

1238

Torrey. New Albany



*George Bailey*  
*4928 Vista Place*

**ENGINEERING DEPARTMENT,  
SAN DIEGO,  
CITY OF  
CALIFORNIA**

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DEC 22 1964



JAEGER  
Bailer  
Claret

Torrey Pines Road

Febr. 15<sup>th</sup> 1928

STA.	Dist	Defl. &	V.A.	Diff. Elev.	Elev.	%	Elev.	Cut
	177.00							
20+79		38° 10' R	7° 13' -					
	71.00							
20+08		12° 53' L	9° 22' -					
	251.00							
17+57 ✓		45° 56' L	1° 57' -		187.41			
	220.00			-46.38				
15+37° ✓	✓	29° 27' - L	12° 27' -		233.79			
	84.00			-3.07				
14+53° ✓	✓	3° 59' - L	2° 05' -		236.86			Outer Edge of Road
	39.00			+4.45				
14+14° ✓		7° 09' - L	6° 35' +		232.41			Outer Edge of Road
	97.00			-5.80				
13+17° ✓		4° 11' - R	3° 25' -		238.21			Outer Edge of Road
	48.00			-2.02				
12+69° ✓		27° 58' - R	2° 28' -		240.23		243.95	Outer Edge of Road.
	292.00			-15.77		6%		
9+77.00 ✓	✓	56° 26' R	3° 05' -		256.41		258.65	
	315.00			-29.14		6%		
6+62.00		3° 19' L	5° 20' -		285.55		277.55	8.00
	116.00			-8.73				
5+46.00	✓	11° 16' R	4° 20' -		294.28			3.00
	146.00			-5.72				
4+00			2° 15' -		300.00			
0+00					302.90			
						BC. of Curve		



STA.	DIST	Defl. $\angle$	V.A.	Diff. El.	Elev.
------	------	----------------	------	-----------	-------

25+35

279.00 70°19'

22+56

6°48'



Change from Sta. 17+57 of Traverse on Page 1

3

STA.	Dist.	Defl. $\angle$	V.A.	Diff. Elev.	Elev.
36+18	81.00	0°-00'	+0°05'	+0.14	97.08
35+37	147.00	0°-00'	-9°-58'	-25.06	71.88
33+90	68.00	4°13'-L	3°44'	-4.42	96.94 ✓
33+22	144.00	27°46'-L	+0°44'	+1.84	101.36 ✓
31+78	64.00	304°04'-L	-0°15'	-0.30	99.5 ✓
31+14	282.00	28°-11' R	5°59'-	-29.24	99.8 ✓
28+32	92.0	31°31'-L	4°12' +	+6.79	129.06
27+40	190	70°-53'-L	1°09' +	+3.87	122.27
25+50	290. ✓	75°19' R	6°4'	-30.47	118.40
22+60	185.	3° 7' L	9°30	-30.12	148.87
20+75	240	21°49' R		-8.30	178.99
18+35	78.00	59°41'-L	0°04'-	-0.12	187.29
17+57					187.41

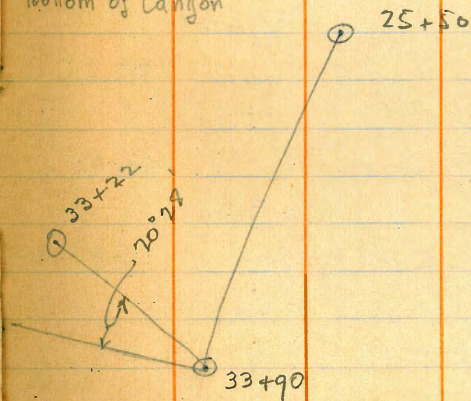


Change from 25+50 on.

STA.	Dist.	Defl. $\angle$	V.A.	Diff. El.	Elev.
38+68 ✓					43.13
	560'	71° 10' incl.	1° 33' -	-14.95	
35+36 ✓					14.40
	228'		11° 15' -	-43.68	
33+08 ✓					58.08
	152'	15°-18'-R	7° 12' -	-18.89'	
31+56 ✓					77.18
	50'	10° 09' -R		-3.67'	
31+06 ✓					80.98
	108	7° 49' -R		-8.43'	
29+98 ✓					89.83
	78	20° 28' (incl) ✓		-7.06'	
33+90 = 29+20 ✓					96.94
25+50					

= 44+64 Page 5

Bottom of Canyon



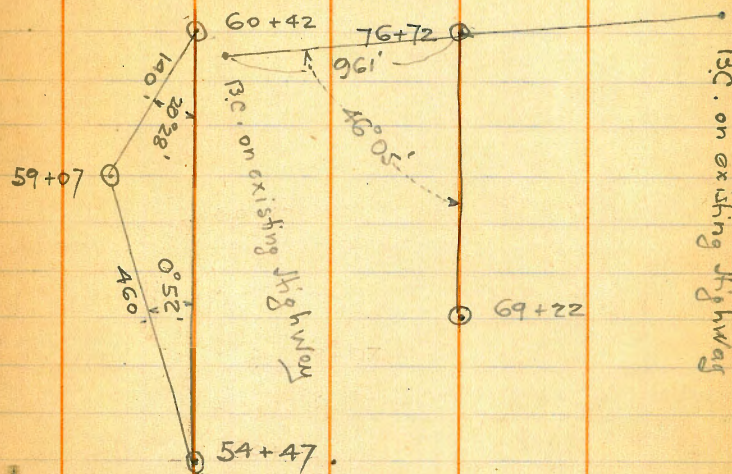
on Traverse on Page 3. Backsight on 33+22



Continued from Page 3

Sta.	Dist.	Def. $\rightarrow$	V.A.	Diff. El.	Elev.
76+92					-35.19 ✓
	750			+6.53	
69+42		P.O.T.	0°30' +		-41.72 ✓
	420			-9.28	
65+22		P.O.T.	1°16' -		-32.44 ✓
	480'			-39.21	
59+07					6.18
	460'			-16.83	
60+42 ✓		3°19' - L	4°42' -		6.77
	595'	0°52' - L	2°06' -		-16.24 ✓
54+47		5°15' - R	1°35' -		23.01
	204'			-17.64 ✓	
52+43		P.O.T.	2°5' -		40.65
	490'			—	
47+53		47°26' R	Level		40.65
	289'			-3.25	
44+64		69°51' - L	0°40' -		43.90 = 38+68 Page 4
	310			-23.71	
41+54		9°26' - L	4°25' -		67.61
	236			+0.68	
39+18		43°10' - R	0°10' +		66.93
	300			-30.15	
36+18		109°17' - R	-5°49'		97.08

⊥ Road existing Pavement





Change from Sta. 25+50 on

T.P.

6

STA	DIST	DEFL	VA	DIFF. EL	ELEV	Sta	+	HI	-	Elev
						TP				248.40
							.40	248.80		
						TP	3.10	249.20	12.65	246.15
						10+84			5.4	
						10+94 <sup>12</sup>			5.6	
						11+44 <sup>18</sup>	TP	<del>4.00</del>	4.00	248.20 <del>253.20</del>
							12.10	257.30		
						11+94 <sup>10</sup>	TP		2.60	254.70
							3.70	258.40		
38+26					42.93	12+19			11.40	
	480			+9.07						
33+46		48°11L	7°5'		33.86					
	210			-55.59						
31+36		30°30'-L	15°59'-		89.45	12+44 <sup>20</sup>		12.60		
	89			-5.74				2.10		
30+47		1°59R	✓		95.19					
	130			-8.45						
29+17		37°16R	✓		103.64					
	109			-7.02						
28+08		19°7L	✓		110.66					
	94			-5.64						
27+14		7°28'-L	✓		116.30					
	164			-2.10						
25+50		66°30'-L			118.40					



8

1



































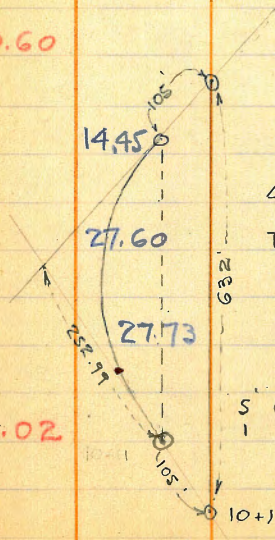




Road Location # 2 at Torrey Pines.

JAEGER }  
 CLAVER } Febr. 24/28 20  
 BAILEY }

STA.	Dist.	Defl. $\delta$	V.A.	Diff. El.	El.	Grade %	Cut	Fill
18+34 <sup>04</sup>				✓	255.59	221.27	34.32	
	108	Tangent	30' Canyon	✓				
17+26 <sup>04</sup>				✓	251.31	228.83	22.48	
	105	Tangent	30' Canyon					
16+26 <sup>04</sup> EC.		6°04'		✓	237.84	236.18	1.66	x
	100							
15+26 <sup>04</sup>		6°04'		✓	244.16	243.18	0.98	
	100							
14+26 <sup>04</sup>		6°04'		✓	240.77	250.18		9.41
	100							
13+26 <sup>04</sup>		6°04'	✓	✓	267.78	257.18	10.60	
	100							
12+26 <sup>04</sup>		6°04'	✓	✓	249.73	264.18		
	100							
11+26 <sup>04</sup>		0°36 $\frac{1}{2}$ '		✓	243.58	271.18		
	10.04							
11+16 BC.				✓	244.15	271.88		
10 <sup>04</sup>	105							
10+11				✓	291.25	279.23	12.02	
10 <sup>05</sup>	190							
8+21				✓	338.67			
	159							
6+62					333.15			



$\Delta = 61^{\circ}53'$   
 $T = 252.77$   
 $R = 473.50$   
 $L = 511.41$   
 Defl.  $\delta = 6^{\circ}04'$   
 5' Chords = 100'  
 1 " " = 10.04' Defl.  $\delta = 36\frac{1}{2}'$



