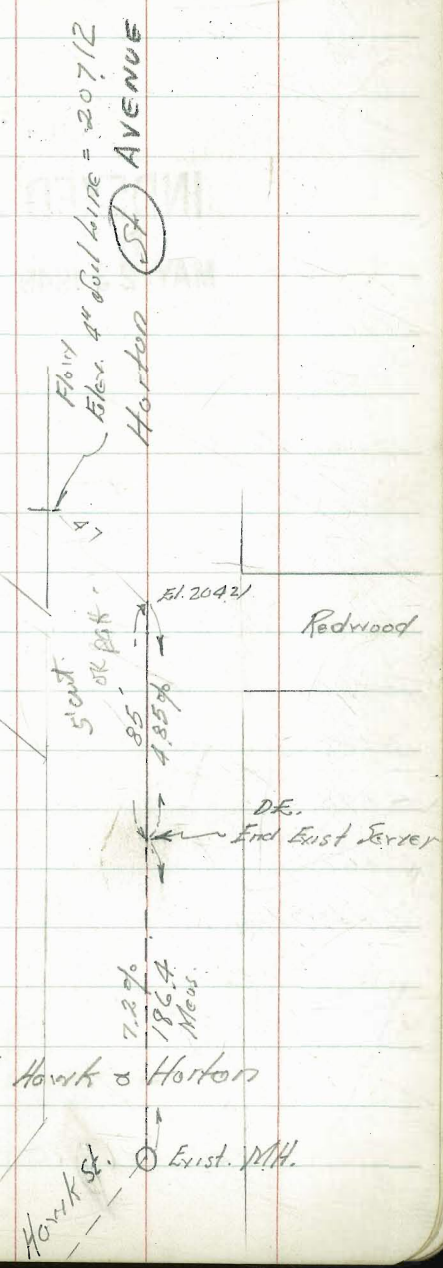
Walker
Johnson
Allen
6-1548

GRADES - Proposed Sewer
on Horton (St.) AVENUE
From Exist DE. to Redwood
W.O. 60275

343 207.12

			Elev. Flow Line	Cuts	offsets
+85 = 3.5 South of ℄ Redwood	1.34	209.21	204.21	5.00	4' Rt.
+60	2.09	208.46	202.76	5.70	"
+30	3.28	207.27	201.30	5.97	"
0+00	4.80	205.75	200.08	5.67	"
0+00 Flow Exist 6" Sewer	10.47	200.08	200.08		
T.P. 8.36	210.55	1.04	202.19		
16.63	203.23		186.60		

B.M. on Flow Line M.H. Howk & Horton



Walker
Johnson
Allen
Gregory

GRADES - El Cerrito Storm Drain
Vale Way, 60th St., Estelle St.
College Way and Public Rts. of Way.
6-23-48
Plan 7164, 7165, 7166, 7167-L

Stations			Elev. Flow Line	Cuts	offsets
18+00	4.47	417.63	410.40	7.23	
17+65	4.20	417.90	410.58	7.32	
17+30	3.87	418.23	410.76	7.47	10' Lt
17+20.25=E.C.	3.86	418.24	410.81	7.43	10' Lt.
17+20.25=E.C.	3.26	418.84	410.81	8.03	6' Rt
17+10	3.15	418.95	410.86	8.09	"
17+00	3.03	419.07	410.91	8.16	"
16+90	2.96	419.14	410.96	8.18	"
16+80	3.44	418.66	411.01	7.65	"
16+70	3.35	418.75	411.06	7.69	"
16+60	3.25	418.85	411.11	7.74	"
16+49.57=B.C.	2.83	419.27	411.16	8.11	6' Rt.
	3.44	122.10	418.66		

El Cerrito Storm Drain

Station					El. Flow line	Cuts	
22+25			1.73	408.55	402.85	5.70	
22+00			1.21	409.07	403.15	5.92	
T.R.	1.09	410.28	12.91	409.19			
21+75 = Stk.			12.55	409.55	403.45	6.10	
21+40			11.79	410.31	404.43	5.88	
21+35 = E. Cleanout			11.76	410.34	404.57	5.77	
21+05 = 20+88.04 / 21+17.26 } Equation			11.14	410.96	405.40	5.56	
			10.80	411.30	405.87	5.43	
21+00			10.43	411.67	406.12	5.55	
20+65			9.70	412.40	406.65	5.75	
20+30			9.05	413.05	407.18	5.87	
19+95			8.41	413.69	407.71	5.98	
19+61.80 = F.C.			7.70	414.40	408.21	6.19	
+46.20			7.37	414.73	408.45	6.28	
19+31.34 = B.C.			7.12	414.98	408.67	6.31	
19+00			6.44	415.66	409.14	6.52	
18+62			5.75	416.35	409.71	6.64	
18+24.91	Δ H. 12°21'		4.80	417.30	410.28	7.02	10' H. "Rt & Forward Tan
18+24.91'			4.76	417.34	410.28	7.06	10' H. "Rt " Back "

422.10

El Cerrito Storm Drain

Stations					El. Flow Line	Cuts	offsets
28+16.48				6.48	397.12	391.73	5.39	
28+00.04				6.19	397.41	392.06	5.35	
27+83.48				5.86	397.74	392.31	5.43	
27+50				5.19	398.41	393.05	5.36	
T.P.	4.40	403.60		11.08	399.20			
27+15				11.23	399.05	393.74	5.31	
26+80				10.53	399.65	394.43	5.22	
26+45				9.91	400.37	395.12	5.25	
26+10				9.19	401.09	395.81	5.28	
25+75				8.50	401.78	396.50	5.28	
25+40				7.89	402.39	397.19	5.20	
25+05				7.14	403.14	397.88	5.26	
24+70				6.47	403.81	398.57	5.24	
24+35				5.87	404.41	399.26	5.15	
24+00				5.20	405.08	399.95	5.13	
23+65				4.56	405.72	400.64	5.08	
23+30				3.78	406.50	401.33	5.17	
22+96 = 2 Cleanout #6				3.17	407.11	402.00	5.11	
22+60				2.48	407.80	402.43	5.37	
		410.28						

El Cerrito Storm Drain

S					El. Flow Line	Cuts	offsets
32+50				7.29	393.01	385.86	7.15	10' Rt.
32+18				7.29	393.01	386.28	6.73	"
31+90				6.67	393.63	386.58	7.05	"
31+80				6.47	393.83	386.70	7.13	"
31+45				6.06	394.24	387.12	7.12	"
31+10				5.04	395.26	387.54	7.72	"
30+75				4.66	395.64	387.96	7.68	"
30+40				4.17	396.13	388.38	7.75	"
+12.5				3.48	396.82	388.71	8.11	"
30+05				3.38	396.92	388.80	8.12	"
29+70				3.09	397.21	389.22	7.99	"
29+35				3.30	397.00	389.64	7.36	"
29+04.84 = Δ				3.82	396.48	390.00	6.48	10' Lt.
	3.66	400.30			396.64	BM Nail 2876.89 10' Lt		
					.01			
	FB 1825-p-20				396.63			
Chk Nail	28+25.16			6.43	397.17			
28+66.59 = E.C.				6.96	396.64	390.76	5.88	
+49.24				6.81	396.79	391.08	5.71	
28+33.35				6.69	396.91	391.41	5.50	
		403.60						

32+16.7	End of Pipe		10.50	389.80	385.06	4.74
32+86			9.99	390.31	385.43	4.88
32+95			7.32	392.98	385.80	7.18
		400.30				

El Cerrito Storm Drain

Grades - Sewer Laterals

			El. Flow Line	Cuts	offsets
Lateral No 55					
0+20	12.69	409.41	404.80	4.61	5' Lt.
0+15	12.85	409.25	404.30	4.95	"
0+07.5	12.88	409.22	402.30	6.92	"
0+01.5	12.86	409.24	402.10	7.14	5' Lt
0+00					
Lateral No 57	20+08		El. Flow Line		
0+20 = W C6 Valley	8.48	413.62	407.80	5.82	Lon Cb.
0+15	9.01	413.09	407.40	5.69	5' Lt
0+07.5	8.70	413.20	406.40	6.80	"
0+01.5	8.87	413.23	406.20	7.03	"
0+00 = E First Sewer					
Lateral No 20					
0+72					
0+62 = W C6 Estella	3.91	418.19	413.90	4.29	on & on Curb
0+33	5.01	417.09	413.7	3.39	5' Lt.
0+04	4.77	417.33	413.5	3.83	5' Lt
0+00					
	3.44	422.10	418.66		

— El Cerrito Storm Drain —

Grades Sewer Laterals

24+53 Lateral No 71

					El. Flow Line	Cuts:	offsets.
0+20				5.81	404.47	399.80	4.67	2 on 6 in Drive
0+15				6.11	404.17	399.40	4.77	
0+07.5				6.25	404.03	397.90	6.13	
0+01.5				6.33	403.95	397.70	6.25	
0+00						396.60		

23+90 Lateral

0+20				4.33	405.95	400.90	5.05	
0+15				4.27	405.31	400.40	4.91	
0+07.5				5.02	405.26	399.00	6.26	
0+01.5				5.20	405.08	398.80	6.28	
0+00						398.00		

22+06 "Lateral No 54.

0+20				1.56	408.72	407.80	3.92	
0+15	Blk			1.69	408.59	407.30	4.29	
0+07.5	Blk			1.69	408.59	402.00	6.59	
0+01.5				1.64	408.64	401.80	6.84	
0+00								
TP	1.09	410.28		1.291	409.19			
		422.10						

El Carrito Storm Drain

Sewer laterals.

					El. Flow Line	Cuts.	offsets.
	27+54.5						
	27+54 = Sewer lateral #80						
0+20				4.21	399.39	394.40	4.99	5' Lt.
0+15				1.85	398.75	393.70	5.05	"
0+07.5				5.20	398.40	392.00	6.40	"
0+5				5.39	398.21	391.80	6.41	"
0+00						391.00		
T.P.	4.40	403.60	11.08		399.20			
	26+75 = Sewer lateral							
0+20				8.33	401.95	397.00	4.95	2 on curb.
0+15				8.96	401.32	396.50	4.82	5' Lt.
0+07.5				9.18	401.10	394.70	6.40	"
0+01.5				9.34	400.94	394.50	6.44	"
0+00						393.70		
	25+78. lateral #70							
0+20				7.05	403.23	397.80	5.43	"
0+15				7.60	402.68	397.40	5.28	"
0+07.5				7.67	402.61	396.20	6.41	"
0+01.5				7.85	402.43	396.0	6.43	"
0+00						395.10		
		410.28						

Est. Carrito Storm Drain
Grades · Sewer Laterals

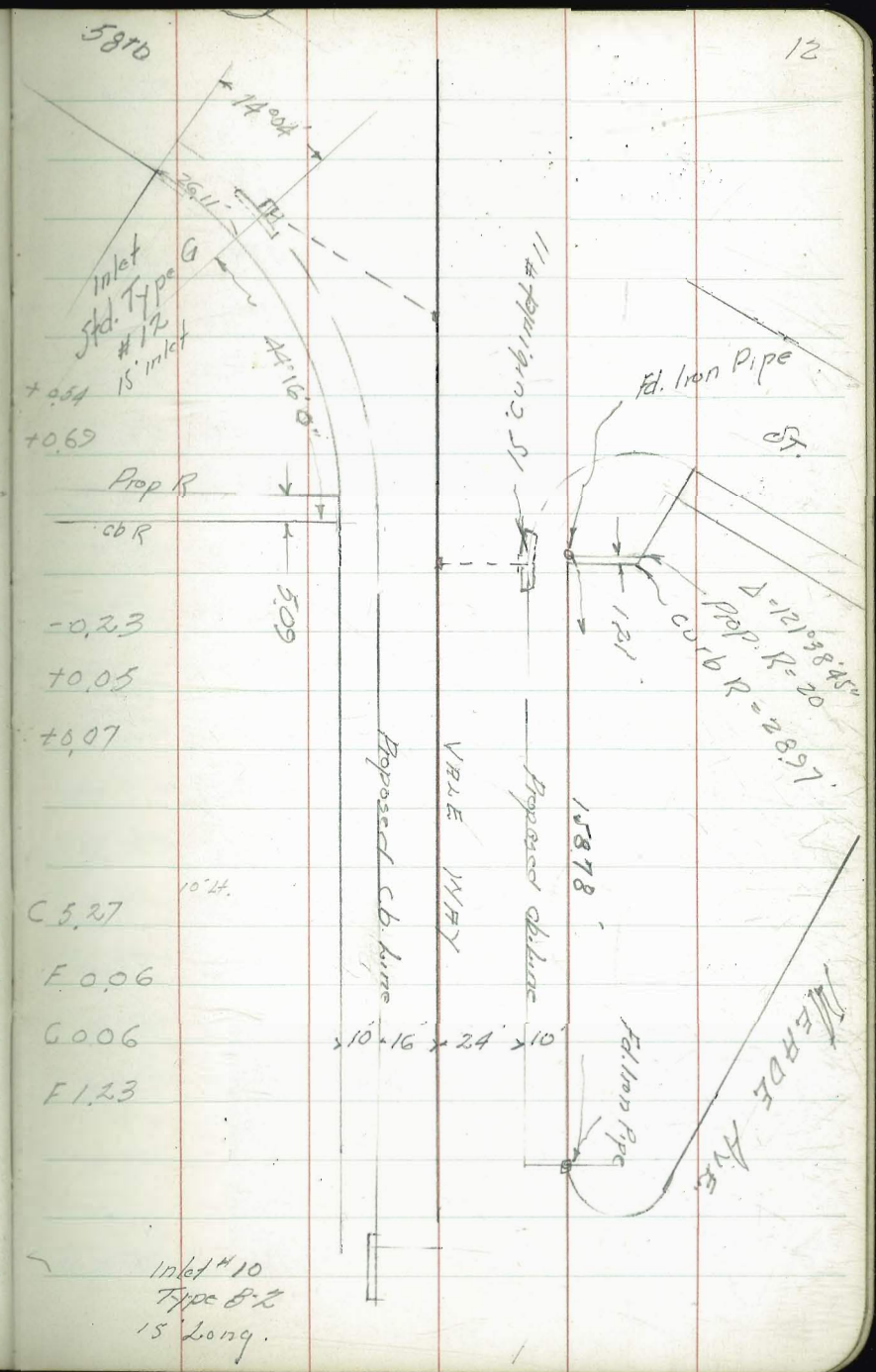
					El. Flow	Cuts	offsets
	28+06	Lateral # 79					
0+20			5.00	398.60	392.86	5.74	Encb.
0+20	Flow		10.74	392.86	392.86	0.00	~~5.74~~
0+15			5.74	397.86	392.06	5.80	5.24
0+07.5			6.07	397.53	390.90	6.63	"
0+01.5			6.30	397.30	390.70	6.60	"
0+00							
		4036.0					

El Cerrito Storm Drain

Grades - Curb Inlet #11, #10 And Inlet #12

		0.03	
FB 1825-31		395.74	
Chk. BM Nail Pole #178268	4.53	395.77	
			Elev. Curb
West end Inlet #10	3.16	397.14	396.60
North end Inlet #10	2.88	397.42	396.73
	400 30		

West End Inlet #11	6.18	394.12	394.35
℄ Inlet #11	6.02	394.28	394.23
East End CB Inlet #11	5.89	394.41	394.34
	400 30		
			Flow
	7.50	392.80	387.53
North end Inlet #12	7.76	392.54	392.60
℄ Inlet #12	7.81	392.59	392.53
South end Inlet #12	8.23	391.87	392.60
	400 30		



El Cerrito Storm Drain

Stations	Grades		El. Flow Line	Cuts	Offsets
			0.02		
16+49.57=B.C.		8.15	419.27 / 419.29	CK.	
16+45.57		8.13	419.31	411.18	8.12 10'Lt
16+35.57=E.C.		8.03	419.41	411.37	8.04
16+26.73		7.99	419.45	411.55	7.90
16+17.89		7.74	419.70	411.73	7.97
16+09.06		7.49	419.95	411.91	8.04
16+00.23=B.C.		7.47	419.97	412.09	7.88 10' Lt.
15+75		5.51	421.93	412.59	9.34 ✓
15+40		5.30	422.14	413.29	8.85
15+05		4.79	422.63	413.99	8.64
14+70		4.67	422.77	414.69	8.08
14+35		4.15	423.29	415.39	7.90
14+00		3.07	424.37	416.09	8.28
13+65		2.36	425.08	416.79	8.29
13+30		1.71	425.73	417.49	8.24
12+99.34=E.C.		0.52	426.92	418.20	8.72 7' Rt.
B.M.	8.78	427.44	418.66		N.W.B.R. 60th & Estelle

