

1206

BLISS

FIELD BOOK

No. 335

1206

386.47 Nail Monroe & 52nd.

Monroe 1189-57

See index page 73 7/11/30 H.A.

Monroe
3-3 20 dale

972-140 Cal.

MICROFILMED
DEC 22 1964

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

Our Leather Bound Engineers Note Books are carried in the following rulings:

- No. 380 LEVEL BOOK. Left and Right Hand Page the same as Left Hand Page of this Book.
- No. 382 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 4 x 4 to the inch, Center Line Red.
- No. 384 MINING TRANSIT BOOK. Left Hand Page as in this Book, Right Hand Page 8x8 to the inch, Center Line Red.
- No. 385 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 8 vertical and 4 horizontal lines to the inch, Center Line Red.

We also carry the Note Books listed above, bound in extra strong Fabri-Hide (otherwise the same quality of book), which can be furnished at a somewhat lower price.

In ordering Fabri-Hide covered books, add the letter "F" to catalog number.

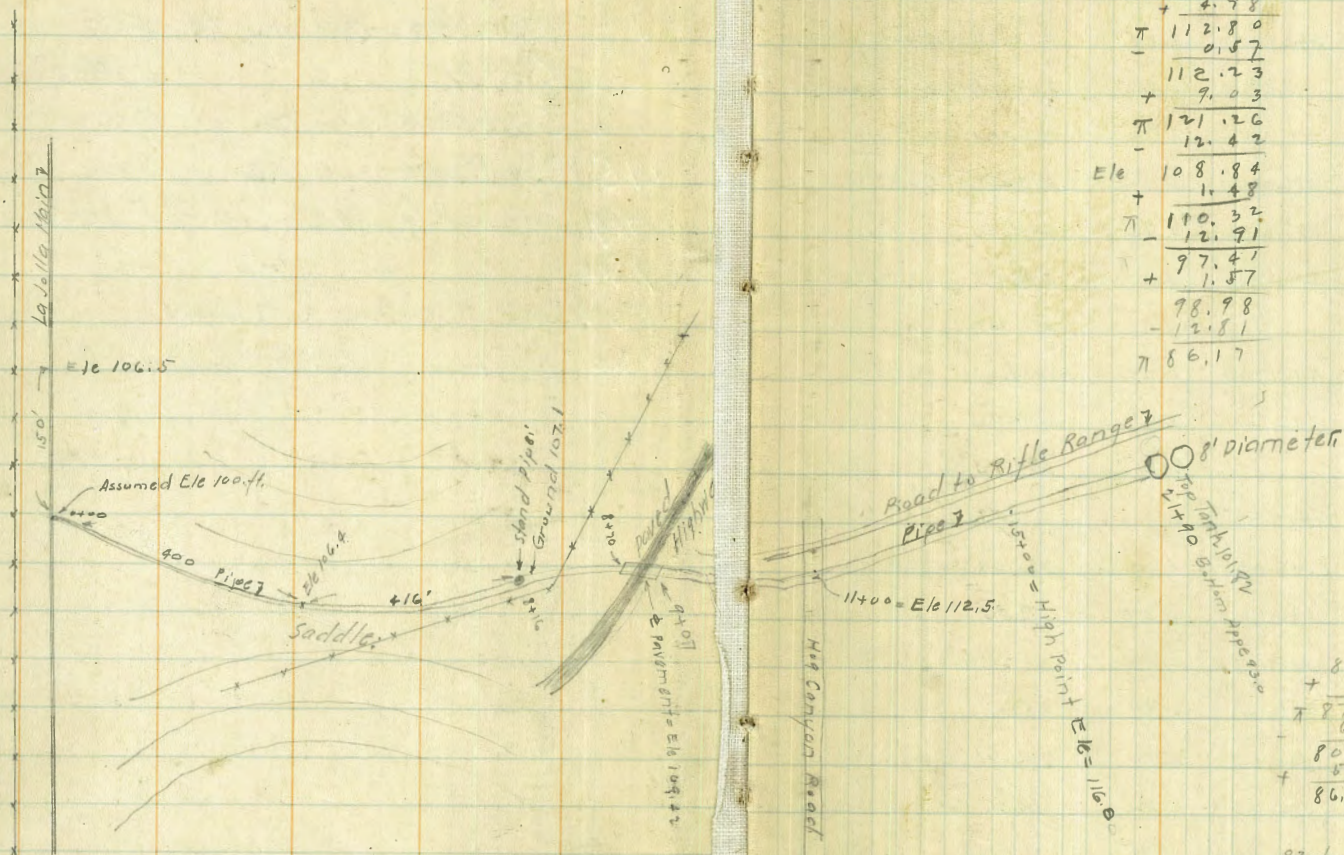
THE FREDERICK POST CO.
ENGINEERING and DRAFTING SUPPLIES
IRVING PARK STATION
CHICAGO, ILL.