STA.	Dist.	Defl. $\alpha$	V.A.	Diff. El.	Elev.	Grade 7%	Cut	Fill
31+32				✓	86.37	130.41 ✓		44.04
	100			-15.34				
30+32	E.C.	4°-39'-L	-8°-56'	✓	92.83	137.41 ✓		44.58
	100 ✓			-18.30				
29+32	x ✓	4°-39'-L	-10°-44'	✓	100.79	144.41 ✓		43.62
	100 ✓			-23.47				
28+32	x ✓	4°-39'-L	-14°-00'	✓	115.81	151.41 ✓		35.60
	100 ✓			-31.92				
27+32	x ✓	4°-39'-L	-19°-50'	✓	147.73	158.41 ✓		10.68
	100 ✓			-25.80				
26+32		Tangent	-15°-32'	✓	173.53	165.41 ✓	8.12	
	100 ✓			-19.00				
25+32	x ✓	9°-18'-L	-11°-10'	✓	192.83	172.41 ✓	20.12	
	100 ✓			-13.35				
24+32		Tangent	-7°-45'	✓	205.88	179.41 ✓	26.47	
	100 ✓			-4.65				
23+32 <sup>00</sup> ✓	x ✓	9°-18'-L	-2°-40'	✓	210.53	186.41 ✓	24.12	
	200			-20.22				
21+32 <sup>00</sup>	B.C.	9°-18'-L	-5°-50'	✓	230.75	200.41	30.34	
	204.96							
19+27 <sup>04</sup>				✓	238.39	214.76	23.63	
	93		-4°-45'	-17.20				
18+34 <sup>04</sup>			-10°-30'	✓	255.59	221.27	34.32	



STA.	Dist.	Defl. $\angle$	V.A.	Diff. El.	Elev.	Grade %	Cut	Fill
47+04				✓	36.59			
	100			-30.84				
46+04			-4°26'	✓	40.19			
	100			-27.24				
45+04			-5°14'	✓	56.01			
	100			-11.42 ✓				
44+04			-5°36'	✓	57.95			
	100'			-9.48 ✓				
43+04	4		-5°28'	✓	67.43	48.37	23.00	
	124			-17.8				
41+80				✓	69.21	57.05	22.16	
	681			-23.76				
37+99			-2°00'	✓	79.68	83.72	5.04	
	166'			-6.13				
36+33				✓	85.81	95.34	9.53	
	134			-7.17				
34+99 ✓				✓	92.98 ✓	104.72 ✓		1.74
	67'			+6.61				
34+32			+1°02'	✓	86.37	109.41 ✓		23.04
	100			~				
33+32			0°00'	✓	81.71	116.41 ✓		34.70
	100'			-4.66				
32+32'			-1°20'	✓	80.39	123.41 ✓		43.02
	100'			-5.98				
31+32			-3°26'	✓	86.37	130.41 ✓		44.04



STA.	Dist.	Defl. x	V.A.	Dist. El.	Elev.	El. 7% Sr.	Cut	Fill
57+24	P.I.			✓	21.14			
	272.59	Tangent						
54+51 <sup>91</sup>	B.C.			✓	14.08			
	47.41			-5.49				
54+04			-1°04'	✓	7.5v	End of Slough	El. Water Level	
	250			-12.05				3 pm. 28 <sup>th</sup> Febr.
51+96				✓	7.52	Beg. " Slough	" " "	
	42'							
51+54	Δ		-2°45'	✓	19.57			
	50'			-47.86				
51+04			-3°14'	✓	22.39			
	100			-45.04				
50+04			-3°14'	✓	22.77			
	100			-44.66				
49+04			-3°46'	✓	23.63			
	100			-43.80				
48+04			-4°12'	✓	28.33			
	100			-39.10				
47+04			-4°30'	✓	36.59			



Sta.	Dist.	Defl. $\angle$	V.A.	Diff. El.	Elev.	El. Grade	Cut	Fill
59+62 <sup>23</sup>		Tangent						
	10.8 $\checkmark$	EC.	0°31'-R	—	21.14			
59+51 <sup>41</sup>	100'		0°31'-R	—	21.76			
58+51 <sup>41</sup>	100'		4°47'-R	—	21.76			
57+51 <sup>41</sup>	100'		4°47'-R	+1°06'	14.08			
56+51 <sup>41</sup>	100'		4°47'-R	0°00'	10.8 $\checkmark$			
55+51 <sup>41</sup>	100'		4°47'-R	-0°56'	14.37			
54+51 <sup>41</sup>	B.C.		4°47'-R	+0°10'	14.08			

R = 600'  
 $\Delta$  = 48°52'  
T = 272.59'



Change from Sta. 17+26 <sup>04</sup>								
STA	Dist.	Defl. $\Delta$	V.A.	Diff. El.	Elev.	El. Grad 7%	Cut	Fill
45+17 <sup>94</sup>					56.07			
	324			-22.90				
41+93 <sup>94</sup>		9°24'-L	-4°04'		78.97	56.49	22.48	
	500			-34.50				
36+93 <sup>94</sup>		Tangent			113.47	91.42	22.05	
	200			-11.00				
34+93 <sup>94</sup>		9°-28'-R			123.47	105.42	18.05	
	300			-8.37				
31+93 <sup>94</sup>	P.R.C.	14°-29'-R	-1°36'		131.89	126.42	5.42	
	360 ✓			-16.52				
28+33 <sup>94</sup>		17°28'-L	-2°38'		148.36	151.62		3.26
	354.44 ✓			-45.49				
24+79 <sup>50</sup>		17°12'-L	-7°19'		193.85	176.40	17.45	
	282.50			-44.96				
21+97		13°37'-L ✓			238.81	196.21	42.60	
	73 ✓			-13.4				
21+24 <sup>00</sup>	P.C.	3°29'-L ✓			252.21	201.32	50.89	
	48 ✓			-6.10				
20+76 <sup>04</sup>	Tangent				258.31	204.68	53.63	
	230 ✓			-5.00				
18+46 <sup>04</sup>	E.C.	11°03'-L ✓			263.31	220.78	42.53	
	120 ✓			+12.00				
17+26 <sup>04</sup>	P.C.	5°44'-L +5°46'			251.31	228.83	22.48	45' Bottom of Canyon See Page 20



STA.	Dist.	Defl. $\alpha$	VA.	Diff. El.	Elev.	7% El. Grade	Cut	Fill
------	-------	----------------	-----	-----------	-------	-----------------	-----	------

5582.94

20.80

580

-3.02

5002.94

Tangent -0°18'

23.82

485

-32.25

45+17.94

Tangent -3°49'



Change from Sta. 21+32 P.C. Page 21  
600' R. Curve to Left.

27

STA.

Elev.

22+67

214.60

26+12

175.65

29+72

111.15

31+62 P.R.C.

115.16



"A" Line  
Location Survey for Torrey Pines Road.

9+94 <sup>15</sup>	B.C.
103.13	
8+91 <sup>02</sup>	E.C.
	7
8+60 <sup>17</sup>	0°53'-L
	6
8+10 <sup>14</sup>	8°36'-L
	5
7+60 <sup>11</sup>	7°10'-L
	4
7+10 <sup>08</sup>	5°44'-L
	3
6+60 <sup>05</sup>	4°18'-L
	2
6+10 <sup>02</sup>	2°52'-L
	1
5+59 <sup>99</sup>	1°26'-L B.C.
5+00	P.O.T.
3+20 <sup>85</sup>	P.O.T.
0+00	

~ Definite Location ~

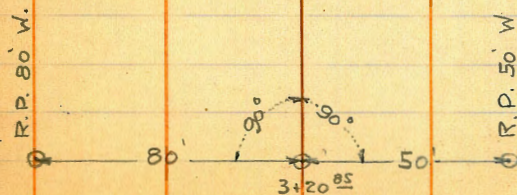
28

March 3<sup>rd</sup> 1928

JAEGER  
BAILEY  
CLAVERT

R = 1000  
Δ = 18°58' - L  
T = 167.04  
L = 331.03

Defl. 4 1°26' 6 Short L = 50.03 6 Chords @ 50'  
" " 0°53' 1 " L = 30.85 1 " 30.84'



EC. of Curve of Existing Pavement



15+44 $\frac{26}{-}$	2°23'16" R	12
14+94 $\frac{25}{-}$	2°23'16" R	11
14+44 $\frac{24}{-}$	2°23'16" R	10
13+94 $\frac{23}{-}$	2°23'16" R	9
13+44 $\frac{22}{-}$	2°23'16" R	8
12+94 $\frac{21}{-}$	2°23'16" R	7
12+44 $\frac{20}{-}$	2°23'16" R	6
11+94 $\frac{19}{-}$	2°23'16" R	5
11+44 $\frac{18}{-}$	2°23'16" R	4
10+94 $\frac{17}{-}$	2°23'16" R	3
10+44 $\frac{16}{-}$	2°23'16" R	2
9+94 $\frac{15}{-}$	2°23'16" B.C.	1

$$\begin{aligned} \Delta &= 59^{\circ}00' - R \\ R &= 600' \\ T &= 339.46 \\ L &= 617.85 \end{aligned}$$