E.L. Cerrito Storm Drain

Stations	Grades			Elevation Flow Line	Cuts	Offsets
	Alley West of 60th St.					
Conton P. 20						
2+50 BRK T.P.	7.57	432.57	0.28	425.00	419.68	5.32 6'Lt
2+15			1.25	424.03	418.63	5.40 "
1+80			2.27	423.01	417.58	5.43 "
1+42.87 BRK.			3.91	421.37	416.47	4.90 "
1+25			4.69	420.59	415.93	4.66 6'Lt
0+85.57			4.90	420.18	413.86	6.32 "
0+69.57=E.C.			5.09	420.29	413.02	7.22 "
0+60.76			5.08	420.20	412.56	7.64 "
0+51.93			5.36	419.92	412.16	7.76 "
0+43.10			5.53	419.75	411.64	8.11 "
0+34.27=B.C.			5.89	419.99	411.18	8.22 6'Lt
B.M.	6.62	425.28		418.66		N.W.B.F. 60th & Estelle

E.L. Cerrito Storm Drain

Stations		Grades		Elevations Flow Line	Cuts	Offsets
4+35		3.60	449.08	442.25	6.83	10' Rt.
4+00		0.41	452.27	444.70	7.57	5' Rt
T.P.	1.26	452.68	10.34	451.42		
3+62.50	Brk.	7.95	453.81	446.95	6.86	1.94 Rt
3+25	Brk.	6.28	455.48	448.64	6.84	10' Rt
2+87.50	Brk.	5.13	456.63	449.95	6.68	10' Rt
2+45.01		3.48	458.28	450.98	7.30	8' Rt.
T.P.	2.89	461.76	9.31	458.87		
2+02.52	Curb # 1	inlet	9.31	458.87	452.00	6.87 10' Rt
1+69.74			8.48	459.70	452.33	7.37 "
1+37.5	Brk.		8.68	459.50	452.65	6.85 "
1+12.5	Brk.		8.26	459.92	453.28	6.64 "
0+87.5	Brk.		8.46	459.72	454.40	5.32 "
0+62.5	Brk.		8.55	459.63	456.03	3.60 "
0+36.3	End of Pipe	inlet	4.73	463.45	458.28	5.17 10' Rt
B.M.	2.91	468.18			465.27	N.W.B.P. College & El Cajon

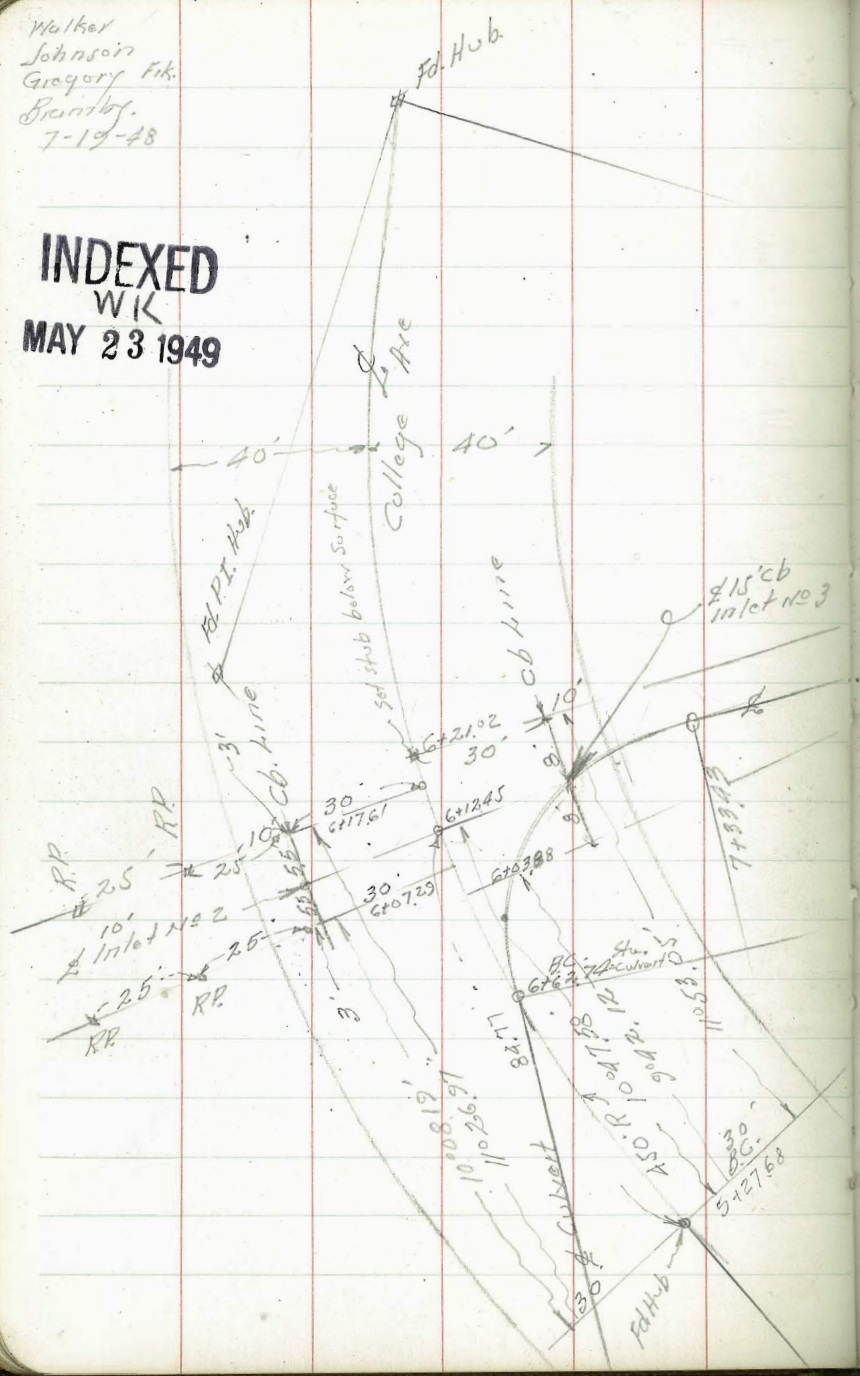
Stations	EL Cerrito Storm Drain Grades				Elevation Flow Line	Cuts	Offsets
7+21.6	℄		7.79	436.69	429.65	7.04	
7+09.86			7.38	437.10	429.89	7.21	
7+05.5			7.10	437.38	429.98	7.40	
6+98.08			6.68	437.80	430.13	7.67	
6+86.30			5.96	438.52	430.37	8.15	
6+74.52			5.48	439.00	430.60	8.40	
6+62.74	=B.C.		5.05	439.43	430.84	8.59	
	4.28	444.48		440.20		on Hub	
				.01	CK.		
Check on Hub				440.20			
6+62.74	=B.C. ℄		5.02	440.21	440.20		
6+61	Brk.		5.80	439.43	430.87	8.56	10' Rt
6+24.25			6.70	438.53	431.97	6.56	10' Rt
5+87.50			6.61	438.62	433.07	5.55	10' Rt
T.P.	5.81	445.23	13.26	439.42			
5+50	Brk.		13.26	439.42	434.57	4.85	10' Rt
5+12.5	Brk.		9.54	443.14	436.82	6.32	10' Rt.
4+91.25			7.40	445.28	438.31	6.97 6.37	10' Rt.
4+70			5.82	446.86	439.80	7.06	10' Rt
		452.68					

El. Corrito Storm Drain

Station					El. Flow Line	Cuts	offsets
11+00			6.04	428.62	422.09	6.53	
10+65			5.05	429.61	422.79	6.82	
T.P.	4.86	434.66	1.319	429.80			
10+30			13.19	429.80	423.49	6.31	
9+95			11.36	431.60	424.19	7.41	
9+60			9.66	433.33	424.89	8.44	
9+30			8.05	434.94	425.49	9.45	
9+08.73 = E.C.			6.91	436.08	425.92	10.16	
8+96.96			6.14	436.85	426.15	10.70	
8+85.19			6.46	436.53	426.39	10.14	
8+73.41			5.99	437.00	426.63	10.37	
8+61.64			5.79	437.20	426.86	10.34	
8+49.87			6.01	436.98	427.10	9.88	
8+38.10 = B.C.			6.73	436.26	427.33	8.93	
8+00			6.76	436.23	428.09	8.14	
T.P.	6.73	442.99	8.22	436.26			
7+65			7.69	436.79	428.79	8.00	24.5' Rt.
7+33.43 E.C.			8.00	436.48	429.42	7.06	
Cont. from P.							
		44448					
		5					

Walker
Johnson
Gregory Fik.
Brantly.
7-19-48

El Cerrito Storm Drain 18
Ties to CB inlets No 2 and No 3



El Cerrito Storm Drain

Stations				Elev. Flowline	Cuts	offsets.
	FB. 1825-14					
Chk. E.H.6	12+33.64	6.23	428.38 428.43			
					8.72 = P.13	
12+94.34		7.68	426.98	418.20	8.78	
12+82.56		7.31	427.35	418.44	8.91	
12+70.78		6.85	427.81	418.67	9.14	
12+58.95		6.23	428.43	418.95	9.48	✓
12+46.30		5.91	428.75	419.14	9.61	
12+35.33		5.95	428.71	419.38	9.33	✓
12+23.64	BC 45°R	5.73	428.93	419.61	9.32	
11+92.64		6.03	428.63	420.23	8.40	
11+61.65	℄ Cleanout	5.92	428.74	420.85	7.89	
11+30		6.12	428.47	421.49	6.98	
		43466				

El Cerrito Storm Drain
in Alley West of 60th

Station			El. Flow Line	Cuts.	offsets
		0.01			
		425.06			
Chk. & Hub 5+348.0 F.B. 1825-P.29	7.50	425.07			
4+81.57	8.69	423.88	422.00	1.88	6'Lt.
4+60	8.65	423.92	421.78	2.14	"
4+25	7.20	425.37	421.43	3.94	"
3+90	6.12	426.45	421.08	5.37	"
3+55	5.89	426.68	420.73	5.95	"
3+20	5.87	426.70	420.38	6.32	"
2+85	6.62	425.95	420.03	5.92	"
2+50=Sta	432.57		419.68		
	Cont. from P. 14				

El Carrito storm Drain

Slope Stakes for Ditch

from End Pipe 32+16.7

1+00					
0+50					
0+00			12.08	384.97	384.97
	1.38	397.05		395.67	

384.50 / 12.5 — 12.5 / 10.1 / C 2.4 — 10.1 / 9.0 / +1.1 / 3.0

384.75 / 12.3 — 12.30 / 8.1 / C 4.2 — R.P. / 8.1 / 7.1 / +1.0 / 3.0

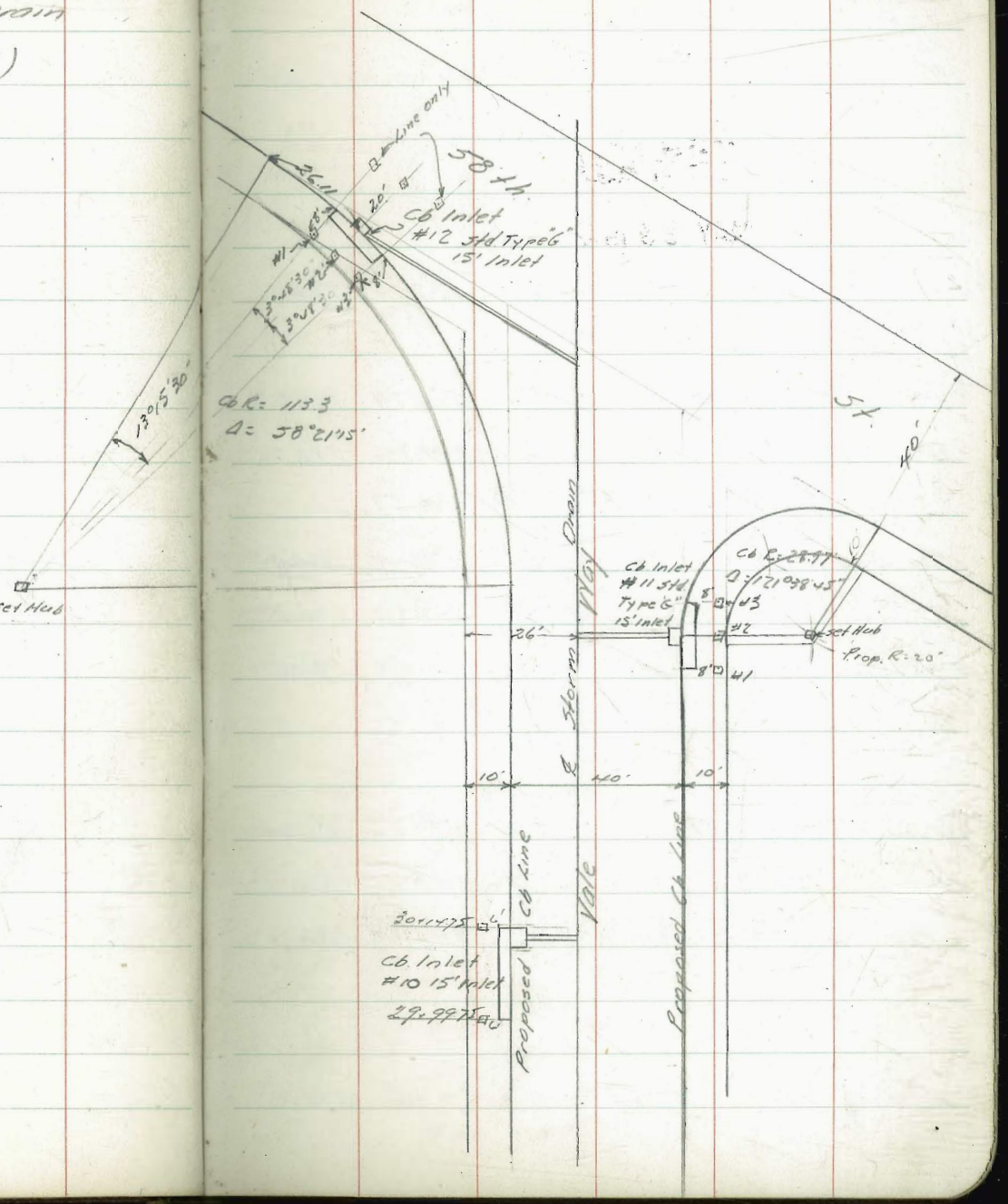
8-18-48
Hendricks
Roberts
Greer
Rorer

State cb Inlets #11 & 12 & 10
El Cerrito Storm Drain
(Drawing #71664)

INDEXED
WK
MAY 23 1949

Grade Next Page

Void



Grades Cb Inlets No 11 & 12 & 10
El Cerrito Hts.