See index opp p 73 7/1/20 H.H.

X Sec. Montecello & Alhambra Park	2
" " Nth Prod. of Monroe Ave.	3
" " Madison from alley West of Winona to 51 st	4
" " Adams Ave. " Winona to 51 st	7
" " Collier " " 50 th	15
" " Sampson Colton " R.R.	19
U.S. Rifle Range pipe line	25
Hog Canyon or Tajalla Dr. Road Alignment	26
X Sec " " " "	34
Cb Levels Kite Brooks to Upas	63
X Sec. Winona Univ. to Landis	65

2" Pipe line from La Jolla Main to Marine Rifle Range

Dennan,
Osborne,
Elead. July 19th - 1927



	+ 100.00	112.80
	- 12.92	2.61
π	112.92	110.17 Top stand Pipe.
	- 4.90	
Ele	108.02	
	+ 4.78	112.80
π	112.80	3.7
	- 0.57	107.1
	112.23	
	+ 9.03	112.80
π	121.26	3.63
	- 12.42	109.17 Road.
Ele	108.84	
	+ 1.48	112.80
π	110.32	5.1
	- 12.91	107.70 Pipe in Cul.
	+ 97.41	
	+ 1.57	112.80
	98.98	3.38
	- 12.51	109.42
π	86.17	

110.32
8.50
101.82 Top Tank
Bottom tank Appx 920

86.17
+ 133
π 219.50
- 6.54
80.96
+ 5.69
86.65

83 top Bldg.

B.M.s for section of Sfs in Montecello & Alhambra Park

July 20-27
Dunn
Osborn
Flood.

	+	-	Elev	
	12.59	369.64		357.05 B.P. SE. El Cajon & 45 th
#	12.15	381.02	0.77	368.87 Rock Alley
#	6.20	385.99	1.23	379.79 Nails in Pole
#	4.57	382.31	8.25	377.74 Hub NW Cor Monroe and Winona
#	7.67	389.18	0.80	381.51 Nail Fence Post
#	6.69	394.11	1.76	387.42 Rock
#	5.48	396.54	3.05	391.06 Rock
#	5.40	397.50	4.44	392.10 Rock
#	3.02	394.95	5.57	391.93 Hub SE Cor Collier & Winona
#			3.21	391.74 Hub SW Cor Collier & 50th
#	4.05	391.71	3.29	391.66 Rock
#	3.79	393.69	5.81	389.90 Rock
#			2.15	391.54 Nail Car fence 50th & Adams
#	5.36	392.95	6.10	387.59 Rock
#	3.54	391.02	4.47	388.48 Hub NE Cor 50th & Madison
#	4.60	386.13	10.49	381.53 Rock
#	6.53	388.63	4.03	382.10 Rock
#	6.05	391.70	2.98	385.65 Rock
#	3.37	390.28	4.79	386.91 Curb El Cajon
#	0.67	384.03	6.92	383.45 noted. 383.35 Mon SW Cor El Cajon & 50th
#	0.78	372.06	12.75	371.28
#	4.32	363.91	12.47	359.59
#			6.85	357.06 = 357.05 Initial

396.54 - 6.01 = 390.53 Hub NE Cor Adams & Winona

Xsectioned 60'
10' cbs
10' qts

July 20-27

Dennan, Monroe;
Osborn,
Flood.