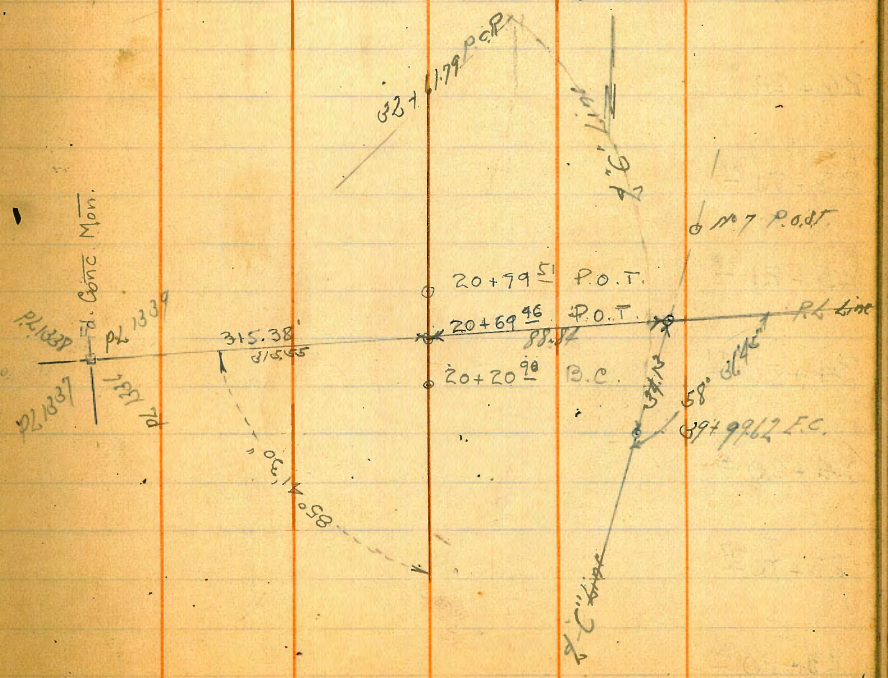
Defl. x 2°23'-16" for 12 Short L<sup>s</sup> = 50.01 Chord 50'  
 " 0°50'48" " 1 " L<sup>s</sup> = 17.73 " 17.74'



22+70 <sup>95</sup>	6
	5
22+20 <sup>94</sup>	4
21+70 <sup>93</sup>	3
21+20 <sup>92</sup>	2
20+70 <sup>91</sup>	1
20+20 <sup>90</sup>	B.C.
25+68 <sup>95</sup>	P.I.
23+78 <sup>09</sup>	P.O.T.
20+79 <sup>51</sup>	P.O.T.
17+80 <sup>58</sup>	P.O.T.
16+78 <sup>62</sup>	P.O.T.
16+12 <sup>00</sup>	E.C.
15+94 <sup>27</sup>	13

0°50'48"

$R = 600'$   
 $\Delta = 84^\circ 46' - L$   
 $T = 547.55$   
 $L = 887.67$   
 Defl.  $2^\circ 23' 16''$  for 17 Short  $L^s @ 50.01'$  Chord  $50'$   
 "  $1^\circ 47' 28''$  " 1 "  $L^s @ 37.51'$  "  $37.50'$





29 08.58

37.51 18

$$28 + 71 \overset{07}{-}$$

17

$$28 + 21 \overset{06}{-}$$

16

$$27 + 71 \overset{05}{-}$$

15

$$27 + 21 \overset{04}{-}$$

14

$$26 + 71 \overset{03}{-}$$

13

$$26 + 21 \overset{02}{-}$$

12

$$25 + 71 \overset{01}{-}$$

11

$$25 + 21 \overset{00}{-}$$

10

$$24 + 70 \overset{99}{-}$$

9

$$24 + 20 \overset{98}{-}$$

8

$$23 + 70 \overset{97}{-}$$

7

$$23 + 20 \overset{96}{-}$$



32 + 77 <sup>15</sup>		⑧
32 + 27 <sup>14</sup>		⑦
31 + 77 <sup>13</sup>		⑥
31 + 27 <sup>12</sup>		⑤
30 + 77 <sup>11</sup>		④
30 + 27 <sup>10</sup>		③
29 + 77 <sup>09</sup>		②
29 + 27 <sup>08</sup>	50.01	①
31 + 46 <sup>30</sup>		P.I.
32 + 09 <sup>80</sup>		P.O.T.
29 + 13 <sup>80</sup>	296	P.O.T.
29 + 08 <sup>57</sup>	5.23'	E.C.

$$A = 30^{\circ} 39' - R \ 4/2 = 15^{\circ} 19' 30''$$

$$R = 800'$$

$$T = 219.22$$

$$L = 427.95$$

Defl.  $\times$   $1^{\circ} 47' 27''$  for 8 short  $L^s$  @ 50.01 Chord 50'

"  $0^{\circ} 59' 54''$  " 1 "  $L^s$  27.88 " 27.87



41 + 48 <sup>55</sup>	50.03	1	B.C.
	242.65		
39 + 05 <sup>90</sup>	38.12	5	E.C.
38 + 67 <sup>78</sup>	50.03	4	
38 + 17 <sup>75</sup>	✓	3	
37 + 67 <sup>74</sup>	✓	2	
37 + 17 <sup>69</sup>			
36 + 67 <sup>66</sup>	50.03	1	B.C.
42 + 84 <sup>35</sup>			P.O.T.
	497.00		
37 + 87. <sup>35</sup>			P.O.T. Made P.I.
	218.91		
35 + 68 <sup>44</sup>			P.O.T.
33 + 55 <sup>03</sup>			E.C.
	27.88		
33 + 27 <sup>16</sup>			

$R = 1000'$   
 $\Delta = 13^\circ 39' - R \quad 4/2 = 6^\circ 49' 30''$   
 $T = 119.69$   
 $L = 238.24'$

Defl.  $\Delta$  1°26' for 4 Short LS @ 50.03' Chord 50'  
 "  $\Delta$  1°5'30" " 1 " LS @ 38.12' " 38.10'

= 32 + 86 <sup>64</sup> " B" Line



✓	7	
57+28 <sup>70</sup>		
✓	6	
56+28 <sup>69</sup>		
✓	5	
56+28 <sup>68</sup>		
✓	4	
55+28 <sup>67</sup>		
✓	3	
55+28 <sup>66</sup>		
✓	2	
54+28 <sup>65</sup>		
50.01	1	
54+28 <sup>64</sup>	B.C.	
1041.85		
43+28 <sup>79</sup>	E.C.	
38.12	5	
43+28 <sup>67</sup>		
50.03	4	
42+28 <sup>64</sup>		
✓	3	
42+28 <sup>61</sup>		
✓	2	
41+28 <sup>58</sup>		

$$R = 600'$$

$$\Delta = 42^\circ 45' - R \quad \Delta/2 = 21^\circ 22' 30''$$

$$T = 234.84$$

$$L = 447.68$$

Defl.  $\rightarrow 2^\circ 23' 16''$  for 8 Short  $L^s = 50.01'$  Chord 50'

"  $\rightarrow 2^\circ 16' 22''$  " 1 "  $L^s = 47.60'$  " 47.59'

$$R = 1000'$$

$$\Delta = 13^\circ 39' - L \quad \Delta/2 = 6^\circ 49' 30''$$

$$T = 119.69$$

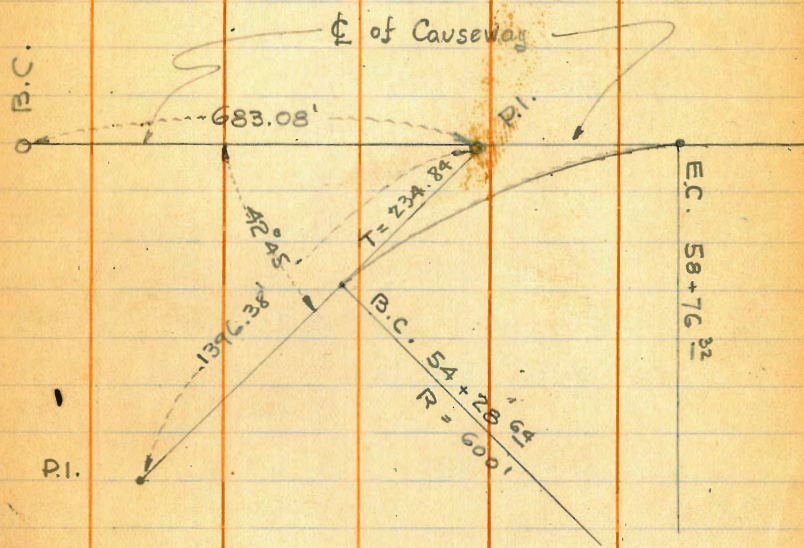
$$L = 238.24'$$

Defl.  $\rightarrow 1^\circ 26'$  for 4 Short  $L^s @ 50.03'$  Chord 50'

"  $\rightarrow 1^\circ 05' 30''$  " 1 "  $L^s @ 38.12'$  " 38.10'



Beginning of Torrey Pines Grade  
going South.



58+76 <sup>32</sup>	E.C.
47.60	9
58+28 <sup>72</sup>	
50.01	8
57+78 <sup>71</sup>	



D.M.E. along Alignment of Proposed Torrey Pines Road.  
See Page 28

Mar. 20<sup>th</sup> 1928

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	+	H.I.	-	Elev.
	55		53	
	3.22			350.00
T.P.		353.22	10.46	342.76
	4.17	346.93		
T.P.			12.70	334.23
	1.64	335.87		
T.P.			12.60	323.27
	0.76	324.03		
T.P.			13.00	311.03
	0.33	311.36		
T.P.			12.11	299.25
	5.72	304.97		
T.P.			11.14	293.83
	4.63	298.46		
T.P.			12.80	285.66
	8.46	294.12		
T.P.			12.44	281.68
	0.43	282.11		
T.P.			12.59	269.52
	0.75	270.27		
T.P.			12.91	257.36
	0.29	257.65		
T.P.			12.04	245.61
	0.07	245.68		
T.P.	30.47		12.33	233.35
			149.14	

B.M. B.C. of Existing Curve of Highway

\* 1. B.M. on South Brink of Canyon

\* 2 B.M. on North Brink of Canyon



	+	H. I.	-	Elev.
T.P.				233.35
	0.38	233.73		
T.P.			12.20	221.53
	0.16	221.69		
T.P.			12.60	209.09
	0.49	209.58		
T.P.			12.88	196.70
	0.59	197.29		
T.P.			11.96	185.33
	0.25	185.58		
T.P.			12.01	173.57
	0.17	173.74		
T.P.			12.87	160.87
	0.62	161.49		
T.P.			11.89	149.60
	1.07	150.67		
T.P.			11.46	139.21
	1.24	140.45		
T.P.			11.59	128.86
	6.41	135.27		
T.P.			12.79	122.48
	0.05	122.53		
T.P.			12.54	109.99
	0.81	110.80		

#3 B.M. on East Edge of Trail leading into Cañon.