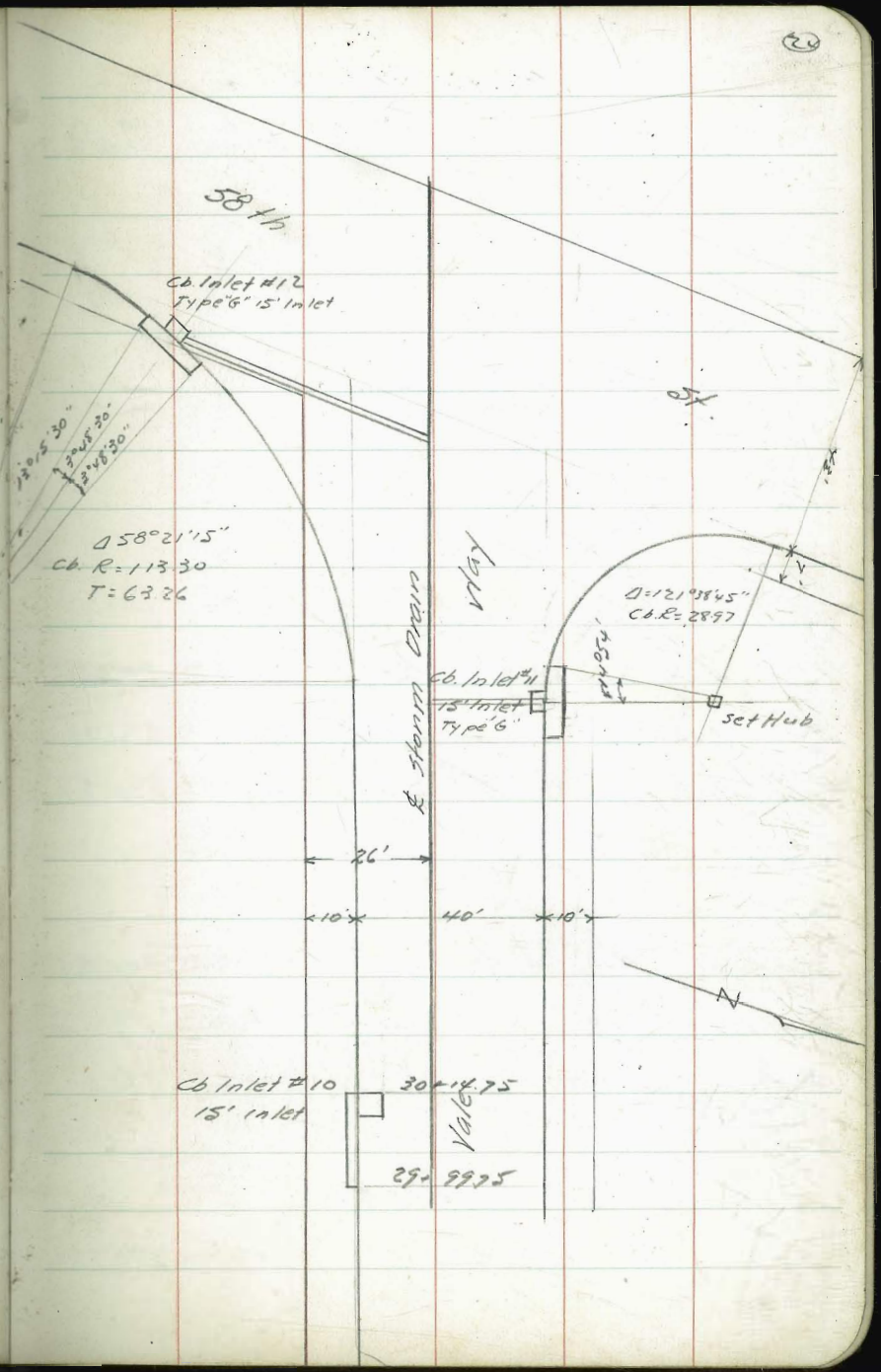
Sta.	+	H.I	−	Elev. Stake	Cb. Grade	Cut or Fill	offset
Ck BM			4.55	395.75	395.75	Starting B.M.	
West End Inlet #10			3.56	396.74	396.60	C0.14	6' Lt
East End Inlet #10			3.16	397.14	396.73	C0.41	6' Lt
TP	3.73	400.30	0.98	396.57			
West End Inlet #11 (#3)			3.15	394.40	394.35	C0.05	6' Rt
& Inlet #11 (#2)			3.21	394.34	394.23	C0.11	6' Rt
East End Inlet #11 (#1)			2.91	394.64	394.34	C0.30	6' Rt

Void #11 & 12

No Line Inlet #12 (#3)			4.32	393.23	392.60	C0.63	8' Lt
& Inlet #12 (#2)			4.84	392.71	392.53	C0.18	8' "
So End Inlet #12 (#1)			4.89	392.66	392.60	C0.06	8' "
BM	1.80	397.55			395.75	BM Rolc # 178269 on 58th St. No Lime Valeway (FB 1825 - P-31)	

8-19-48
Hendricks
Roberts
Greer
Rarer

State Curb Inlets #11 & 12
El Cerrito Storm Drain
(Dwg. #7166 L)



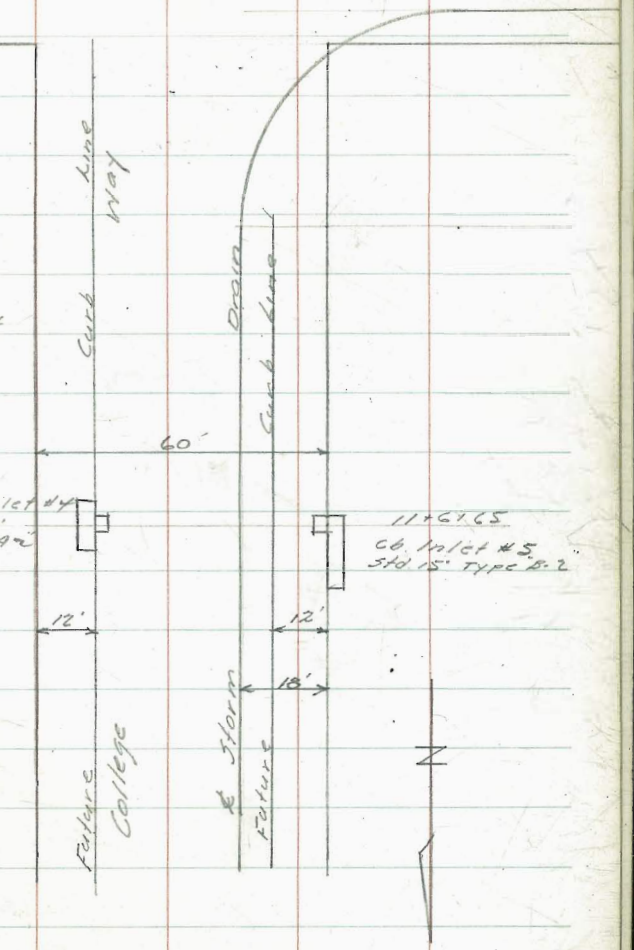
Grades Inlets #11 & 12

Sta.	+	H.I	−	Elev. Stakes	Ch. Grade	Cut or Fill	Offsets
West End Inlet #11			3.81	394.32	394.35	6' Rt	F0.03
℄ Inlet #11			3.55	394.58	394.23	"	C0.35
East End Inlet #11			3.52	394.61	394.34	"	C0.27
30 Line Inlet #12			4.89	393.24	392.60	10' Lt	C0.64
℄ Inlet #12			4.88	393.25	392.53	"	C0.72
No Line Inlet #12			5.28	392.85	392.60	"	C0.25
B.M	2.38	398.13			395.75	Pole # 178268	F13/1825 P.31

8-20-48 Stake Curb Inlets #4285
Hendricks El Cerrito Storm Drain
Roberts Dwg # 71644
Greer
Rorer

Estelle St.

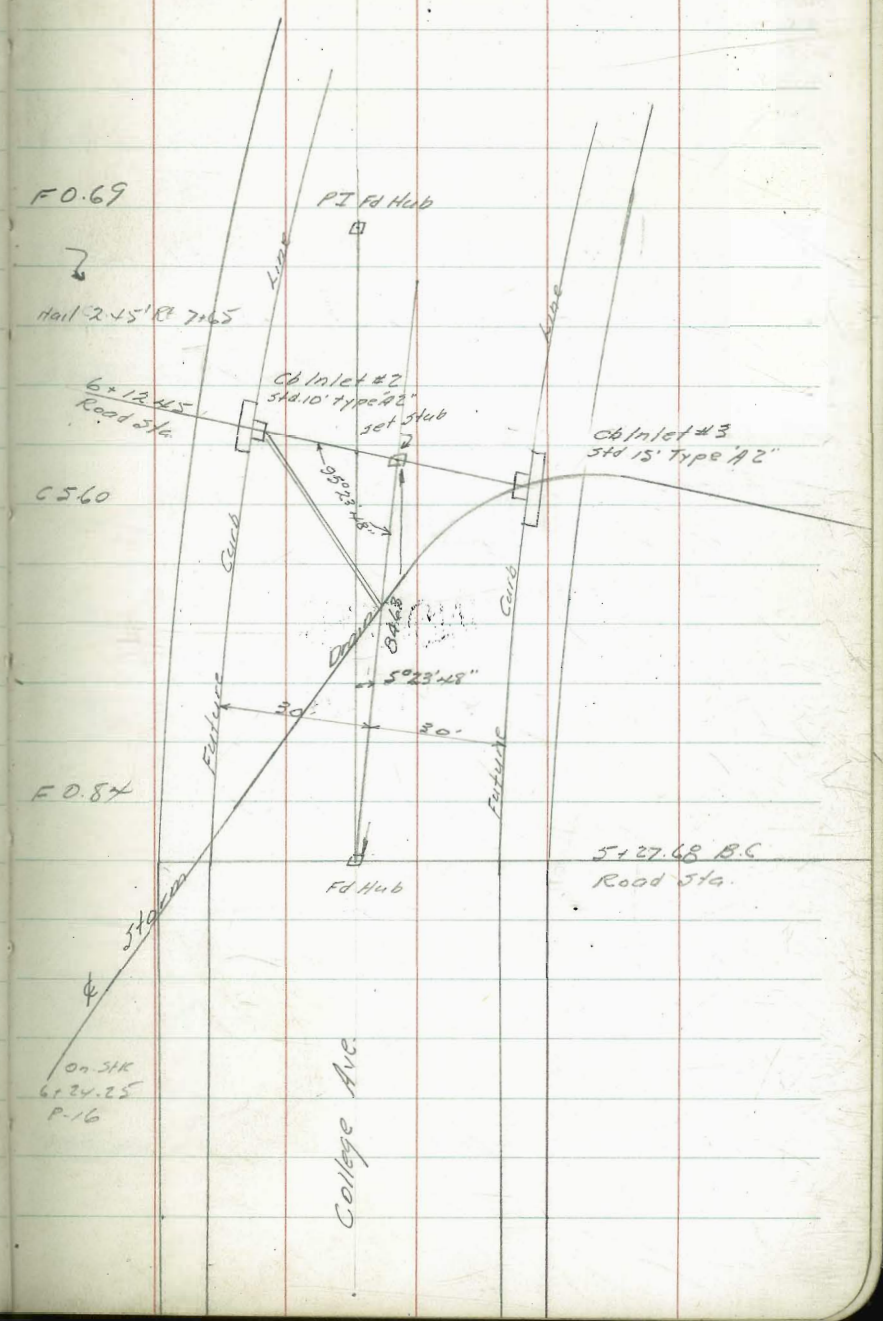
Sta.	+	N1	−	Elev Stakes	Cb. Elev	C or F	offsets
CK STK 7' Rt 11+61.65 P. 19			4.35	428.66	428.74		
No End Inlet #4			4.37	428.64	429.58	F 0.94	10' Lt
So End Inlet #4			4.28	428.73	429.44	F 0.71	"
No End Inlet #5			3.97	429.04	429.09	F 0.05	6' Rt
So End Inlet #5			4.02	428.99	428.89	C 0.10	"
T.P.	6.15	433.01	0.01	426.86			
B.M.	8.21	426.87			418.66	NW IBP 60th. & Estelle	



8 20-48
Hendricks
Roberts
Greer
Rorer

Stake Curb Inlets #2 & 3
El Cerrito Storm. Drain
(Dwg # 7164 L)

	Reset	Cb. Inlet	No. 3			
℄ & Inlet #2			1.35	44435	44436	
℄ Cb Inlet #3			8.63	43707	43776	F 0.69
B.M.	8.91	445.70			436.79	
℄			10.08	43678	436.79	
No End Inlet #2						
℄ Inlet #2			2.50	44436	438.76	C 5.60
So. End Inlet #2						
No End Inlet #3						
℄ Inlet #3			9.94	43692	43776	E 0.84
So End Inlet #3						
B.M.	8.33	446.86			438.53	



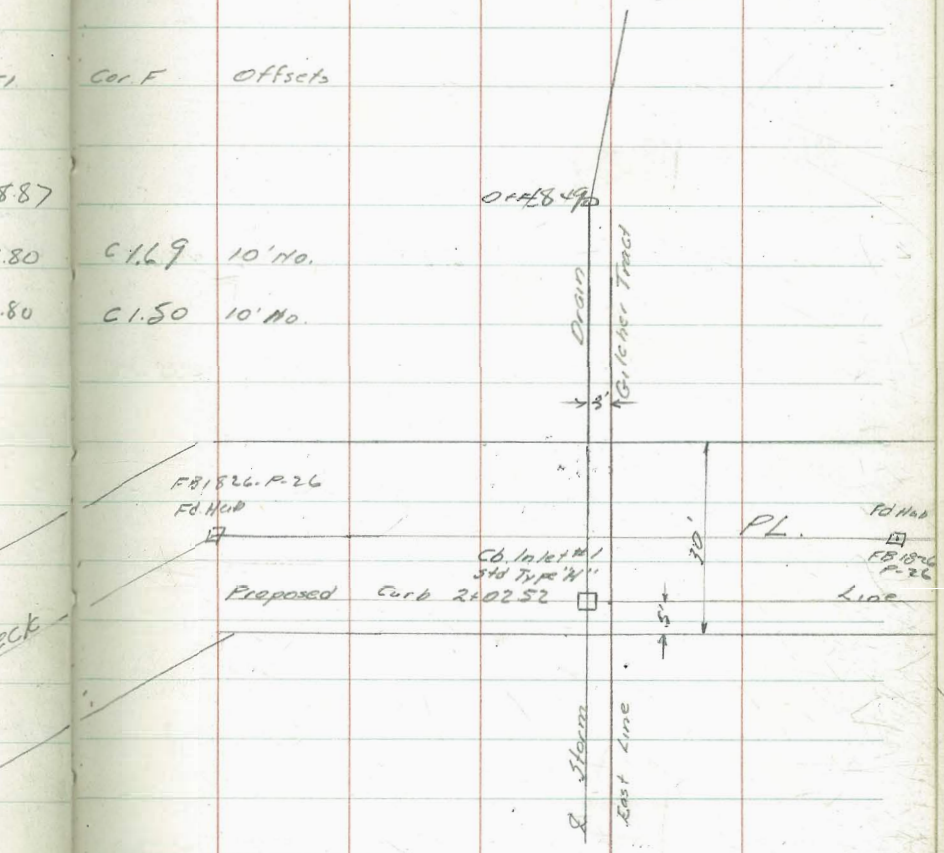
8-23-48
Hendricks
Roberts
Greer
Rorer

Stake Curb Inlet #1
El Cerrito Storm Drain

Sta.	+	H.I.	−	El. Stake	Cb. El.	Cor. F	Offsets
CF Hub (2+02.52 P.I.5)			5.91	458.87	458.87		
W. End Inlet #1			6.29	458.49	456.80	C1.69	10' No.
E " " #1			6.48	458.30	456.80	C1.50	10' No.

peck

BM	1.58	464.78			463.20	Nail in Pole #7070	FB-1826-P-11



Stake Pavement Grade for
Cleanout #1 & #2 Cerrito Storm Drain

				Elev. Stake	Pavement Grade			
Cleanout #1								
CK Stake Inlet #3			6.83	436.93	436.92	P-27		
Cleanout #1			3.84	439.92	438.42	C 1.50		
BM	5.23	443.76			438.53	On Stk	6+24.25	P-16
Cleanout #2								
CK 9+60			7.78	433.34	433.33		P-17	
Cleanout #2			-6.13	434.99	436.74	F 1.75		
BM	5.04	441.12			436.08	On Hub	9+08.73	P-17

Walker
F. Gregory
Bailey
9-20-98

Grades - Culvert Extension
Block 15 Paradise Hills
Drawing 7234-L

			Elev. Flow Line	Cuts
		0.01		
FB1796-66		166.63		
Chk Grating 3+41.5	3.27	166.64		
4+21.8 = End Work	8.18	161.73	158.8	2.93
3+96.22 = B.C. H.	6.82	163.09	160.62	2.47
3+57.75 = E.C.	3.03	166.88	163.33	3.55
3+42.8 = Beginning Work			163.90	
3+40.85 B.C. H.				
	2.25	169.91	167.66	