#4 B.M.



	+	H.I.	-	Elev.
T.P.		110.80		
	1.92	100.20	12.52	98.28
T.P.			12.57	87.63
	0.17	87.80		
T.P.			10.02	77.78
	5.34	83.12		
T.P.			12.28	70.84
	1.69	72.53		
T.P.			12.77	59.76
	1.87	61.63		
T.P.			12.95	48.68
	0.62	49.30		
T.P.			11.67	37.63
	2.39	40.02		
T.P.			12.92	27.10
	0.58	27.68		
T.P.			9.89	17.79
	2.89	20.68		
			4.59	16.09
			4.49	16.19

B.M. # 5 on Trail

B.M. # 6

B.M. # 7 on South End of Slough. 16.85 CorrectE.C. of Curve joining Causeway Sta. 58+76<sup>32</sup> 15.13 CorrectP.I. " Causeway 15.23 Correct

350.00	112.18
17.47	134.79
12.24	<del>147.12</del>
30.47	394.09
410.18	
394.09	
16.09	



Check on Levels going over existing Highway

Mar. 21<sup>st</sup>

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Claremont

38

	+	H.I.	-	Elev.
	4.78	20.97		16.19
T.P.			- 0.05	20.92
	11.77	32.69		
T.P.			0.38	32.31
	13.06	45.37		
T.P.			0.11	45.26
	12.29	57.55		
T.P.			0.23	57.32
	11.87	69.19		
T.P.			0.51	68.68
	12.50	81.18		
T.P.			0.58	80.60
	12.76	93.36		
T.P.			0.41	92.95
	11.90	104.85		
T.P.			0.10	104.75
	12.40	117.15		
T.P.			0.03	117.12
	13.11	130.23		
T.P.			0.06	130.17
	12.31	142.48		
T.P.			0.09	142.39
			11.44	131.04

P.I. of Curve on Causeway



	+	H.I	-	Elev.	
				131.04	
	12.94	143.98			
			3.72	140.26	B.M. 139.21
T.P.				142.39	4
	12.37	154.76			
T.P.			0.06	154.70	
	12.27	166.97			
T.P.			0.29	166.68	
	12.24	178.92			
T.P.			0.35	178.57	
	12.45	191.02			
T.P.			0.16	190.86	
	12.05	202.91			
T.P.			0.02	202.89	
	12.11	215.00			
T.P.			0.42	214.58	
	11.99	226.57			
T.P.			0.43	226.14	
	12.46	238.60			
T.P.			0.22	238.38	
	12.49	250.87			
T.P.			0.01	250.86	
	12.50	263.36			
			0.29	263.07	



	+	H.I.	-	Elev.				
				263.07				
T.P.	12.18	275.25	0.45	274.80				
T.P.	12.04	286.84	0.12	286.72				
T.P.	13.07	299.79	0.27	299.52				
T.P.	12.56	312.08	0.51	311.57				
T.P.	12.36	323.93	1.24	322.69				
T.P.	13.12	335.81	0.23	335.58				
T.P.	8.10	343.68	1.99	341.69				
T.P.	11.31	353.00	4.33	348.67				
T.P.	6.00	354.67	3.50	351.17	350.00	B.M.	P.C. of Curve on Highway	



Correction	Levels						
+	H.I.	-		Elev.			
				350.00			
T.P.	1.74	351.74					
			10.11	341.63			
T.P.	0.47	342.10					
			12.92	329.18			
T.P.	1.36	330.54					
			12.76	317.78			
T.P.	0.04	317.82					
			12.63	305.19			
T.P.	0.11	305.30					
			11.44	293.86	293.83	B.M. #1	✓
T.P.	4.55	298.41					
			12.74	285.67	285.66	B.M. #2	✓
T.P.	8.40	294.07					
			13.09	280.98			
T.P.	0.06	281.04					
			14.80	268.24			
T.P.	0.23	268.47					
			12.98	255.49			
T.P.	0.42	255.91					
			13.06	242.85			
T.P.	0.20	243.05					
			11.84	231.21			
T.P.	0.23	231.44					
			12.33	219.11			



	+	H. I.	-	Elev.				
T.P.	0.31	219.42						
			13.07	206.35				
T.P.	0.03	206.38						
			12.96	193.42				
T.P.	0.20	193.62						
			12.70	180.92				
T.P.	0.10	181.02						
			12.02	169.00				
T.P.	0.11	169.11						
			12.96	156.15				
T.P.	0.59	156.74						
			7.16	149.58	149.60	B.M. # 3		
T.P.	0.02	149.60						
			12.61	136.99				
T.P.	0.81	137.80						
			12.88	124.92				
T.P.	0.19	125.11						
			12.43	112.68				
T.P.	0.65	113.33						
			13.23	100.10				
T.P.	3.04	103.14						
			12.89	90.25				
T.P.	1.58	91.83						
			12.38	79.45				



	+	H.I.	-	Elev.			
				79.45			
T.P.	3.13	82.58					
			4.80	77.78	77.78	B.M. # 5	✓
T.P.	4.55	82.33					Check levels on Rd. See Page 38
			12.73	69.60	✓		Diff. El. 334.98 feet
	0.42	70.02					" " 334.77 "
T.P.			10.24	59.78	59.76	B.M. # 6	✓
	7.31	67.09					
T.P.			12.50	54.59			
	1.14	55.73					
T.D.			11.92	43.81			
	0.79	44.60					
T.P.			12.78	31.82			
	0.08	31.90					
T.P.			11.88	20.02			
	3.33	23.35					
T.P.			6.50	16.85	17.79	B.M. # 7	Changed to 16.85 Correct. ✓
			8.12	15.23	16.19	P.I. of Causeway	Changed to 15.23 Correct ✓



Final STA.	"A" Line		See Page	Note: - Subtract 3.57 for correct Elev. (See Page 10 Book-1231) Mar. 23 <sup>rd</sup> 1928						
	Levels on Line	H.I.		28	Elev.	6.5% Grade	Cut	Fill	7% Grade	Cut
0+00	3.68	353.08		350						
1+01	Edge of Pavement		4.50	348.58	348.58	—		348.58	—	
1+57			4.20	348.88	344.87	4.01		344.66	4.22	
2+02			6.60	346.48 ✓	341.95	4.53		341.51	4.97	
2+86			5.10	347.98 ✓	336.49	9.49		335.63	12.35	
3+20 <sup>85</sup>			5.15	347.93 ✓	334.28	13.65		333.18	16.75	
3+30			4.10	348.98	333.70	15.28		332.55	16.43	
4+00			5.80	347.28	329.15	18.13		327.65	19.63	
	T.P.		7.76	345.32						
	2.00	347.32								
+50			1.8	345.52	325.90	19.62		324.15	21.37	
5+06			3.8	343.52	322.65	20.87		320.65	22.87	
+59 <sup>99</sup>			6.4	340.92	318.75	22.17		316.45	24.47	
6+10 <sup>02</sup>			9.1	338.22	315.50	22.72		312.95	25.27	
	T.P.		11.92	335.40						
	7.85	343.25								
6+60			10.50	332.75	312.25	20.50		309.45	23.30	
6+66			11.6	331.65	311.85	19.80		309.03	22.62	
+72			10.0	333.25	311.47	21.78		308.61	24.64	
7+10 <sup>08</sup>			8.35	334.90	309.00	25.90		305.95	28.95	
+60 <sup>11</sup>			6.70	336.55	305.75	30.80		302.45	34.10	
8+10 <sup>14</sup>			3.15	340.10	302.50	37.60		298.95	41.15	
8+19			3.35	339.90	301.91	37.99		298.32	41.58	

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Claret 44



STA		+	H.I.	-	Elev.	Elev.	6.5% Grade	Cut	Fill.	7% Grade	Cut	Fill
8+28				7.70	335.55	301.33		34.22		297.69	37.86	
	T.P.			12.34	330.91							
		0.56	331.47									
8+60 <sup>17</sup>				2.90	328.57	299.25		29.32		295.45	33.12	
	T.P.			12.63	318.84							
		0.24	319.08									
+91 <sup>20</sup>				2.35	316.73	297.23		19.50		293.28	23.45	
	T.P.			13.10	305.98							
		0.37	306.35									
				3.80	302.55							
				12.65	293.70	293.83			B.M. #1			
			306.48 ✓									
	T.P.			12.75	293.73							
		1.43	295.16									
9+94 <sup>15</sup> B.C.				2.65	292.51 ✓	290.54		1.97		286.07	6.44	
10+00				7.00	288.16	290.15			1.99	285.65	2.51	
+18	T.P.			12.45	282.71	288.98			6.27	284.39		1.68
		1.29	284.00									
	T.P.			12.28	271.72							
		0.12	271.84									
+44 <sup>16</sup>				7.00	264.84 ✓	287.29			22.45	282.57		17.73
	T.P.			12.59	259.25							
		0.37	259.62									
	T.P.			11.22	248.40							



Note - Subtract

46

STA.		+	H.I.	-	Elev.	6.5% Grade	Cut	Fill	7% Grade	Cut	Fill
					248.40						
		0.40	248.80								
	T.P.			12.65	236.15						
		3.10	239.75								
10+84 <sup>00</sup>				5.40	233.85	284.69		50.84	279.77		45.92
10+94 <sup>17</sup>				5.60	233.65 ✓	284.04		50.39	279.07		45.42
11+44 <sup>18</sup>	T.P.			4.00	235.25 ✓	280.79		45.54	275.57		40.32
		12.10	247.35								
11+94 <sup>19</sup>	T.P.			2.60	244.75 ✓	277.54		32.79	272.07		27.32
		3.70	248.45								
12+19				11.40	237.05	275.91		38.86	270.32		33.27
		14.73	251.78	12.60							
12+44 <sup>20</sup>					239.18 ✓	274.29		35.11	268.57		29.32
		4.88	251.88								
12+80 <sup>00</sup>				3.20	249.68	271.95		22.27	268.05		16.37
12+94 <sup>21</sup>	T.P.	Hand Level		8.90	243.98 ✓	271.04		27.06	265.07		21.09
	T.P.			12.41	240.47						
		0.65	244.63								
13+20	T.P.			12.80	231.83	269.35		37.52	263.25		31.42
		1.30	233.13								
13+44 <sup>22</sup>				2.60	230.53 ✓	267.79		37.26	261.57		31.04
13+94 <sup>23</sup>				5.50	227.63 ✓	264.54		36.91	258.07		30.44
14+15				5.00	227.13	263.17		36.04	256.60		29.47
+ 24				13.30	219.83	262.59		42.76	255.97		36.14
+ 44 <sup>24</sup>	T.P.			3.40	229.73 ✓	261.29		31.56	254.57		24.84



STA.	+	H.I.	-	Elev.	Elev.	6.5% Grade	Cut	Fill	7% Grade	Cut	Fill
14+94 <sup>25</sup>	13.00	242.73	2.50	240.23 ✓					251.07		10.84
T.P.	8.89	249.36		240.47			Instr.				
			1.61	247.75							
				240.47							
	0.10	240.57									
15+3V			6.70	233.87					248.41		14.54
15+44 <sup>26</sup>			5.60	234.97 ✓					247.57		12.60
+ 69			3.70	236.87					245.82		8.95
15+94 <sup>27</sup>			13.00	227.57 ✓					244.07		16.50
T.P.	1.10	228.67									
16+12 FC.			12.20	216.47 ✓					242.81		26.34
16+30			11.40	217.27					241.55		24.28
T.P.			0.00	228.67							
	12.50	241.17									
T.P.			0.30	240.87							
	12.60	253.47									
T.P.			0.20	253.27							
	5.70	258.97									
16+78 <sup>64</sup>			5.00	253.97 ✓					238.12	15.85	
				247.75							
	1.30	249.05									
16+98			5.30	243.75					236.79	6.96	
T.P.			13.00	236.05							

Elev.  
 6.5% Grade  
 Instr.  
 B.M.  
 Hand Level.

15.85  
 6.96







STA.	+	H.I.	-	Elev.	Elev. 6.5% Grade	Cut	Fill	7% Grade	Cut	Fill
		224.61								
19+63 <sup>58</sup>			10.80	213.81				218.17		4.36
	T.P.		0.80	223.81						
	8.20	232.01		229.01						
19+88 <sup>58</sup>			3.00					216.42	12.59	
20+05			17.17	214.84				215.30		0.46
20+20 <sup>90</sup> B.C.			10.00	222.01 ✓				214.18	7.83	
20+23 <sup>90</sup>			6.00	226.01				213.98	12.03	
20+70 <sup>99</sup>	T.P.		2.40	229.61 ✓				210.75	18.86	
				243.39	B.M.					
	1.10	244.49								
	T.P.		11.90	232.59						
	3.20	235.79								
21+20 <sup>92</sup>			7.20	228.59 ✓				207.18	21.41	
	T.P.		11.90	223.89						
	5.30	229.19								
+ 70 <sup>92</sup>			8.20	220.99 ✓				203.68	17.31	
22+20 <sup>94</sup>	T.P.		10.80	218.39 ✓				200.18	18.21	
	2.20	220.59								
22+70 <sup>95</sup>			7.60	212.99 ✓				196.68	16.31	
23+70 <sup>96</sup>	T.P.		10.80	209.79 ✓				193.18	16.61	
	0.50	210.29								
+ 70 <sup>97</sup>			8.00	202.29 ✓				189.68	12.61	
	T.P.		11.90	198.39						



STA.	+	H.I.	-	Elev.	Elev, 6.5% Grade	Cut	Fill	7% Grade	Cut	Fill
24+20 <sup>98</sup>	0.30	198.69	5.00	193.69 ✓				186.18	7.51	
			10.20	188.49						
	0.10	188.59								
24+70 <sup>99</sup>			6.10	182.49 ✓				182.68		0.19
+90			13.00	175.59				181.35		5.76
	0.30	175.89								
25+21			8.40	167.49				179.18		11.69
			12.50	163.39						
	0.10	163.49								
			12.40	151.09						
	4.90	155.99								
+71 <sup>01</sup>			8.60	147.39				175.68		28.29
+85			9.20	146.79				174.70		27.91
26+06			4.10	151.89				173.72		21.83
			5.20	150.79						
	4.80	154.40			BM. 149.60 ✓					
+21 <sup>02</sup>			6.7	147.70				172.25		24.55
			11.90	142.50						
	0.60	143.10								
+71 <sup>03</sup>			2.30	140.80				168.75		27.95
			12.70	130.40						
	1.30	131.70								
27+21 <sup>04</sup>			7.70	124.00				165.25		41.25



STA.	+	H.I.	-	Elev.	Elev. 6.5% Grade	Cut	Fill	7% Grade	Cut	Fill
27+36			15.80	115.90				164.26		48.30
+ 51	T.P.		11.40	120.30				163.15		42.85
		0.90	121.20			5.23				
+ 57			11.60	109.60		13.28		162.73		53.13
+ 71 <sup>05</sup>			12.20	109.00				161.75		52.75
+ 79			5.90	115.30				161.19		45.89
+ 95	T.P.		1.50	119.70				160.07		40.37
		3.60	123.30							
28+21 <sup>06</sup>			4.70	118.60				158.25		39.65
+ 55			4.20	119.10				155.87		36.77
+ 71 <sup>07</sup>	T.P.		0.00	123.30				154.75		31.45
		12.10	135.40							
	T.P.		1.40	134.00						
		5.50	139.50							
29+08 <sup>59</sup>	E.C.		3.90	135.60				152.05		16.45
+ 13 <sup>80</sup>			2.50	137.00				151.68		14.68
29+27 <sup>08</sup>	B.C.		3.10	136.40				150.75		14.35
	T.P.		1.90	137.60						
		10.40	148.00							
			8.30	139.70		B.M. # 4	139.21			
		0.10	139.31							
+ 77 <sup>09</sup>	T.P.		12.00	127.31 ✓						
		1.86	129.11							
30+27 <sup>10</sup>			4.3	124.81						
+ 77 <sup>11</sup>	T.P.		4.6	124.51						



STA.	+	H.I.	-	Elev.
	4.1	128.61		
31+27 <sup>12</sup>			5.9	122.71
+77 <sup>13</sup>			6.0	122.61
32+27 <sup>14</sup>			0.33	128.28
	6.3	134.58		
+77 <sup>15</sup>			6.2	128.38
	142.46	(Instr.)	2.7	131.88
			11.49	130.97
		142.46		
1	T.P.		13.05	129.45
	2.10	131.51		
33+27 <sup>16</sup>			6.30	125.21
+55 <sup>17</sup>	T.P.		8.70	122.81
	5.2	128.01		
34+00			7.9	120.11
+50	T.P.		9.41	118.60
	10.41	129.01		
35+00			8.00	121.01
+50			8.80	120.21
+68 <sup>18</sup>	T.P.		9.10	119.91
	4.50	124.41		
36+00			4.50	119.91
+50			5.10	119.31
+67 <sup>19</sup>	B.C. T.P.		5.20	119.21

T/o Grade Cut

Fill







STA.		+	H.I.	-	Elev.
		3.50	77.30		
42+98 <sup>69</sup>				5.4	71.99
43+48 <sup>67</sup>	T.P.			10.4	66.80
		4.40	71.20		
+86 <sup>79</sup>	T.P.			9.5	61.70
		2.20	62.90		
44+00				3.60	60.30
+50	T.P.			7.40	56.50
		4.30	60.80		
45+00				6.30	54.50
+50	T.P.			7.60	53.20
		11.60	64.80		
				5.80	59.00
		1.00	60.76		
46+00	T.P.			11.50	49.26
		1.30	50.56		
+50				5.60	44.96
	T.P.			13.00	37.56
		7.20	44.76		
47+00				5.90	38.86
+50	T.P.			11.40	33.36
		2.10	35.46		
48+00	T.P.			7.20	28.26
		4.80	33.66		

B.M. 59.76



STA.		+	H.I.	-	Elev.
48+50	T.P.			8.70	24.36
		3.40	27.76		
49+00				6.60	21.16
+50				7.20	20.56
50+00	T.P.			7.90	19.86
		3.30	23.16		
+50				4.40	18.76
				7.00	16.16
		4.20	21.05		
+75				2.70	18.35
51+00	T.P.			10.80	10.25
		2.10	12.35		
+22	T.P.			11.40	0.95
53+27				0.95	
		12.80	13.75		
+50				7.60	6.15
54+00				6.00	7.75
54+28 <sup>69</sup>				5.50	8.25
+48	T.P.			1.60	12.15
		3.10	15.25		
54+78 <sup>65</sup>				8.60	6.65
55+28 <sup>66</sup>				8.40	6.85
+78 <sup>67</sup>				10.40	4.85
56+28 <sup>65</sup>				7.90	7.35

16.85 B.M. #7

Water Level of Slough 2<sup>10</sup> am. Mar. 26<sup>th</sup> 1928.