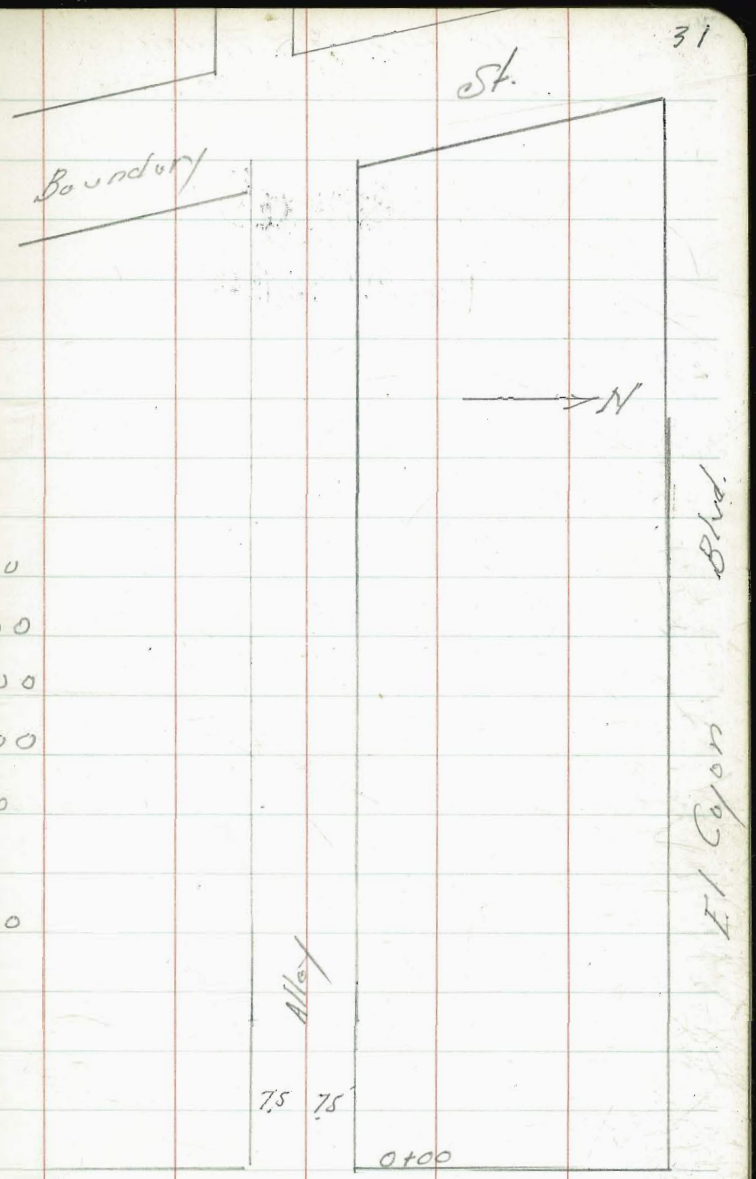
B.M. Top cb & Inlet 3+41.5 FB 1796-P-66

Walker
Allen
F. Gregory
Granby
9-30-46

Grades - North Line Alley
Block 1 - North Highland Park

001

Top ○			377.56		
check 9" Conc. Wall		+1.80	374.55		
Station				Elev. Grade N.L. Alley	Cuts
4+50 = P.V.C.				368.32	
4+46.7	Blk	2.46	370.29	368.29	C 2.00
4+30	"	2.60	370.15	368.15	C 2.00
4+10	"	2.71	370.04	368.04	C 2.00
3+90	"	2.77	369.98	367.98	C 2.00
3+72 = Beg. 9" Conc. Wall		2.75	370.0	368.00	C 2.00
3+70 = Blk = ~~P.V.C. of 120' V.C.~~				368.01	
3+50.8	Blk.	2.67	370.08	368.08	C 2.00
3+30 = P.V.C.					
0+00 = N. Line 33rd St					
TP	2.73	372.75	7.28	370.02	
	3.05	377.30		374.25	



B.M. B.P. SW El Colors = 33rd St.

Gibbs Airport ~ Finish Grades

Wly End Runway "8"

	75'	50	25'	℄	25 Rt.	50	75'
10+00 = Beg. Paving	404.53	404.78	405.03	405.28	405.03	404.78	404.53
2+50	404.28	404.53	404.78	405.03	404.78	404.53	404.28
9+00	404.03	404.28	404.53	404.78	404.53	404.28	404.03
8+50							
8+00							

~ Gibbs Airport ~ Finish Grades

Runway "C" 5+44 End

						Lt. 50	Lt. 25	℄	Rt. 25	Rt. 50	Rt. 75
					75'						
46+00					412.05	412.30	412.55	412.80	412.55	412.30	412.05
					5.31	5.06	4.81	4.56	4.81	5.06	5.31
45+75					412.15	412.40	412.65	412.90	412.65	412.40	412.15
					5.21	4.96	4.71	4.46	4.71	4.96	5.21
45+50					412.22	412.47	412.72	412.97	412.70	412.44	412.18
					5.14	4.89	4.64	4.39	4.66	4.92	5.18
E Hub 47+00 T.P.	4.61	417.36	4.58	412.75							
45+00					412.27	412.52	412.77	413.02	412.67	412.33	412.00
					5.06	4.81	4.56	4.31	4.66	5.00	5.33
44+50					412.32	412.57	412.82	413.07	412.78	412.49	412.20
					5.01	4.76	4.51	4.26	4.55	4.84	5.13
44+00 - End Paving					412.38	412.63	412.88	413.13	412.88	412.63	412.38
	6.43	417.33		410.90	B.M. 2	Taxiway "C"					

Wky end Runway "A" - Finish Grades

Gibbs Airport

Walker
Johnson
Pope
Riley
1-19-49

					Lt. 50'	Lt. 25'	℄	Rt. 25'	Rt. 50'	Rt. 75'
110+00 Beg. Paving.				406.45	406.70	406.95	407.20	406.95	406.70	406.45
109+50				406.35	406.60	406.85	407.10	406.85	406.60	406.35
				5.39	5.14	4.89	4.64	4.89	5.14	5.39
109+00				406.25	406.50	406.75	407.00	406.75	406.50	406.25
				5.49	5.24	4.99	4.74	4.99	5.24	5.49
108+50				404.87	405.20	405.53	405.86	405.64	405.42	405.20
				6.87	6.54	6.21	5.88	6.10	6.32	6.54
108+00				403.82	403.98	404.14	404.30	404.40	404.50	404.60
				7.92 BM Conc Mon	7.76	7.60	7.44	7.34	7.24	7.14
	8.40	411.74		403.34 108+00						

Gibbs Airport

Walker
Johnson
Pope
Riley
1-19-48

FINISH GRADES E'LY END RUNWAY "A"

						Lt.			Rt.		
					75'	50	25	℄	25'	50	75
146+00					415.20	415.30	415.40	415.50	415.34	415.17	415.00
					6.59	6.49	6.39	6.29	6.45	6.62	6.79
145+50					415.50	415.75	416.00	416.25	416.00	415.75	415.50
					6.29	6.04	5.79	5.54	5.79	6.04	6.29
145+00					416.45	416.70	416.95	417.20	416.95	416.70	416.45
					5.34	5.09	4.84	4.59	4.84	5.09	5.34
144+50					416.29	416.54	416.79	417.04	416.79	416.54	416.29
					5.50	5.25	5.00	4.75	5.00	5.25	5.50
	6.46	42.179		415.33	BM Conc. Mon 146+06						
144+00					416.13	416.38	416.63	416.88	416.63	416.38	416.13

PACIFIC RIVIERA VILLAS

Walker Johnson Pope Riley 2-7-49

Culvert Grades in Blk 3, & 4.

From La Jolla Blvd. to Ocean

Plan Drawing 7375-L

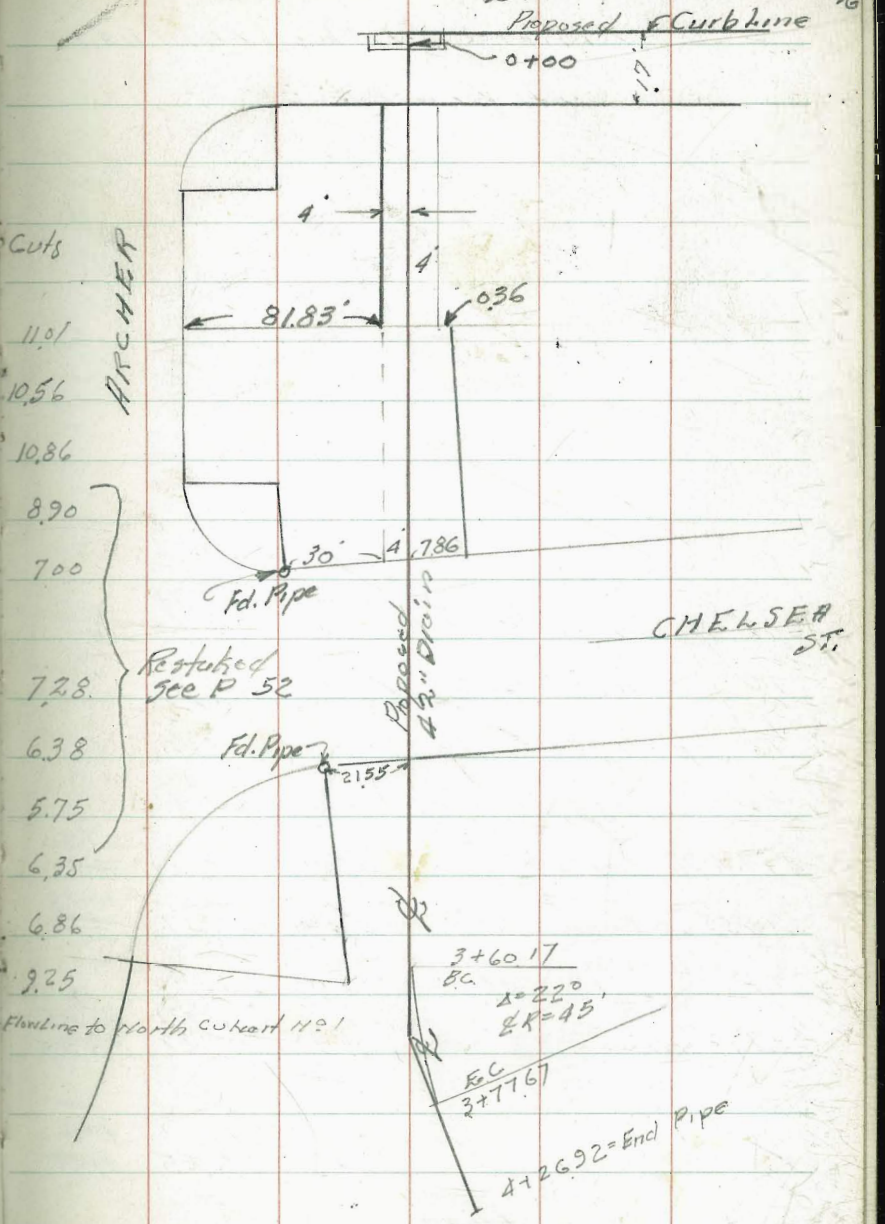
Profile 7385-L

M.O. 90083

Cont P 37

					El. Flow Line	Cuts
3+55.5=Blk			4.68	52.69	41.68	11.01
3+35.5=Blk			3.16	54.21	43.65	10.56
3+10			1.27	56.10	45.24	10.86
2+80			1.37	56.00	47.10	8.90
2+40			0.80	56.57	49.57	7.00
T.P. #3	0.21	57.37	12.68	57.16		
2+00			10.50	59.34	52.06	7.28
1+60			8.92	60.92	54.54	6.38
1+23=Blk			7.26	62.58	56.83	5.75
0+80			5.49	64.35	58.00	6.35
0+40			3.89	65.95	59.09	6.86
0+10			0.68	69.16	59.91	9.25
0+00= Chk Existing Flow			24" Pipe	9.66	60.18	60.18=First Flowline to North Culvert No 1 60.27=Plan
~~0+0~~ T.P. #2	0.29	69.84	4.24	69.55		
T.P. #1	4.22	73.79	8.96	69.57		BM BP SW La Jolla Colima (Drawing 7385-L)
	0.55	78.53		77.98		

SEE ALSO PAGE No 52



Grades - Culvert No 2
Riviera Villas Unit No 1
Cont. from P. 36

4+26.9			18.0	24.5		
4+08			8.4	36.1		
	0.00	42.47		42.47		
				77.98		
Chk starting BM			1.40	77.99		
T.P.	11.20	79.39	0.69	68.19		
T.P.	11.87	68.88	2.24	57.01		
T.P.	12.53	59.25	0.18	46.72		
4+26.92 = End 42" Pipe			11.29	35.61	24.50 ~~28.80~~	11.11 ~~6.81~~
3+95.5 = Brk			4.43	42.47	33.78 ~~34.78~~	8.69 ~~7.69~~
T.P.	2.12	46.90	12.59	44.78		
3+77.67 = E.C.			9.71	47.66	37.85 ~~38.35~~	9.81 ~~9.31~~
3+60.17 = B.C. Lt			5.12	52.25	40.82 ~~41.09~~	11.43 ~~11.18~~
		57.37				

Grade changed as shown to meet Existing ground at end of pipe
Per. E.F. Gabrielson
2-9-48

Stoke Portion Cohort No 1

Riviera Villas

Unit No 1

Walker
Johnson
Pope
Kilo
8-18-49

0+63		3.48	71.21	61.53	9.68
0+424		4.91	69.78	61.12	8.66
0+144 = Int. Gas Line		5.29	69.40	60.56	8.84
				60.27	Using Phelps Datum.
0+00 = 2' East Proposed cl line					
	5.07	74.69		69.62 = Elev. Stoke	
			C	9.35 = cut on Stoke To Flow	
				60.27	
~~T.P #2 P-36~~					
	~~5.07~~	~~74.62~~		~~69.55~~	

GRADES - CULVERT - 24" Conc. Pipe

Walker
Johnson
Pope
Crawford
2-17-49

on Imperial Ave from 14th Street to Switzer Storm Drain West of 15th St.

Drawing 7436-L- W.O. 60342

Cont. P-40

		El. Flow Line		Cuts	offsets
3+60	5.46	7.15	-1.82	8.97	6'R
3+25	5.36	7.25	-1.60	8.85	"
2+90	5.33	7.28	-1.37	8.65	"
2+55	5.15	7.46	-1.15	8.61	"
2+20	5.03	7.58	-0.92	8.50	"
1+85	4.95	7.66	-0.70	8.36	"
1+50	4.82	7.79	-0.47	8.26	"
1+15	4.84	7.77	-0.25	8.02	"
0+81.00=E.C.	4.68	7.93	-0.02	7.95	"
0+61.11	4.71	7.90	0.10	7.80	"
0+41.22	4.65	7.96	0.23	7.73	"
0+21.33	4.68	7.93	0.36	7.57	"
0+01.44=B.C. Lt.	4.75	7.86	0.49	7.37	"
0+00=Inside Inlet Well NWLY			0.50		

4.64 12.6.1 7.97

B.M. 5'N 7' East Imp. Ave & 15th St.

Storm Drain
Cont. from P-39

Cont. P-51

			El. Flowline	Cuts	offsets	
5+75		6.37	6.24	-3.20	9.44	6' RT ✓
5+35		5.79	6.82	-2.95	9.77	" ✓
5+00		5.71	6.90	-2.72	9.62	" ✓
4+65		5.72	6.89	-2.50	9.39	" ✓
4+30		5.62	6.99	-2.27	9.26	" ✓
3+95		5.51	7.10	-2.05	9.15	" ✓
	12.61					

Const. GRADES - TRUNK SEWER #21

Walker
Johnson
Pope
Crawford

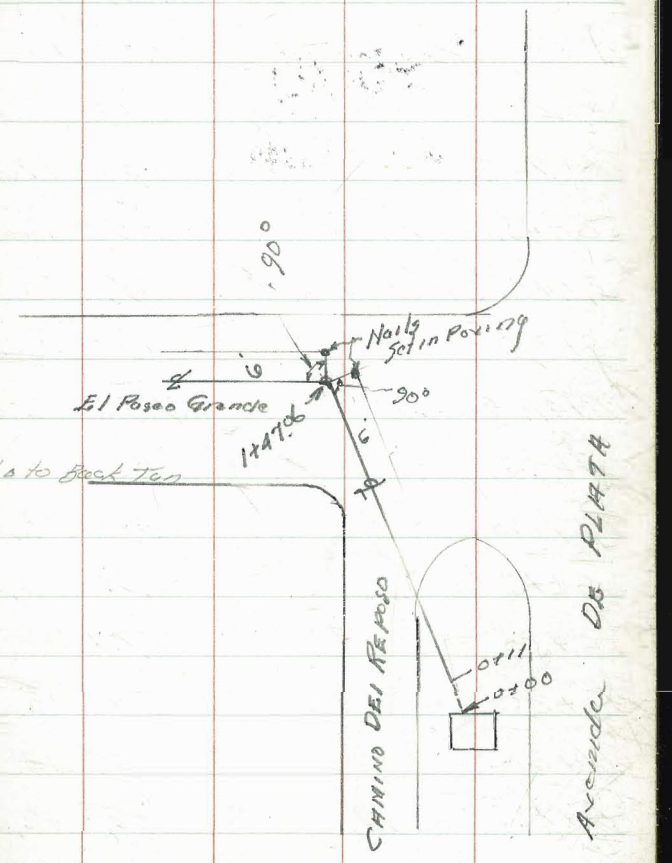
From La Jolla Shores Pumping Station to Prospect Place

2-28-49
3-1-49

Drawing 1369-D to 1371-D

					Elev. Flowline	Cuts
T.P	8.10	19.32	0.77	11.22		
4+50			0.77	11.22	5.66	5.56
4+00			1.53	10.46	5.28	5.18
3+50			2.35	9.64	4.89	4.75
3+00			3.06	8.93	4.51	4.42
2+50			3.83	8.16	4.12	4.04
2+00			4.55	7.44	3.74	3.70
1+47.06	Sta. 62°04'15" Turned		5.26	6.73	3.33	3.40
1+47.06			5.17	6.82	3.33	3.49
1+00			4.64	7.35	2.97	4.38
0+50			4.02	7.97	2.58	5.39
0+11 = Beg. Project			2.97	9.02	2.28	6.74
0+00						
FB 1857-21				6.38		
Check Rim MH	0+10	0.94	5.63	6.36		
	3.42	11.99		8.57		

B.M. on ℄ Spike = 0+00 FB 1857-6



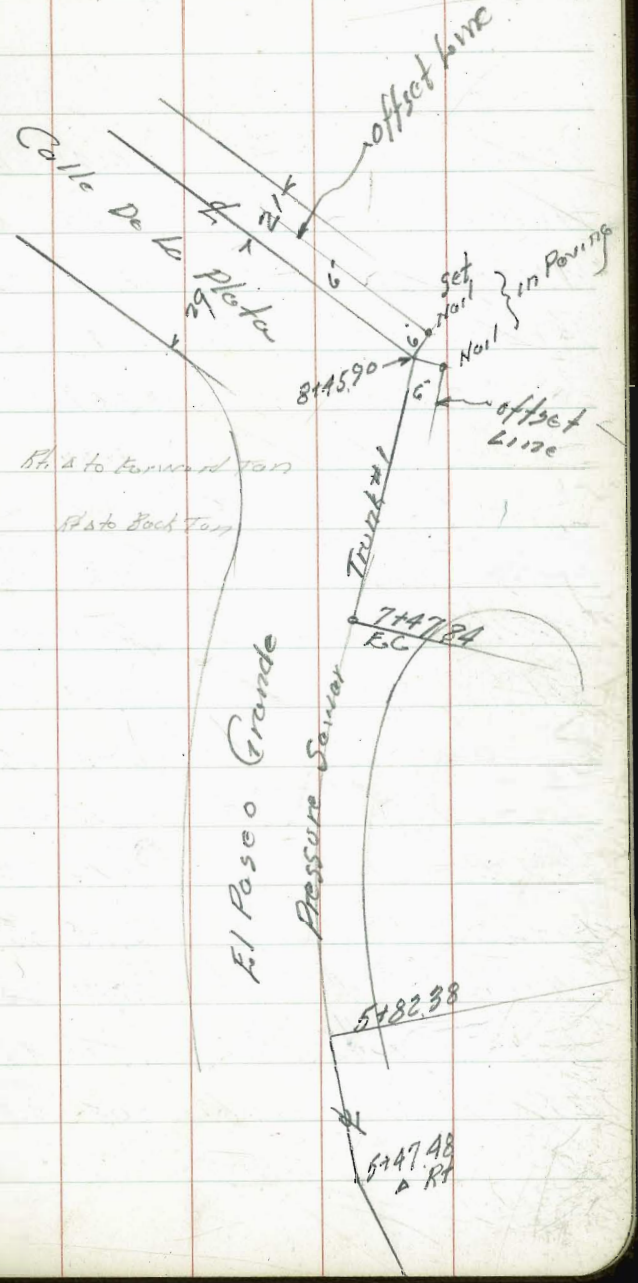
Trunk Sewer Cont.
from P-41

11+00			0.05	28.04	24.20	3.84
10+50			3.14	24.95	20.50	4.45
10+00			7.39	20.70	16.80	3.90
9+50			11.10	16.99	13.10	3.89
T.P.	12.54	28.02	3.77	15.55		
8+96=Bk.			5.47	13.85	9.10	4.75
8+45.90			~~6.39~~ 6.95	~~12.23~~ 12.37	8.71	~~4.22~~ 3.66 ?
8+45.90=Δ Lt 49°49'17"			6.99	12.33	8.71	3.62 ?
8+00			7.22	12.10	8.35	3.75
7+47.84=E.C.			6.65	12.67	7.95	4.72
7+25			6.29	13.03	7.77	5.26
7+00			5.80	13.52	7.58	5.94
6+75			5.56	13.76	7.39	6.37
6+50			5.77	13.55	7.20	6.35
6+25			5.98	13.34	7.01	6.33
6+00			6.23	13.09	6.82	6.27
5+82.38=B.C. Rt			6.43	12.89	6.68	6.21
5+47.48=Δ 6°33'36" Rt.			6.85	12.47	6.41	6.06
5+00			7.82	11.50	6.05	5.45

Cont. from P-41 1932

Rt Δ to forward tan

Rt to Back Tan



La Jolla Trunk Sewer No 1
from Pumping Plant
to Prospect Pl. Cont from P-42

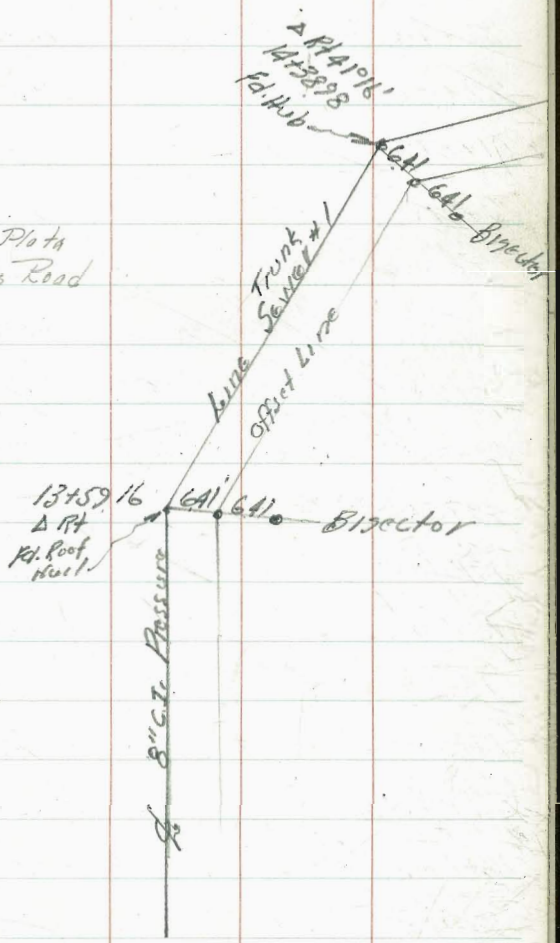
				El. Flow line	Cuts
15+00			6.44	61.20	57.42	3.78'
14+70			7.59	60.05	56.55	3.50'
14+38.98		Δ Rt 41°16'	8.52	59.12	55.65	3.47'
14+00			11.04	56.60	51.54	5.06'
	12.95	67.64			54.69	

N.E.B.P. - Calle De La Plata
B.M. & Torrey Pines Road

Calle De La Plata & Torrey Pines Rd — 0.03 — 54.69 = Plan
Check N.E.B.P. — 8.62 — 54.72

13+59.16		Δ Rt 41°16'	2.61	53.72	47.20	6.52'
T.P.	10.12	63.34	0.27	53.22		
13+00			7.69	45.80	40.91	4.89'
T.P.	12.93	53.49	0.45	40.56		
12+50			1.04	39.97	35.62	4.35'
12+40		Brk	1.95	39.06	34.56	4.50'
12+00			5.47	35.54	31.60	3.94'
11+50			9.80	31.21	27.90	3.31'
T.P.	13.97	41.01	0.05	28.04		
		28.09				

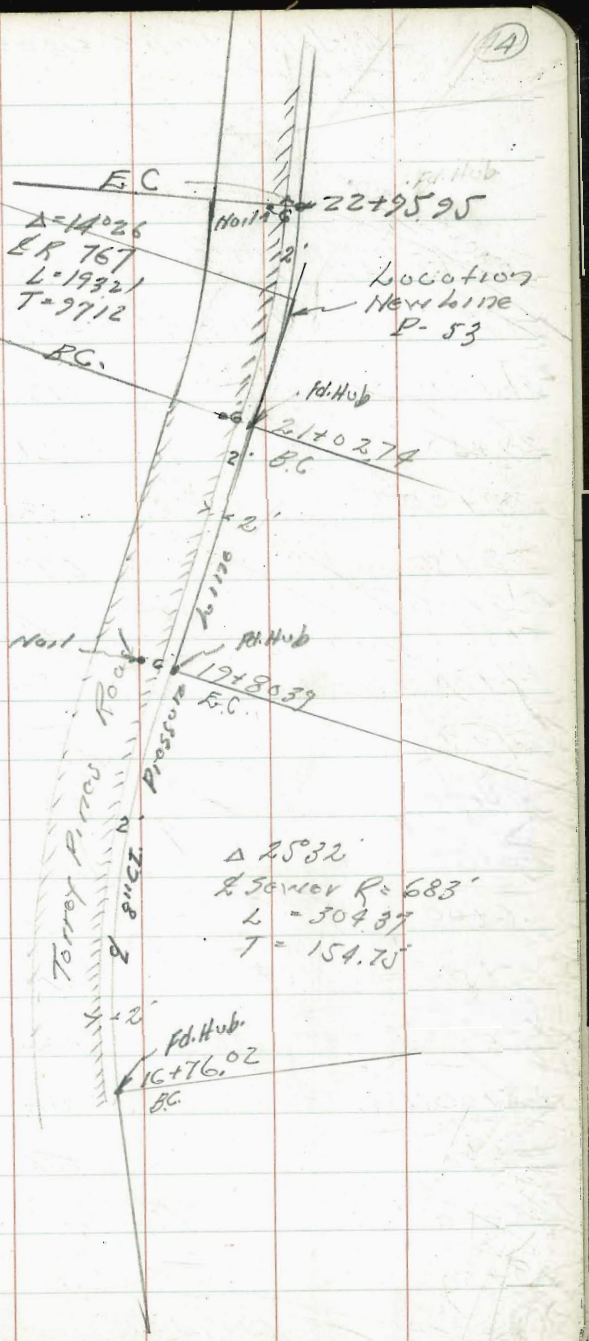
Cont from P-42



La Jolla Trunk Sewer No. 1
from Pumping Plant
To Prospect Pl. (Cont. from P-43

				Elev Fl. Line	Cuts	Offsets
22+95.95 = E.C.	This Portion of Line changed See P-53 for New Location	4.59	86.15	80.51	5.64	6' Rt
22+50		5.17	85.17	79.18	5.99	"
22+00		5.80	83.94	77.73	6.21	"
21+50		8.23	82.51	76.28	6.23	"
Δ 7°13' Lt 21+02.74 = B.C		9.60	81.14	74.91	6.23	"
20+60		11.05	79.69	73.67	6.02	"
T.P.	12.84	30.74	0.94	77.90		
20+20		2.01	76.83	72.51	4.32	"
19+80.39 = E.C.		4.22	74.62	71.36	3.26	"
19+50		4.61	74.23	70.47	3.76	"
19+00		7.28	71.56	69.02	2.54	"
18+50		7.84	71.00	67.57	3.43	"
18+00		8.81	70.03	66.12	3.91	"
17+50		10.10	68.74	64.67	4.07	"
17+00 Δ Rt 12°46'	B.C. Δ Rt 25°32'	10.76	68.08	63.22	4.86	"
16+76.02	11.22	78.84	0.02	67.62	62.52	5.10	"
16+50			1.50	66.14	61.48	4.66	"
16+00			4.16	63.98 ~~66.48~~	60.32	3.16	"
15+50			4.35	63.29 ~~66.29~~	58.87	4.42	"

67.64



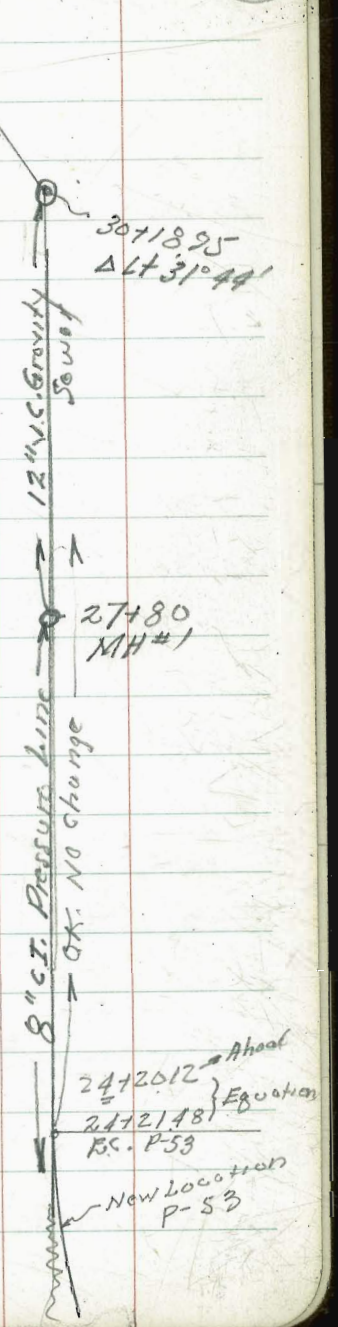
La Jolla Trunk Sewer #1
from Pumping Station to Prospect Pl.

Cont from P. 44

N.W.B.P. Viking Way & Torrey Pines Rd			8.06	96.32 - 003 = 96.29 by Moore		
chk FB 1847 / -31						
T.P.	7.57	104.35	019	96.78		
30+00			019	96.78	86.56	10.22
29+50			1.27	95.70	87.01	8.69
29+00			3.53	93.44	87.46	5.98
28+50			5.78	91.19	87.91	3.28
28+00			6.51	90.46	88.36	2.10
27+80 MH #1 End Pressure Line			6.16	90.81	88.54	2.27
27+50			7.07	89.90	88.31	1.59
27+00			8.49	88.48	87.93	0.55
26+50			8.79	88.18	87.55	0.63
26+00			6.90	90.07	87.18	2.89
25+50			5.83	91.14	86.80	4.34
T.P.	6.97	96.97	0.24	90.50		
25+00 Brk.			0.24	90.50	86.42	4.08
24+50			1.44	89.30	84.97	4.33
24+00			2.67	88.07	83.51	4.56
23+50			3.48	87.26	82.07	5.19

Line Changed See P-53

90.74



La Jolla Trunk Sewer #1 from Pumping Station to Prospect Pl.