" " " " " "



STA.	+	H.I.	-	Elev.
+78 <sup>66</sup> T.P.			6.10	9.15
	9.65	18.80		
56+98			8.10	10.70
57+28 <sup>67</sup>			3.30	15.50
+78 <sup>71</sup>			3.65	15.15
+28			3.65	15.15
58+76 <sup>32</sup> EC.			3.67	15.13



"B" Line

Change of Alignment from STA. 19+18<sup>39</sup> To

STA. 32+86<sup>69</sup> = 33+55<sup>03</sup> "A" Line

24+68 <sup>50</sup>	11
24+18 <sup>49</sup>	10
23+68 <sup>48</sup>	9
23+18 <sup>47</sup>	8
22+68 <sup>46</sup>	7
22+18 <sup>45</sup>	6
21+68 <sup>44</sup>	5
21+18 <sup>43</sup>	4
20+68 <sup>42</sup>	3
20+18 <sup>41</sup>	2
19+68 <sup>40</sup>	1
19+18 <sup>39</sup>	B.C.

50.01

$$\Delta = 67^{\circ} 55'$$

$$R = 600'$$

$$T = 404.07'$$

$$L = 711.22'$$

Defl.  $2^{\circ} 23' 16''$  for 14 Short L<sup>s</sup> @ 50.01' Chord 50'

"  $0^{\circ} 31' 46''$  " 1 " L<sup>s</sup> @ 11.09' " 11.09'



$$\Delta = 13^{\circ}47' \quad \Delta/2 = 6^{\circ}53'30''$$

$$R = 1813.75 \quad \Delta/4 = 3^{\circ}26'45''$$

$$T = 219.22$$

$$L = 436.32$$

$$= 33 + 55^{\circ} \quad \text{"A" Line}$$

$$32 + 86 \frac{60}{-}$$

E.C.

436.32

$$28 + 50 \frac{30}{-}$$

B.C.

P.I.

269.70

$$27 + 99 \frac{78}{-}$$

P.O.T.

170.17

$$26 + 29 \frac{61}{-}$$

E.C.

11.09'

15

$$26 + 18 \frac{53}{-}$$

50.01

14

$$25 + 68 \frac{50}{-}$$

13

$$25 + 18 \frac{51}{-}$$

12

$$24 + 68 \frac{50}{-}$$



"B" Line

Levels for change of Alignment See Page 56.

STA.		+	H.I.	-	Elev.	% Grade	Cut	Fill
19+18 <sup>29</sup>	B.C.				208.91	221.36		12.45
		0.50	243.85		243.39 B.M.			
	T.P.			-13.00	230.89			
		0.60	231.49					
	T.P.			13.25	218.24			
		2.50	220.74					
19+68 <sup>40</sup>				7.70	213.04	217.86		4.82
					243.39			
		0.00	243.39					
20+18 <sup>41</sup>				14.5	228.89	214.36	14.53	
+68 <sup>42</sup>				9.1	234.29	210.86	23.43	
+88				5.1	238.29	209.46	28.83	
21+18 <sup>43</sup>	T.P.			9.6	233.79	207.36	26.43	
		2.70	236.49					
+68 <sup>44</sup>				7.05	229.44	203.86	25.58	
22+18 <sup>45</sup>	T.P.			12.75	223.74	200.36	23.38	
		1.70	225.44					
+68 <sup>46</sup>				8.60	216.84	196.86	19.98	
	T.P.			13.25	212.19			
		0.60	212.79					
23+18 <sup>47</sup>				4.10	208.69	193.36	15.33	
	T.P.			10.20	202.59			
		0.80	203.39					
+68 <sup>48</sup>				2.20	201.19	189.86	11.33	



STA.		+	H.I.	-	Elev.	7% Grade	Cut	Fill
	T.P.			12.90	190.49			
		0.40	190.89					
24+18 <sup>89</sup>				5.60	185.29	186.36		1.07
	T.P.			13.00	177.89			
		0.40	178.29					
+68 <sup>50</sup>				14.20	164.09	182.86		18.77
				0.00	178.29			
		3.40	181.69					
25+00				0.50	181.19	180.51	0.68	
+18 <sup>51</sup>				0.10	181.59	179.39	2.20	
+30				4.70	176.99	178.41		1.42
				12.40	169.29			
		0.50	169.79					
	T.P.			12.40	157.39			
		0.20	157.59					
+68 <sup>52</sup>				1.30	156.29	175.89		19.60
	T.P.			12.90	144.69			
		0.50	145.19					
26+18 <sup>53</sup>				8.30	136.89	172.39		35.50
+29 <sup>51</sup>	EC.			11.20	133.99	171.62		37.63
+58	T.P.			11.10	134.09	169.59		35.50
		0.10	134.19					
+74				18.40	115.79	168.47		52.68
+94	T.P.			2.70	131.49	167.07		35.58



STA.		+	H.I.	-	Elev.	7% Grade	Cut	Fill
		12.60	144.09					
27+17				9.80	134.29	165.46		31.17
	T.P.			0.10	143.99			
		12.40	156.39					
	T.P.			1.60	154.79			
		10.00	164.79					
+99 <sup>28</sup>				4.90	159.89	159.65	0.24	
28+30	T.P.			9.50	155.29	157.55		2.26
		0.50	155.79					
+50 <sup>32</sup>	B.C.			9.40	146.39	156.15		9.76
+60				5.50	150.29	155.45		5.16
+86 <sup>64</sup>	T.P.			12.50	143.29	153.63		10.34
		1.40	144.69					
				4.2	140.49			
					139.21			
		2.60	141.81					
29+36 <sup>64</sup>				8.20	133.61	150.13		16.52
+86 <sup>64</sup>				13.00	128.81	146.63		17.82
30+36 <sup>64</sup>				14.70	127.11	143.13		16.02
+86 <sup>64</sup>				16.20	125.61	139.63		14.02
31+36				14.30	127.51	136.13		8.62
+86				13.00	128.81	132.63		3.82
32+36				13.00	128.81	129.13		0.32
+86 <sup>64</sup>	E.C.			16.50	125.31	125.59		0.28



STA.

+

H.I.

-

Elev.











9  
9  
9







1  
9  
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9



1  
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9  
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9  
9



+      +      -      Elev

4193 x 9  
 29351  
 350  
 5640

2718.21  
 2680.71  
 37.50

10 + 11			291.25
8 + 21	190		338.67
	159		
6 + 62°		10.02	333.15
	369	343.17	
		12.81	339.48
	2.29	352.29	

850.

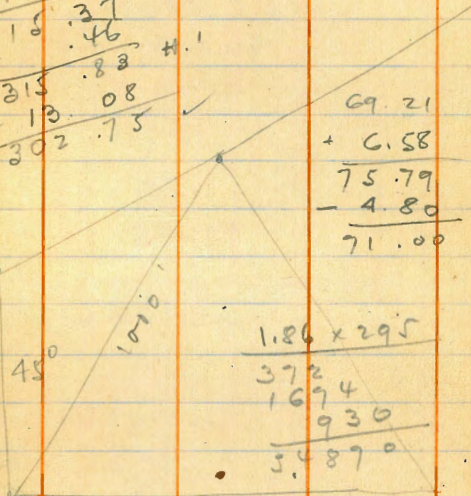
338.67  
 + 1.23  
 339.90 H.I.  
 - 12.42  
 327.48

302.75  
 + 1.52  
 304.27 H.I.  
 - 13.02  
 291.25

19.57  
 5.49  
 14.08

327.88 H.I.  
 - 12.51  
 315.37  
 + 0.46  
 315.83 H.I.  
 - 13.08  
 302.75

69.21  
 4.80  
 74.01  
 - 6.58  
 67.43



124 x 7  
 8.68  
 17.05  
 38.37

Dist. 63W V.A 3° 38.  
 Diff. x 28° 07



17.26 x 6  
 350  
 21  
 329 : 6000 = 5

El. 96.94 ✓  
 + 1.94  
 98.88  
 - 9.05  
 89.83 ✓  
 + 0.25  
 90.08  
 - 9.10  
 80.98 ✓  
 + 1.70  
 82.68  
 - 5.50  
 77.18 ✓  
 + 1.70  
 78.88  
 - 13.00  
 65.88  
 + 1.10  
 66.98  
 - 8.90  
 58.08  
 + 5.63 x 85  
 4504  
 2815  
 47855

6 x 62  
 1.59  
 8 + 21  
 343.52  
 4.85  
 338.67

251.31  
 4.7  
 256.01  
 4  
 255.59

108 x 7  
 756  
 228.83  
 221.27

13.00  
 5.90  
 7.10  
 7.10  
 14 20

STA.  
 33+90  
 333.15  
 10.37  
 343.52  
 92.98  
 11.87  
 81.11  
 4.7  
 85.81  
 7.71 x 4  
 30.84  
 7.82 x 5  
 39.10  
 7.30 x 6  
 43.80  
 6.38 x 7  
 44.66  
 5.63 x 8  
 45.04

700  
 137  
 563  
 5451.41  
 5404  
 47.41  
 T = 600 x 1/2 Δ tang  
 Δ = 24 - 26  
 .45432 x 600  
 272.59200  
 1420  
 7.41  
 57 + 24  
 272.59  
 5451.41 ✓  
 4304.00  
 1147.41  
 9.71 x 2  
 11.42  
 67.43  
 9.48  
 57.95  
 67.43  
 39.10  
 28.33  
 67.43  
 47.86  
 19.54  
 67.43  
 11.42  
 56.01  
 67.43  
 43.80  
 23.63  
 3.26 x 1420  
 1304  
 6520  
 462920  
 67.43  
 21.14