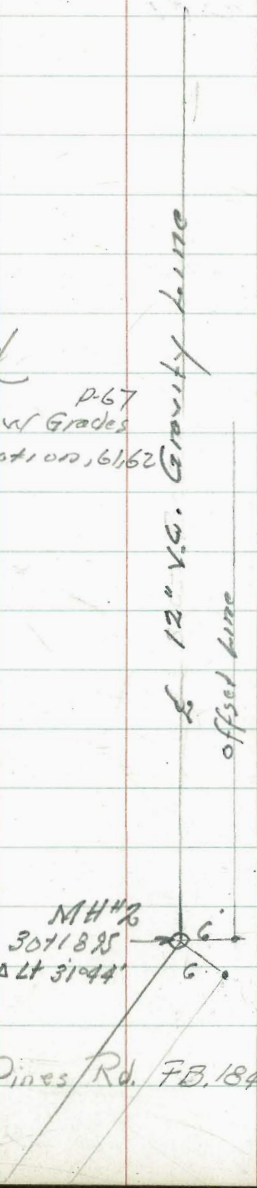
Cont. from P. 45

35+36.30	MH #3		7.96	84.9~~7~~	81.73	3.24
35+05			7.78	85.15	82.02	3.13
+70			7.02	85.91	82.33	3.58
+35			5.47	87.46 ~~86.46~~	82.65	4.81
34+00			3.46	89.47	82.96	6.51
+65			1.78	91.15	83.28	7.87
T.P.	1.36	92.93	10.92	91.57		
33+30			9.64	92.75	83.59	9.16
+95			7.69	94.70	83.91	10.79
+60			5.86	96.53	84.22	12.31
32+25			4.60	97.79	84.54	13.25
+90			3.61	98.78	84.85	13.93
+55			3.38	99.01	85.17	13.84
31+20			3.43	98.96	85.48	13.48
30+85			3.67	98.72	85.80	12.92
30+50	Pd. Tang.		3.74	98.65	86.11	12.54
30+18.95	BK. Tang. Δ Lt 31°44'		4.66	97.73	86.39	11.34 OK
30+18.95 = MH #2			4.80	97.59	86.39	11.20 OK
		6.07 102.39			96.32	

Void

P. 67

See New Grades And Location, 61/62



N.W.B.P. Viking Way & Torrey Pines Rd. FB. 1847-31

La Jolla Trunk Sewer #1
From Pumping Plant
To Prospect Pl. Cont. from P-46

$\mathbb{E}$ Rail below	8.07	92.72		84.65		
				0.05		
$\mathbb{E}$ Rail → FB-1847-38				84.65		
CK. B.M.	12.35		3.31	84.69		
39+83.42			9.50	78.41	76.86	1.55
Fd. Tan						
39+51.42			2.97	84.94	78.00	6.94
Bk. Tan. Δ Lt 87°49'						
39+51.42	MH #9		3.48	84.48	78.00	6.48
39+20			5.04	82.87	78.27	4.60
+85			5.04	82.87	78.58	4.29
+50			4.72	83.19	78.90	4.29
38+15			4.63	83.28	79.21	4.07
T.P.	4.53	87.91	9.55	83.38		
+80			9.55	83.38	79.53	3.85
+45			9.45	83.48	79.84	3.64
37+10			9.02	83.91	79.16	4.75
+75			8.79	84.14	79.47	4.67
+40			8.67	84.26	80.79	3.47
36+05			8.88	84.05	81.10	2.95
35+70			8.55	84.38	81.42	2.96

92.93

Void

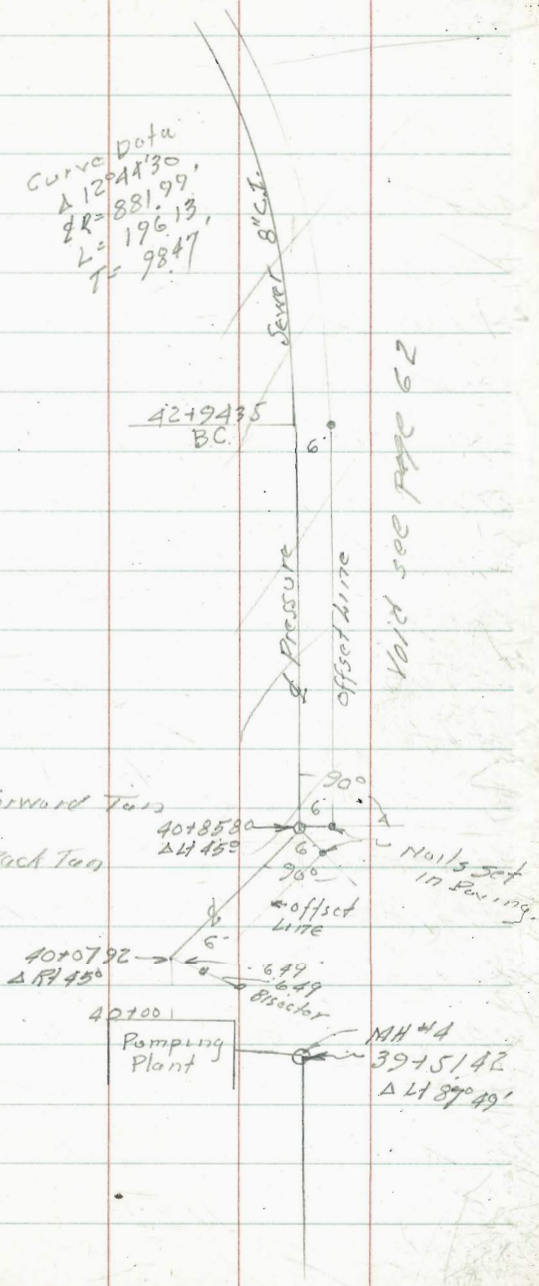
For New Grades See P-68

La Jolla Trunk Sewer #1

Grades

					El. Flow Line	Cuts	
T.P.	12.71	117.70	0.28	104.99			
43+60 = Bk			0.28	104.99	100.80	4.19	
43+40			1.46	103.81	99.41	4.40	
43+20			2.70	102.57	98.03	4.54	
43+94.35 = B.C. L.H.			4.41	100.86	96.26	4.60	
+50			7.68	97.59	93.21	4.38	
42+00			11.18	94.09	89.76	4.33	
T.P.	12.70	105.27	0.15	92.57			
41+60 = Bk			1.41	91.31	87.00	4.31	
41+20			3.80	88.92	85.03	3.89	
40+85.8 } Δ Lt 45°			5.25	87.47	83.38	4.09	Rt Δ to Forward Tan
40+85.8			5.33	87.39	83.38	4.01	Rt Δ to Back Tan
40+45			6.08	86.64	81.46	5.18	
40+07.92 = Δ Rt 45°			10.78	81.94	79.67	2.27	
40+00			12.77	79.95			

92.72
5



La Salle Trunk Sewer #1

Grades

					Elev. Flowline	Cuts.
Cont. P50						
48+25			8.56	121.78	116.36	5.42
48+00=Brk.			9.80	120.54	114.70	5.84
47+75			10.78	119.56	113.90	5.66
47+50			11.70	118.64	113.11	5.53
47+25			12.50	117.84	112.32	5.52
T.P.	12.82	130.34	0.18	117.52		
47+00			0.73	116.97	111.53	5.44
46+75			1.63	116.07	110.74	5.33
46+49.75=B.C.H			2.57	115.11	109.94	5.17
46+00			4.51	113.19	108.37	4.82
45+50			6.53	111.17	106.79	4.38
45+23.19=D.H. 25°41			7.21	110.49	105.94	4.55
44+90.48=E.C.			8.16	109.54	104.92	4.62
44+75			8.36	109.34	104.43	4.91
44+50			9.02	108.68	103.64	5.04
44+25			9.80	107.90	102.85	5.05
44+00			10.83	106.87	102.06	4.81
43+80			11.73	105.97	101.43	4.54
		117.70				
Cont. from P-48		℄				

Walker
Johnson
Pope
Crawford

3-3-49

La Salle Trunk Sewer #1

Grades

(Completed 3-3-49)

				El. Flow Line	Cuts	
			0.04			
Grade Book 253-8			150.58			
Chk. 354+20.68			5.16 150.54			
=354+20.68			150.58-4.04			
52+51.73			5.16	150.54	144.58	
52+50			5.39	150.31	144.47	5.84
52+00			6.53	149.17	141.20	7.97
51+50			9.89	145.81	137.91	7.90
T.P.	12.91	155.70	0.10	142.79		
51+00			1.05	141.84	134.60	7.24
50+50			5.00	137.89	131.28	6.61
50+00			8.95	133.94	127.96	5.98
49+87.72 } Δ 7°43'15" Rt. Turned			9.98	132.91	127.14	5.77	6' Rt. Δ to Forward Tan.
49+87.72			10.08	132.81	127.14	5.67	6' Rt. Δ to Back Tan.
T.P.	12.63	142.89	0.08	130.26		
49+50			0.37	129.97	124.64	5.33
49+00			4.03	126.31	121.33	5.98
48+70			6.01	124.33	119.34	4.99
48+93.64=E.C.			7.49	122.85	117.60	5.25
		130.34				

Drain – Imperial Ave
& 15th Cont. from P-39-40

Plan 7436

GRADES NE Return

			El Curb
0+31.42 = E.C.	3.70	8.43	8.43
0+23.20 = N.Y. Inside Edge Inlet	3.83	8.30	8.30
0+15.71 = ℄ Inlet = ℄ Return	3.93	8.20	8.20
0+08.20 = Beg. Inside edge Inlet	3.90	8.23	8.23
0+00 = B.C. 20' C6 R.	3.72	8.41	8.41

Grades S.E. Return

0+31.42	5.39	6.74	7.80
0+23.20 = 5½" Inside Inlet.	4.29	7.84	7.84
0+15.71 = ℄ Inlet = ℄ Return	4.23	7.90	7.90
0+08.20 = Beg. Inlet = Inside edge	4.17	7.96	7.96
0+00 = B.C. 20' C6 R.	4.03	8.10	8.10

Grades 18" Conc. Pipe

			El. Flow Line
0+61.36 = End Pipe	4.15	7.98	1.00 = Flow to West } Cuts
0+30	3.83	8.30	1.66 0.50 = Flow to North } 6.98
0+00	3.78	8.35	2.30 6.64
4.20	12.13	7.93	6.05

BM on No. 1
0+21.33 P.39

Cuts

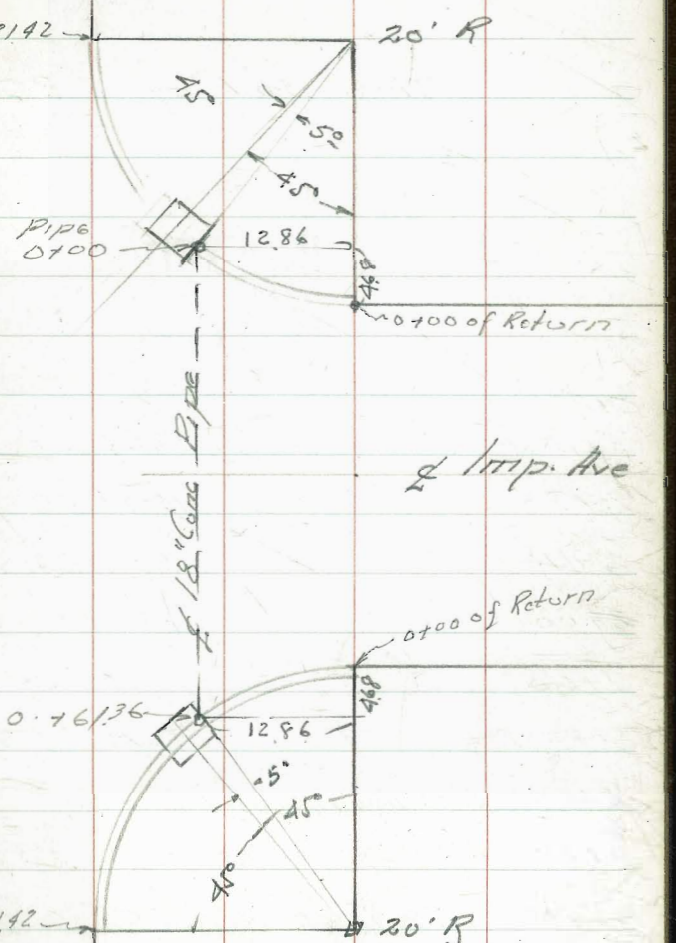
Grade 0+31.42 — 20' R

"

"

"

"



Walker
Johnson
Pope
Crawford
3-7-49

Pacific Riviera Villas
Culvert Grades Blk 3, 4
Re Stake Portion
on account Stakes being Lost.

Orig. Staking P-36

				Fl. Flow Line	Cuts	offsets
			001			
Chk			56.10			
3+10 P-36		12.05	56.11	45.24	10.87	6' Lt.
2+80		12.21	55.95	47.10	8.85	"
2+40		11.82	56.34	49.57	6.77	"
2+00		8.81	59.35	52.06	7.29	"
1+60		7.25	60.91	54.54	6.37	"
1+24=Bk		6.64	61.52	56.77	4.75	"
1+23=Orig. Bk Now inaccessable				56.83		
0+80		3.65	64.51	58.00	6.51	"
0+40	2.21	68.16	65.95	57.09	B.M. on stake 0+40 P-36	

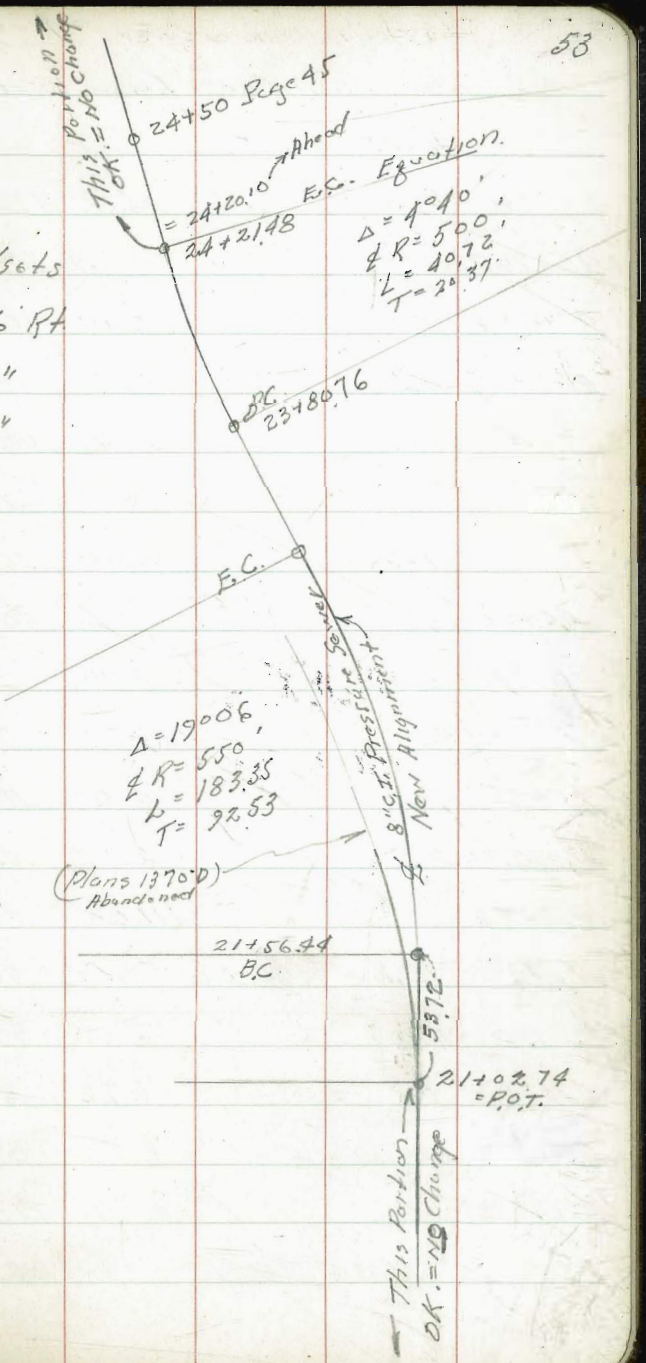
LA JOLLA TRUNK SEWER #1

New Alignment from Station

21+02.74 to 24+20.10

Reason for change to this Location:
To clear 6" High Pressure Gas Main at Station 22+25 - order - Gabrielson 3-9-49 Fl. Flow

				Cuts	offsets
=24+20.10 Ahead					
24+21.48 } =Equation =E.C.	2.79	88.49	84.12	4.37'	6' Rt
24+01.12	3.19	88.09	83.52	4.57'	"
23+80.76 = BC. Rt	4.23	87.05	82.92	4.13'	"
23+39.79 = E.C.	4.47	86.81	81.74	5.07'	"
23+13.58	4.85	86.43	80.98	5.45'	"
22+87.39	5.19	86.09	80.23	5.86'	"
22+61.20	5.74	85.54	79.48	6.06'	"
22+35.01	6.34	84.94	78.73	6.21'	"
22+08.82	6.96	84.32	77.98	6.34'	"
21+82.63	7.65	83.63	77.23	6.40'	"
21+56.44 = BC. Rt	8.51	82.77	76.47	6.30'	"
10.14	9.28	8.14 PAA			
21+02.74 = Plan BC. = P.O.T.	New Alignment		74.91		



La Jolla Trunk Sewer #1 - GRADES

New Alignment from Station 40+85.80 to

				Stations 4' offset	Elev. Floor	Cuts
45+60 = E.V.C.			4.87	110.79	107.35	3.44
52° Diag Brk						
45+26.22 = ℄ Pt. Rt			5.62	109.94	106.22	3.72
P.V.C.						
44+89.43 = E.C.			6.01	109.53	105.25	4.30
44+75 = E.V.C.			6.37	109.19	104.95	4.24
+50 Brk			6.88	108.68	104.15	4.53
T.P.	7.35	115.56	0.13	108.21		
+25 Brk			0.49	107.85	103.40	4.45
44+00 Brk			1.69	106.70	102.35	4.35
+75 Brk			2.79	105.57	100.90	4.67
+50 Brk			4.48	103.86	99.80	4.06
43+25 = P.V.C.			6.07	102.27	98.19	4.08
42+98.77 = B.C.			7.57	100.77	96.44	4.33
42+50			11.03	97.31	93.18	4.13
T.P.	12.26	108.34	0.43	96.08		
42+00 E.V.C.			2.67	93.84	89.84	4.00
41+50 Brk			6.22	90.29	86.50	3.79
fwd. Tan.						
41+03.22 = 4' Ret. Bk. Tan. } P.V.C.			8.59	87.92	84.25	3.67
41+03.22 = 6' Rt			8.79	87.72	84.25	3.47
	11.86	96.51		84.65		

2 No. 1. F.B. 1897-38 Sta - 12+35

La Jolla Trunk Sewer #1 - Grades

New Alignment from Station 40+85.80 to 52+63.45

				4' offset El. Flow	Cuts
50+40			4.46	136.26	132.56	3.70
50+15			6.79	133.98	130.78	3.20
49+91.30	=B.C		8.66	132.06	129.09	2.97
49+50			11.32	129.40	126.14	3.26
T.P.	12.27	140.72	0.07	128.45		
49+00	E.C.C.		2.40	126.12	122.58	3.54
48+49.86	Brk. =E.C.		5.61	122.91	119.40	3.51
+25	Brk.		6.86	121.66	118.20	3.46
48+00	P.C.		8.12	120.40	117.00	3.40
+75			9.03	119.49	115.99	3.50
+50			9.69	118.83	114.98	3.85
+25			10.48	118.04	113.97	4.07
47+00			11.31	117.21	112.97	4.24
+75			12.31	116.21	111.95	4.26
T.P.	13.05	128.52	0.09	115.97		
+50.67	=B.C.		0.33	115.23	110.97	4.26
+19.17	=E.C.		2.10	113.46	109.69	3.77
46+03.82			2.84	112.72	109.09	3.63
+88.48	=B.C.		3.44	112.12	108.49	3.63
		115.56				

LaSolla Trunk Sewer #1 · Grades
New Alignment from Station
40+85.80 to 52+63.45 4' offset

Check					0.01 / 149.80		
354+00 = 5' Rt				3.45	149.79	G-253	P-8
Grade Book 253							
354+02.09 = 5' Rt MH.	12" Proj.	Gravity	Line	3.35	149.89	142.95	6.94
52+63.45 - Plug End				3.58	149.66	143.15	6.51
+33	Brk.			4.00	149.24	142.40	6.84
52+00	Brk			5.64	147.60	141.35	6.25
+50	Brk			8.48	144.76	139.10	5.66
51+00	Brk			12.25	140.99	136.40	4.59
T.P.	12.58	153.24		0.06	140.66		
	Brk						
50+60.09 = E.C.				2.84	137.88	134.00	3.88

140.72

Walker
Johnson T + Holes
Pope
Crawford
9-10-49

Lg Solla Trunk Sewer #1
& Profile Levels
New Alignment from Station

40+85.80		to 52+63.45		& Stations	
45+88.48 = B.C.			3.19	112.37	✓
+60			4.56	111.00	✓
45+26.22 Δ Pt. Rt.			6.14	109.42	✓
44+89.43 = E.C.			6.38	109.18	✓
+75			6.72	108.84	✓
+50			7.24	108.32	✓
T.P.	7.35	115.56	0.13	108.21	
+25			0.81	107.53	✓
44+00			1.90	106.44	✓
+75			3.10	105.24	✓
+50			4.57	103.77	✓
43+25			6.07	102.27	✓
42+98.77 = B.C.			7.69	100.65	✓
42+50			11.24	97.10	
T.P.	12.26	108.34	0.43	96.08	
42+00			2.98	93.53	
41+50			6.46	90.05	
41+03.22 = Δ Pt. Lt.	45°		8.90	87.61	
	11.86	96.51		84.65	

2 Nail F.B. 1847-38 Sta. 12+35

Walker
Johnson
Pope
Crawford
3-10-49

℄ Profile Levels

La Jolla Trunk Sewer #1

New Alignment from Station 40+85.80 to 52+63.45 ℄ Stations

50+60.09 = E.C.			3.10	137.62	
+40			4.73	135.99	
50+15			6.75	133.97	
49+91.30 = B.C			8.56	132.16	
49+50			11.59	129.13	
T.P.	12.27	140.72	0.07	128.45	
49+00			2.78	125.74	
48+49.86 = E.C.			5.89	122.63	
+25			7.13	121.39	
48+00			8.40	120.12	
+75			9.26	119.26	
+50			10.05	118.47	
+25			10.86	117.66	
47+00			11.64	116.88	
+75			12.46	116.06	
T.P.	13.05	128.52	0.09	115.47	
46+50.67 = B.C			0.52	115.04	
46+19.17 = = E.C.			1.92	113.64	
46+03.82			2.60	112.96	
		115.52			

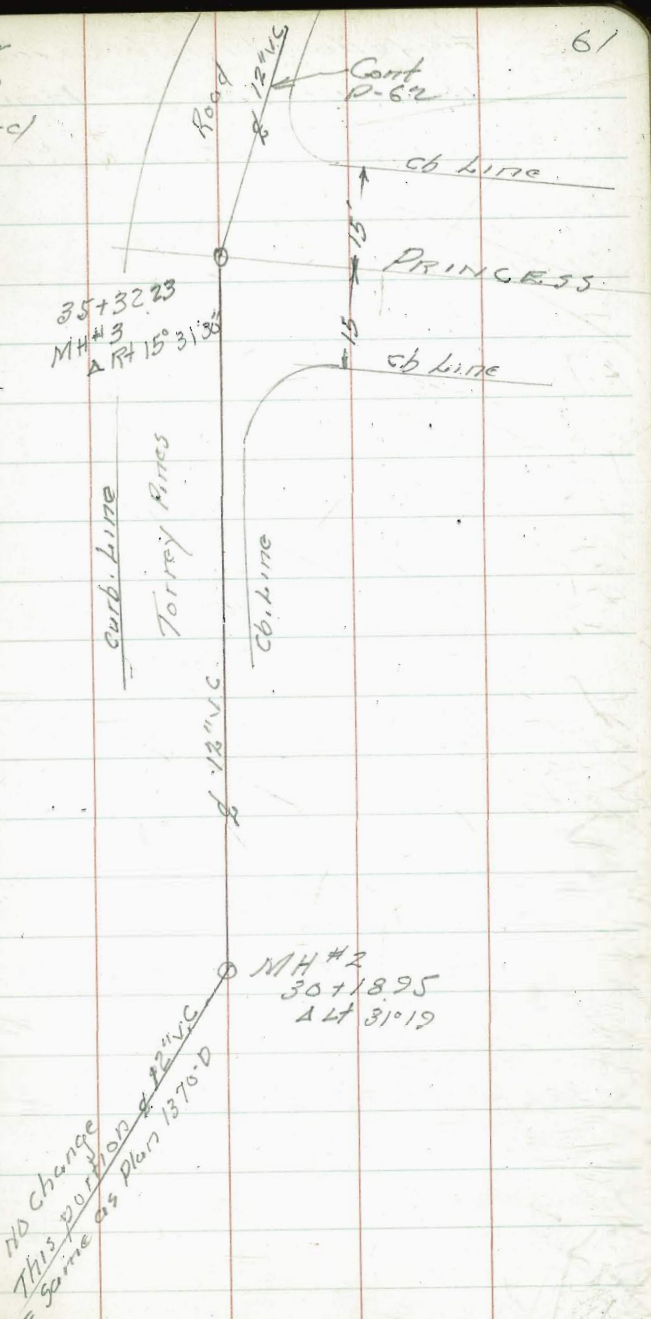
La Jolla Trunk Sewer #1

Walker — New Alignment from Station 40+85.80 to 52+63.45 & Stations & Profile Levels

				0.01		
				149.80		
354+00	5' Rt		3.45	149.79	G-253	P-8
52+63.45 = Plug End			3.38	149.86		
+33			4.32	148.92		
52+00			5.68	147.56		
+50			8.53	144.71		
51+00			12.47	140.77		
T.P.	12.58	153.24	0.06	140.66		
		140.72				

New Location for Change in
Alignment Lalolla Trunk Sewer
No 1 from MH #2 - 30+18.95
To Pump Station in Charlotte St.
Thence from Pump Station
To Prospect Place
Reason for change: To permit a
better Flow Traffic During Construction
Per Request. Ed Gabrielson
3-10-49

Walker
Johnson
Pope
Crawford
3-10-49



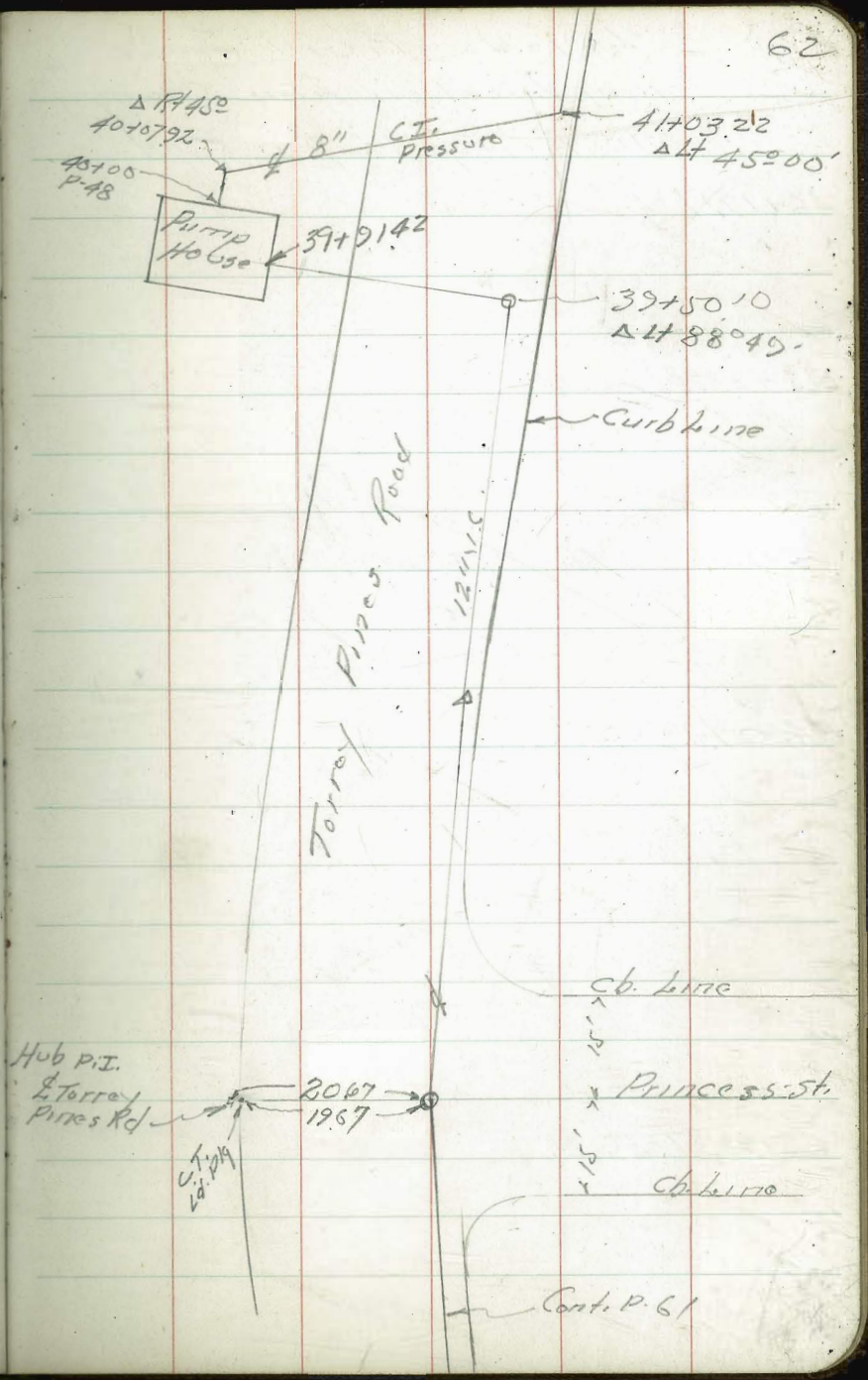
La Jolla Trunk Sewer #1
New Location of Alignment
in Torrey Pines Road

39+91.42 = Pump House

39+50.10

36+70 = Rt 1°51'

35+32.23 = MH #3 Δ Rt 15°31'30"



La Jolla Trunk Sewer #1
New Location Line Change in Torrey Pines Road

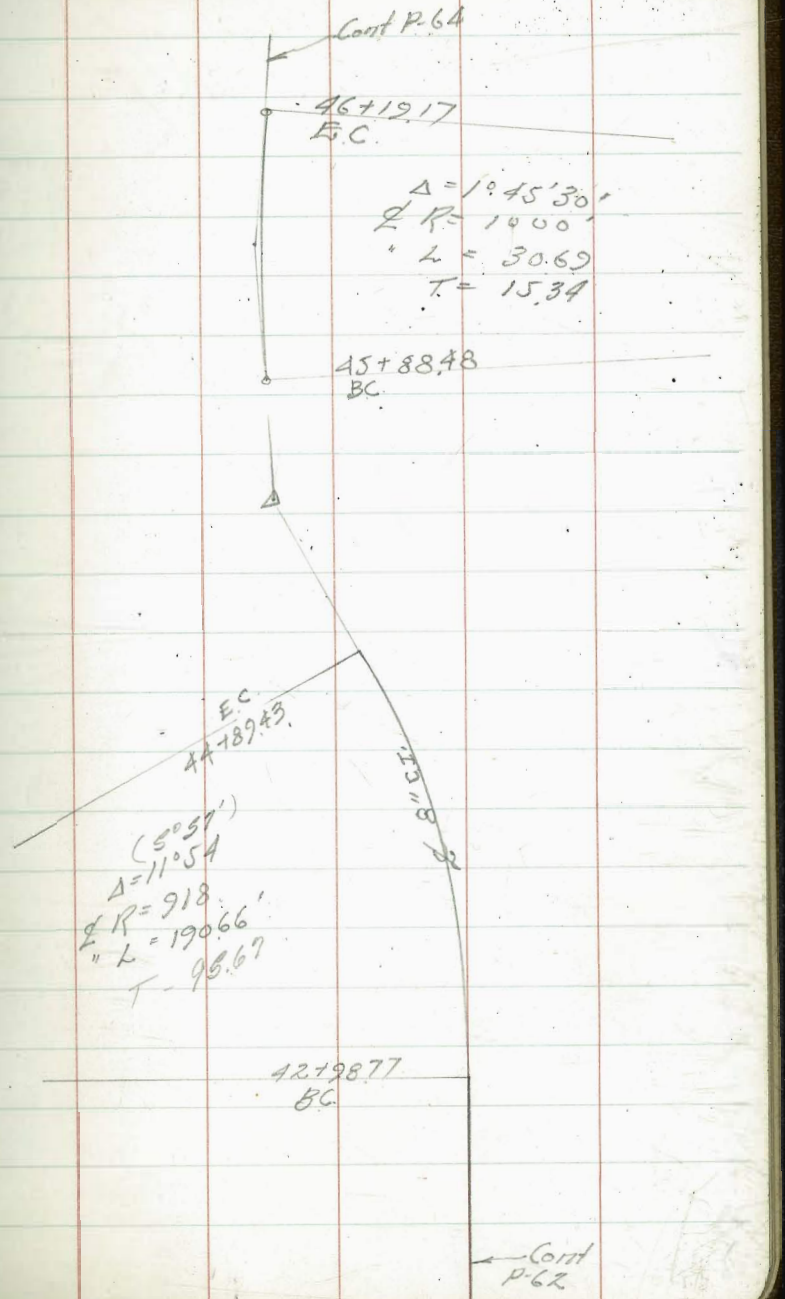
46+19.17 = E.C.