10.11 x 2  
 20.22  
 51.54  
 4304  
 850 ✓  
 563  
 1413  
 54 + 51.91  
 54.04  
 47.41  
 1420 P.1.  
 9.71 x 2  
 11.42  
 67.43  
 9.48  
 57.95  
 67.43  
 39.10  
 28.33  
 67.43  
 47.86  
 19.54  
 67.43  
 11.42  
 56.01  
 67.43  
 43.80  
 23.63  
 3.26 x 1420  
 1304  
 6520  
 462920  
 67.43  
 21.14

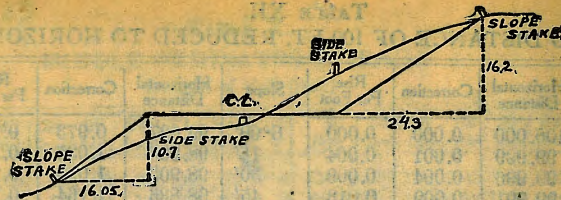
1.86 x 295  
 372.4  
 4.82 x 250  
 964  
 2410  
 120500  
 19.57  
 9.52

70  
 70









DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING

SLOPE 1/4 TO 1. ROADWAY OF ANY WIDTH.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0 00	0 15	0 30	0 45	0 60	0 75	0 90	1 05	1 20	1 35	0
1	1 50	1 05	1 20	1 35	1 50	1 65	1 80	1 95	2 10	2 25	1
2	3 00	3 15	3 30	3 45	3 60	3 75	3 90	4 05	4 20	4 35	2
3	4 50	4 65	4 80	4 95	5 10	5 25	5 40	5 55	5 70	5 85	3
4	6 00	6 15	6 30	6 45	6 60	6 75	6 90	7 05	7 20	7 35	4
5	7 50	7 65	7 80	7 95	8 10	8 25	8 40	8 55	8 70	8 85	5
6	9 00	9 15	9 30	9 45	9 60	9 75	9 90	10 05	10 20	10 35	6
7	10 50	10 65	10 80	10 95	11 10	11 25	11 40	11 55	11 70	11 85	7
8	12 00	12 15	12 30	12 45	12 60	12 75	12 90	13 05	13 20	13 35	8
9	13 50	13 65	13 80	13 95	14 10	14 25	14 40	14 55	14 70	14 85	9
10	15 00	15 15	15 30	15 45	15 60	15 75	15 90	16 05	16 20	16 35	10
11	16 50	16 65	16 80	16 95	17 10	17 25	17 40	17 55	17 70	17 85	11
12	18 00	18 15	18 30	18 45	18 60	18 75	18 90	19 05	19 20	19 35	12
13	19 50	19 65	19 80	19 95	20 10	20 25	20 40	20 55	20 70	20 85	13
14	21 00	21 15	21 30	21 45	21 60	21 75	21 90	22 05	22 20	22 35	14
15	22 50	22 65	22 80	22 95	23 10	23 25	23 40	23 55	23 70	23 85	15
16	24 00	24 15	24 30	24 45	24 60	24 75	24 90	25 05	25 20	25 35	16
17	25 50	25 65	25 80	25 95	26 10	26 25	26 40	26 55	26 70	26 85	17
18	27 00	27 15	27 30	27 45	27 60	27 75	27 90	28 05	28 20	28 35	18
19	28 50	28 65	28 80	28 95	29 10	29 25	29 40	29 55	29 70	29 85	19
20	30 00	30 15	30 30	30 45	30 60	30 75	30 90	31 05	31 20	31 35	20
21	31 50	31 65	31 80	31 95	32 10	32 25	32 40	32 55	32 70	32 85	21
22	33 00	33 15	33 30	33 45	33 60	33 75	33 90	34 05	34 20	34 35	22
23	34 50	34 65	34 80	34 95	35 10	35 25	35 40	35 55	35 70	35 85	23
24	36 00	36 15	36 30	36 45	36 60	36 75	36 90	37 05	37 20	37 35	24
25	37 50	37 65	37 80	37 95	38 10	38 25	38 40	38 55	38 70	38 85	25
26	39 00	39 15	39 30	39 45	39 60	39 75	39 90	40 05	40 20	40 35	26
27	40 50	40 65	40 80	40 95	41 10	41 25	41 40	41 55	41 70	41 85	27
28	42 00	42 15	42 30	42 45	42 60	42 75	42 90	43 05	43 20	43 35	28
29	43 50	43 65	43 80	43 95	44 10	44 25	44 40	44 55	44 70	44 85	29
30	45 00	45 15	45 30	45 45	45 60	45 75	45 90	46 05	46 20	46 35	30
31	46 50	46 65	46 80	46 95	47 10	47 25	47 40	47 55	47 70	47 85	31
32	48 00	48 15	48 30	48 45	48 60	48 75	48 90	49 05	49 20	49 35	32
33	49 50	49 65	49 80	49 95	50 10	50 25	50 40	50 55	50 70	50 85	33
34	51 00	51 15	51 30	51 45	51 60	51 75	51 90	52 05	52 20	52 35	34
35	52 50	52 65	52 80	52 95	53 10	53 25	53 40	53 55	53 70	53 85	35
36	54 00	54 15	54 30	54 45	54 60	54 75	54 90	55 05	55 20	55 35	36
37	55 50	55 65	55 80	55 95	56 10	56 25	56 40	56 55	56 70	56 85	37
38	57 00	57 15	57 30	57 45	57 60	57 75	57 90	58 05	58 20	58 35	38
39	58 50	58 65	58 80	58 95	59 10	59 25	59 40	59 55	59 70	59 85	39
40	60 00	60 15	60 30	60 45	60 60	60 75	60 90	61 05	61 20	61 35	40
41	61 50	61 65	61 80	61 95	62 10	62 25	62 40	62 55	62 70	62 85	41
42	63 00	63 15	63 30	63 45	63 60	63 75	63 90	64 05	64 20	64 35	42
43	64 50	64 65	64 80	64 95	65 10	65 25	65 40	65 55	65 70	65 85	43
44	66 00	66 15	66 30	66 45	66 60	66 75	66 90	67 05	67 20	67 35	44
45	67 50	67 65	67 80	67 95	68 10	68 25	68 40	68 55	68 70	68 85	45
46	69 00	69 15	69 30	69 45	69 60	69 75	69 90	70 05	70 20	70 35	46
47	70 50	70 65	70 80	70 95	71 10	71 25	71 40	71 55	71 70	71 85	47
48	72 00	72 15	72 30	72 45	72 60	72 75	72 90	73 05	73 20	73 35	48
49	73 50	73 65	73 80	73 95	74 10	74 25	74 40	74 55	74 70	74 85	49
50	75 00	75 15	75 30	75 45	75 60	75 75	75 90	76 05	76 20	76 35	50

Computed by L. Leland Locke.

20+20

B.C.

108.90

16+12

E.C.

R = 600'

Δ = 59°00' - R

T = 339.46'

L = 617.85'

9+94

B.C.

103.13

8+91

E.C.

R = 1000

Δ = 18°58' - L

T = 167.04'

L = 331.03'

5+59

B.C.

559.99'

0+00

E.C. of Curve of Existing Highway

10+00

288.16



20+20<sup>90</sup>

408.90

B.C.

16+12<sup>00</sup>

E.C.

$$R = 600'$$

$$\Delta = 59^{\circ}00' - R$$

$$T = 339.46'$$

$$L = 617.85'$$

9+94<sup>15</sup>

103.13

B.C.

8+91<sup>02</sup>

E.C.

$$R = 1000'$$

$$\Delta = 18^{\circ}58' - L$$

$$T = 167.04'$$

$$L = 331.03'$$

5+59<sup>99</sup>

559.99

B.C.

0+00

E.C. of Curve of Existing  
Highway

①



39+05<sup>20</sup>

E.C.

(2)

$$R = 1000'$$

$$\Delta = 13^{\circ}39' - R$$

$$T = 119.69'$$

$$L = 238.24'$$

36+67<sup>66</sup>

B.C.

312.63'

33+55<sup>93</sup>

E.C.

$$R = 800'$$

$$\Delta = 30^{\circ}39' - R$$

$$T = 219.22'$$

$$L = 427.95'$$

29+27<sup>98</sup>

B.C.

18.51'

29+08<sup>97</sup>

E.C.

$$R = 600'$$

$$\Delta = 84^{\circ}46' - L$$

$$T = 547.55'$$

$$L = 887.67'$$

20+20<sup>90</sup>

B.C.



③

$$58+76 \frac{32}{-}$$

E.C.

$$R = 600'$$

$$\Delta = 42^\circ 45' \text{ R}$$

$$T = 234.84'$$

$$L = 447.68'$$

$$54+28 \frac{64}{-}$$

B.C.

$$1041.85$$

$$43+86 \frac{79}{-}$$

E.C.

$$R = 1000'$$

$$\Delta = 13^\circ 39' \text{ L}$$

$$T = 119.69'$$

$$L = 238.24'$$

$$41+48 \frac{55}{-}$$

B.C.

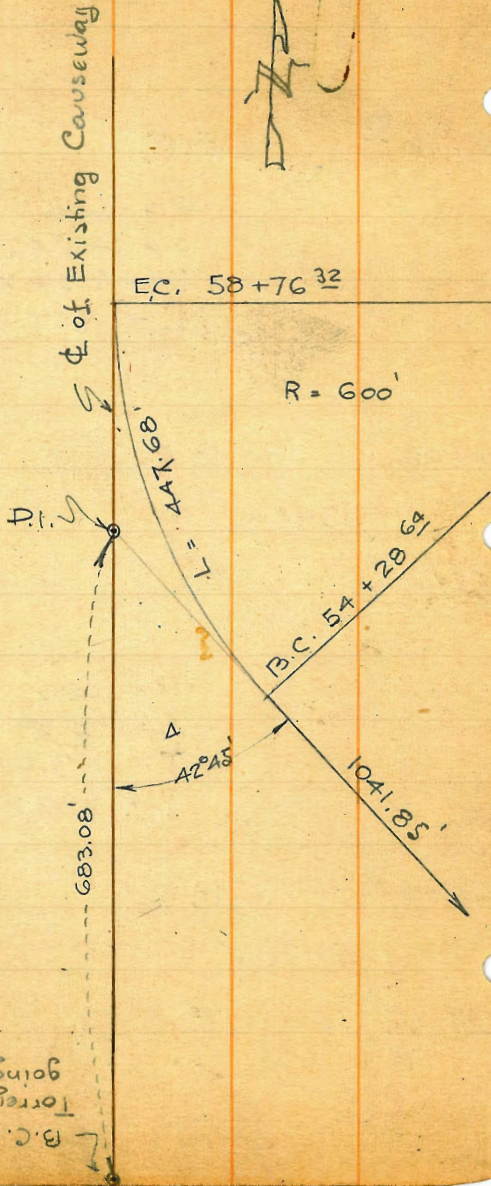
$$242.65'$$

$$39+05 \frac{90}{-}$$

E.C.



B.C. Beginning of  
Torrey Pines Grade  
going South





STA.	Elev.
25+21	167.49
+71 <sup>01</sup>	147.39
+85	146.79
26+00	151.89
+21 <sup>02</sup>	147.70
+71 <sup>03</sup>	140.80
27+21 <sup>09</sup>	124.00
+36	115.90
+51	120.30
+57	109.60
+71 <sup>05</sup>	109.00
+79	115.30
+95	119.70
28+21 <sup>06</sup>	118.60
+55	119.10
+71 <sup>07</sup>	123.30
29+08 <sup>57</sup> E.C.	135.60
+13 <sup>80</sup>	137.00
+27 <sup>08</sup> B.C.	136.40

Levels on  $\frac{1}{2}$  of Proposed Torrey Pines Rd.  
JAEGER

STA.		Elev.
0+00	B.C. of Curve on existing Pavement	350.00
1+01	Edge of Pavement	348.58
+57		348.88
2+02		346.48
486		347.98
3+20 <sup>85</sup>		347.93
+30		348.98
4+00		347.28
+50		345.52
5+00		343.52
+59 <sup>99</sup>	B.C.	340.92
6+10 <sup>02</sup>		338.22
+60		332.75
+66		331.65
+72		333.25
7+10 <sup>08</sup>		334.90
+60 <sup>11</sup>		336.55
8+10 <sup>19</sup>		340.10
+19		339.90
+28		335.55
+60 <sup>17</sup>		328.57
+91 <sup>02</sup>	E.C.	316.73
9+94 <sup>15</sup>	B.C.	292.51
10+00		288.16



STA.	Elev.
10+18	282.71
+44 <sup>16</sup>	264.84
+89	233.85
+94 <sup>17</sup>	233.65
11+44 <sup>18</sup>	235.25
+94 <sup>19</sup>	244.75
12+19	237.05
+44 <sup>20</sup>	239.18
+80	249.68
+94 <sup>21</sup>	243.98
13+20	231.83
+44 <sup>22</sup>	230.53
+94 <sup>23</sup>	227.63
14+15	227.13
+24	219.83
+44 <sup>24</sup>	229.73
+94 <sup>25</sup>	240.23
15+32	233.87
+44 <sup>26</sup>	234.97
+69	236.87
+94 <sup>27</sup>	227.57
16+12	216.47
+30	217.27
+78 <sup>62</sup>	253.97
+98	243.75

E.C.

STA.	Elev.
17+28	227.45
+60	249.91
+80 <sup>58</sup>	256.32
18+59 <sup>58</sup>	244.96
+89 <sup>58</sup>	237.41
+95 <sup>58</sup>	228.41
19+10 <sup>58</sup>	218.91
+25 <sup>58</sup>	201.91
+38 <sup>58</sup>	194.91
+53 <sup>58</sup>	199.51
+63 <sup>58</sup>	213.81
+88 <sup>58</sup>	229.01
20+05	214.84
+20 <sup>90</sup>	222.01
+23 <sup>90</sup>	226.01
+70 <sup>19</sup>	229.61
21+20 <sup>92</sup>	228.59
+70 <sup>92</sup>	220.99
22+20 <sup>94</sup>	218.39
+70 <sup>95</sup>	212.99
23+20 <sup>96</sup>	209.79
+70 <sup>97</sup>	202.29
24+20 <sup>98</sup>	193.69
+70 <sup>99</sup>	182.49
+90	175.59

B.C.

11



$29+77^{\underline{09}}$		127.31
$30+27^{\underline{10}}$		124.81
$+77^{\underline{11}}$		124.51
$31+27^{\underline{12}}$		122.71
$+77^{\underline{13}}$		122.61
$32+27^{\underline{14}}$		128.28
$+77^{\underline{15}}$		128.38
$33+27^{\underline{16}}$		125.21
$+55^{\underline{03}}$	E.C.	122.81
$34+00$		120.11
$+50$		118.60
$35+00$		121.01
$+50$		120.21
$+68^{\underline{94}}$		119.91
$36+00$		119.91
$+50$		119.31
$+67^{\underline{66}}$	B.C.	119.21
$37+17^{\underline{69}}$		116.61
$+67^{\underline{72}}$		112.71
$38+17^{\underline{75}}$		108.04
$+67^{\underline{78}}$		105.34
$39+05^{\underline{90}}$	E.C.	101.64
$+50$		96.34
$40+00$		92.46
$+50$		88.96
$41+00$		86.16



41+48<sup>55</sup> B.C.

83.26

53+50

6.15

+98<sup>58</sup>

79.56

54+00

7.75

42+48<sup>61</sup>

76.16

54+28<sup>69</sup> B.C.

8.25

+98<sup>69</sup>

71.99

+48

12.15

43+48<sup>67</sup>

66.80

+78<sup>65</sup>

6.65

+86<sup>79</sup> E.C.

61.70

55+28<sup>66</sup>

6.85

44+00

60.30

+78<sup>67</sup>

4.85

+50

56.50

56+28<sup>68</sup>

7.35

45+00

54.50

+78<sup>69</sup>

9.15

+50

53.20

+98

10.70

46+00

49.26

57+28<sup>70</sup>

15.50

+50

44.96

+78<sup>71</sup>

15.15

47+00

38.86

58+28<sup>72</sup>

15.15

+50

33.36

58+76<sup>82</sup> E.C.

15.13

48+00

28.26

+50

24.36

49+00

21.16

+50

20.56

50+00

19.86

+50

18.76

+75

18.35

51+00

10.25

+22

0.95

53+27

0.95

Water Level of Slough at 2<sup>10</sup> pm. 26<sup>th</sup> 1928.

" " " " " " " "



2-52 160.87  
 1-26 160.25  
 4-18 11.89  
 3-26 148.36  
 5-44

1w-08  
 36  
 1w-44

ENGINEERING DEPARTMENT  
 CITY OF CALIFORNIA  
 S IN

353.22  
 10.48  
 342.76  
 4.17  
 346.93  
 12.70  
 334.23  
 1.64  
 335.87  
 12.60  
 323.27  
 0.76  
 324.03  
 13.00  
 311.03  
 .33  
 311.36  
 12.11  
 299.25

76  
 167  
 727

299.14  
 298.46  
 285.66  
 8.46  
 294.12  
 12.44  
 6.56  
 281.68  
 0.43  
 282.11  
 12.59  
 269.52  
 0.75  
 270.27  
 12.91  
 257.36  
 0.29  
 257.65  
 0021  
 02 x 09  
 7 x 0.91  
 150  
 212  
 2 x 25

160.87  
 .67  
 160.25  
 11.89  
 148.36  
 299.14  
 298.46  
 285.66  
 8.46  
 294.12  
 12.44  
 6.56  
 281.68  
 0.43  
 282.11  
 12.59  
 269.52  
 0.75  
 270.27  
 12.91  
 257.36  
 0.29  
 257.65  
 0021  
 02 x 09  
 7 x 0.91  
 150  
 212  
 2 x 25  
 245.68  
 12.33  
 233.35  
 0.38  
 233.73  
 12.20  
 221.53  
 0.16  
 221.69  
 12.60  
 209.09  
 0.49  
 209.58  
 12.88  
 196.70  
 0.59  
 197.29  
 11.96  
 185.33  
 0.25  
 185.58  
 12.01  
 173.57  
 0.17  
 173.74  
 12.87  
 160.87

148.36  
 1.07  
 149.43  
 11.46  
 137.97  
 1.24  
 139.21  
 11.59  
 127.62  
 6.41  
 134.03  
 12.79  
 121.24  
 0.05  
 121.19  
 12.59  
 108.65  
 0.81  
 109.46  
 12.52  
 96.94  
 1.92  
 98.86  
 12.57  
 86.29  
 0.17  
 86.46  
 10.02  
 76.44  
 5.34  
 81.78  
 12.28  
 69.50  
 1.69  
 71.19  
 12.77  
 58.42  
 1.87  
 60.29

60.29  
 12.95  
 47.34  
 0.62  
 47.96  
 11.67  
 36.29  
 2.39  
 38.68  
 12.92  
 25.76  
 0.58  
 26.34  
 9.89  
 16.45  
 2.89  
 19.34  
 4.59  
 14.75

218.60  
 131.40  
 2  
 129.40  
 140.80  
 5.90  
 134.70  
 134.70  
 118.60  
 16.10  
 39.65  
 10.10  
 23.55

209.79  
 3.57  
 206.22

349.98  
 3.57  
 344.41

139.21  
 6.20  
 145.41  
 347.98  
 3.57  
 343.41

340.62  
 3.57  
 337.05