45+88.48 = B.C. Rt.

45+26.22 = Δ Rt. 23°28'30"

44+89.43 = E.C.

42+98.77 = B.C. Lt.

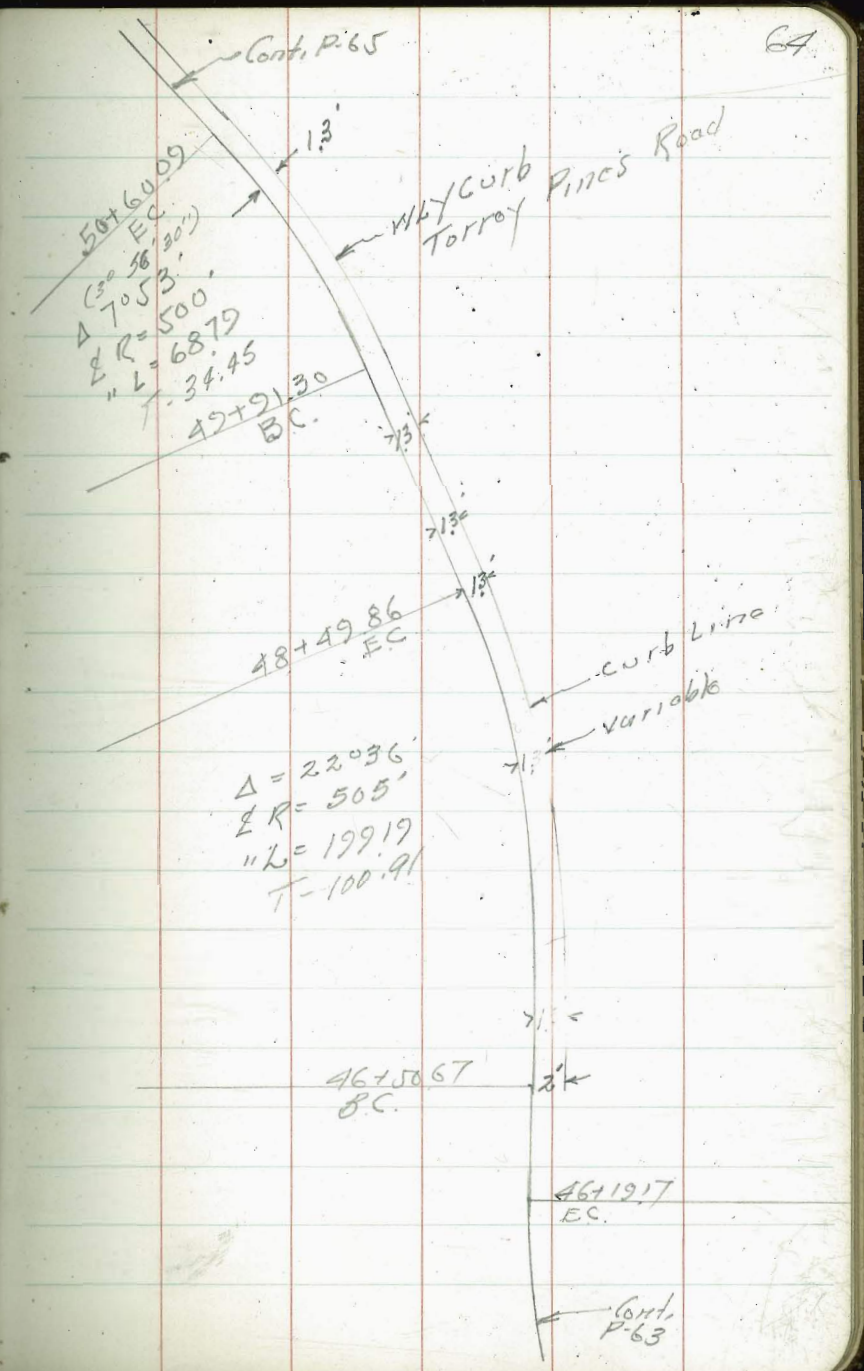


La Jolla Trunk Sewer #1

New Location Alignment

in Torrey Pines Road

46+50.67 = B.C. Lt.

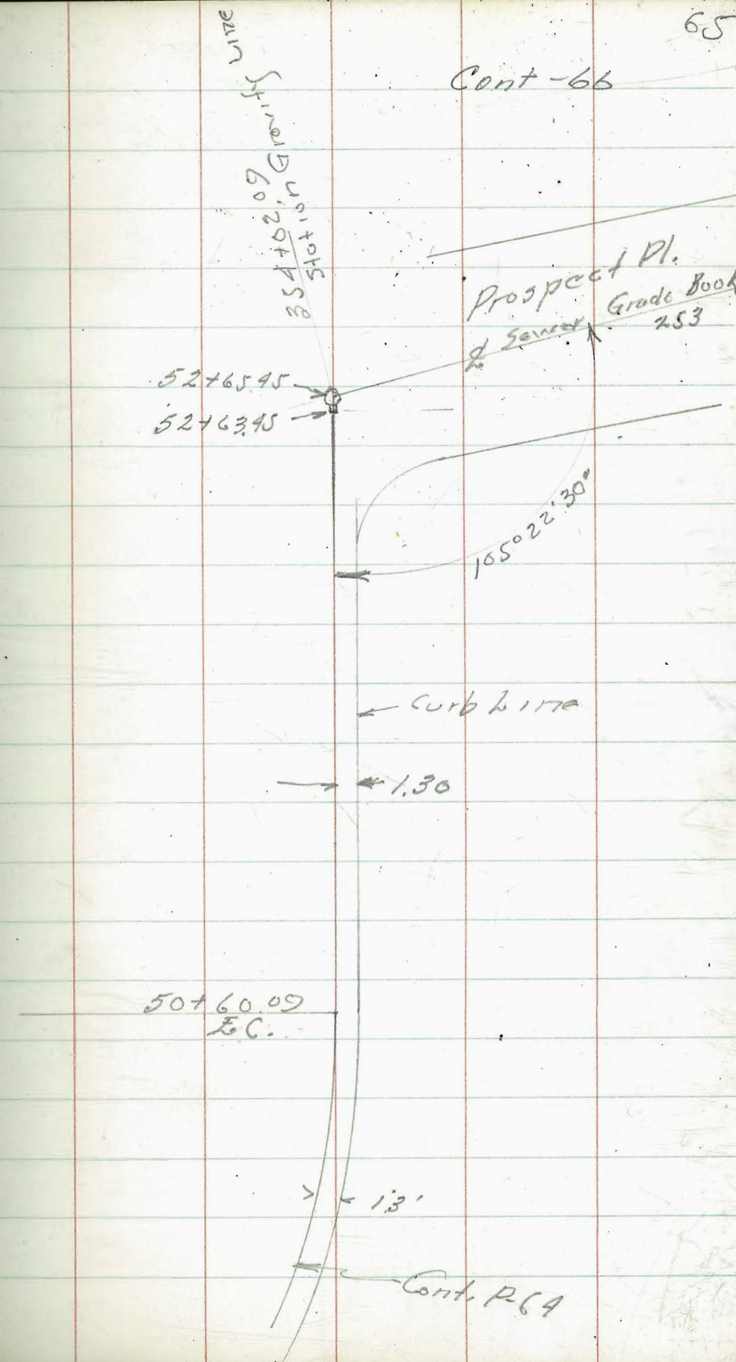


La Jolla Trunk Sewer #1
New Location of Alignment
in Torrey Pines Road

52+65.45 = ℄ M.H.

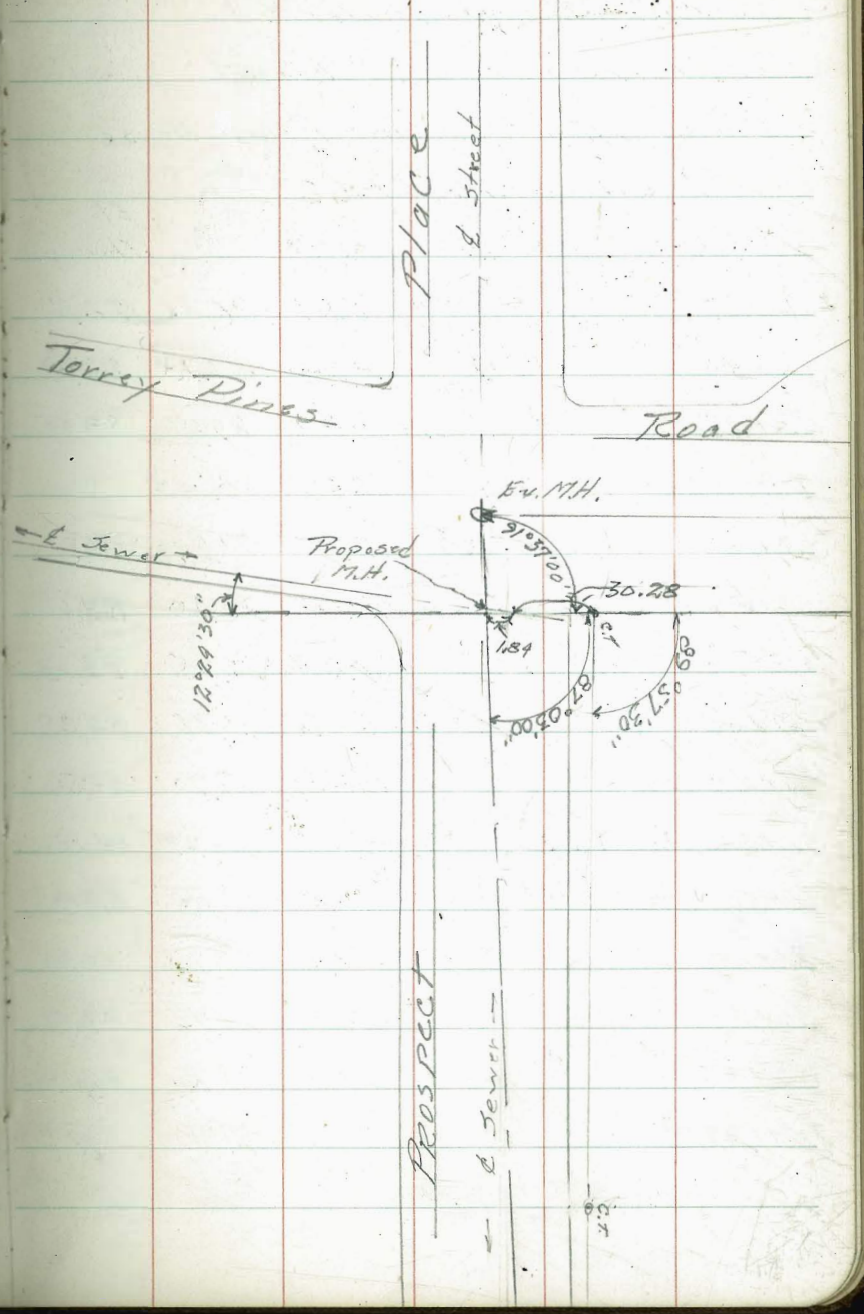
52+63.45 = Plg. end Stub to MH

Cont - 66



Intersection Prospect Place & Torrey Pines Road Ties to & Sewer in Both Directions

3-17-49
Johnson
Pope
Crawford



— GRADES —

La Jolla Trunk Sewer #1

in Torrey Pines Road

from MH #2 to Pump House

Location P-61-62

Cont. P&B					El. Flow Line	Cuts		Z Profile Elev. = Top Paving For Plotting.
34+65			5.61	86.46	82.37	4.09		86.16
34+30			4.34	87.73	82.69	5.04		87.31
33+95			2.40	89.67	83.00	6.67		89.37
TP	1.62	92.07	12.69	90.45				
33+60			11.45	91.69	83.31	8.38		91.36
33+25			9.64	93.50	83.61	9.89		93.17
32+90			7.89	95.25	83.93	11.32		95.16
32+55			6.29	96.85	84.25	12.60		96.93
32+20			5.24	97.90	84.56	13.34		98.03
31+85	0.90 D		4.21	98.93	84.87	14.06		98.76
31+50			4.08	99.06	85.19	13.87		98.84
31+15			4.18	98.96	85.50	13.46		98.76
30+80			4.40	98.74	85.82	12.92		98.44
30+45			4.57	98.57	86.13	12.44		98.12
30+18.95				97.73 P-26	86.39	11.34		
	6.82	103.14		96.32				

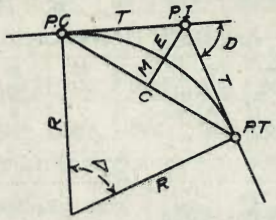
BM NAVD 8.P. Viking Way & Torrey Pines Rd.

Lo Salle Trunk Sewer #1

Grades

				El. Flowline	Cuts.	Top Paving & profile Elev. For Plotting.
			P-47			
39+91.42 = End at Ramp House			78.47	76.86	1.55	
39+58	2.77%		3.77	84.46 (93) 77.79	6.67	
39+50.10		MH #4	3.49	84.74	78.01	6.73	84.39
39+50.10		Δ 4 88°49	4.14	84.09	78.01	6.08	
39+15			6.11	82.12	78.32	3.80	82.62
38+80			5.39	82.84	78.64	4.20	82.92
38+45	0.90%		4.83	83.40	78.95	4.45	83.16
38+10			4.85	83.38	79.27	4.11	83.29
37+75			4.51	83.72	79.58	4.14	83.42
T.P. 37+40	442	88.23	8.26	83.81	79.90	3.91	83.55
37+05			8.08	83.99	80.21	3.78	83.71
36+70 = Δ Rt 1°51'			7.86	84.21	80.53	3.68	83.94
36+35			7.77	84.30	80.84	3.46	84.04
36+00			7.66	84.41	81.16	3.25	84.24
35+65			7.98	84.09	81.47	2.62	84.56
35+32.23 = Δ Rt 15°31'30"	MH #3		7.31	84.76	81.77	2.99	85.09
35+00	0.20%		7.09	84.98	82.06	2.92	85.35
		92.07					

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=R tan $\frac{\Delta}{2}$ (3) Length of Curve=L=$100\frac{\Delta}{D}$ (4)

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

External=E=T tan $\frac{\Delta}{4}$-(7)=R ÷ cos. $\frac{\Delta}{2}$—R(8)=R exsec $\frac{\Delta}{2}$(9)

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

EXPLANATION AND USE OF TABLES

Stations.—Given P. I.=Sta. 161+60.35 to find Sta. of P. C. and P. T. Δ=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 Δ=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.

MADE IN U.S.A.