+

π
383.00

-
Ele 3

Xsection of the westerly prolongation of Monroe Ave. from
the east line of the alley west of Winona to a point 200' west;
60' wide: 10' cbs, 10' quarters;

	+	π	-	Ele				
					1450 S.W.	8.4	374.6	
					cb	8.4	374.6	
					1/4	8.9	374.1	
					E	8.8	374.2	
					1/4	8.6	374.4	
	5.26	383.00			cb	8.5	374.5	
				377.74 = Hub. N.W. Cor. Monroe and Winona; see page 2.				
00 = E.L. Alley N.W.				6.5	376.5	N.W.	9.2	373.8
cb				6.0	377.0	1450 N.W.	10.4	372.6
1/4				5.8	377.2	cb	10.7	372.3
E				5.6	377.4	1/4	10.7	372.3
1/4				5.8	377.2	E	10.8	372.2
cb				5.7	377.3	1/4	10.4	372.6
S.W.				6.0	377.0	cb	10.0	373.0
0+50 S.W.				6.4	376.6	S.W.	9.5	373.5
cb				6.6	376.4			
1/4				6.6	376.4			
E				6.7	376.3			
1/4				6.9	376.1			
cb				7.2	375.8			
N.W.				7.1	375.9			
1400 N.W.				8.5	374.5			
cb				7.8	375.4			
1/4				8.0	375.0			
E				8.0	375.0			
1/4				7.9	375.1			
cb				7.6	375.4			
S.W.				7.6	375.4			

Plotted
7/27/27
J.H. Kay

Co. St.
10' C.S.
10 Gts.

July 20-27

Dennan
Osborne
Flood.

Madison;

π
389.67

E/c

4

Xsection Madison Ave from the east line of the alley ^{West} east
of Winona Ave to 51st St

+ π - Ele

8.16 389.67

381.51 Nail fence post E side
Winona, between Madison and
Monroe. See page 2.

0+0 = N.W. Winona Ave S.W

7.4 382.3

cb 7.3 382.4

1/4 7.0 382.7

± 6.4 383.3

1/4 6.7 383.0

cb 6.5 383.2

N.W. 6.4 383.3

0+50 N.W. 7.0 382.7

cb 7.3 382.4

1/4 7.2 382.5

± 6.9 382.8

1/4 7.1 382.6

cb 7.7 382.0

S.W. 8.0 381.7

1+00 S.W. 8.2 381.5

cb 7.7 382.0

1/4 7.8 381.9

± 8.1 381.6

1/4 7.6 382.1

cb 7.0 382.2

N.W. 7.1 382.6

(1+170 N
191.170 S = E.L. Alley, West of Winona

N.W. 8.1 381.6

cb 8.5 381.2

1/4 8.9 380.8

± 9.2 380.5

1/4 9.3 380.4

cb 9.3 380.4

S.W. 9.2 380.5

Intersection of Winona and Madison See Book Page:

0+0 = E.L. Winona Ave. S.W. 6.3 383.4

cb 6.4 383.3

1/4 5.8 383.9

± 6.1 383.6

1/4 5.9 383.8

cb 5.7 384.0

N.W. 5.0 384.7

0+50 N.W. 4.2 385.5

cb 4.7 385.0

1/4 4.9 384.8

± 5.0 384.7

1/4 4.7 385.0

cb 5.2 384.5

S.W. 5.7 384.0

1+00 S.W. 4.3 385.4

cb 4.3 385.4

+	T 389.67	-	E/c Madison:
1400 1/4		4.2	385.5
E		4.2	385.5
1/4		4.1	385.6
cb		3.8	385.9
N.L.		3.7	386.0
1450 N.L.		2.9	386.8
cb		2.7	387.0
1/4		2.9	386.8
E		3.2	386.5
1/4		2.9	386.8
cb		2.1	387.6
S.L.		2.6	387.1
2400 S.L.		2.7	387.0
cb		2.4	387.3
1/4		1.8	387.9
E		2.1	387.6
1/4		2.3	387.4
cb		1.6	388.1
N.L.		1.7	388.0
2400 N.L.		1.6	388.1
cb		1.5	388.2
1/4		1.0	388.7
E		1.2	388.5
1/4		1.8	387.9
cb		1.9	387.8
S.L.		2.0	387.7

+	T 389.67	-	E/c
#	3.94	392.36	1.28
	2470 = W.L. 50th sf. S.L.		4.9
cb			4.6
1/4			4.7
E			4.7
1/4			4.5
cb			5.0
N.L.			5.2
0+00 = E.L. 50th sf. N.L.			4.9
cb			4.6
1/4			5.0
E			4.7
1/4			5.0
cb			4.5
S.L.			4.4
0+50 S.L.			5.0
cb			5.0
1/4			5.0
E			4.8
1/4			5.0
cb			5.1
N.L.			5.1
1400 N.L.			4.4
cb			4.7
1/4			5.3
E			5.0
1/4			5.2

+	π 392.36	-	E/e Madison.
cb		5.1	387.3
S.U		5.3	387.1
1450 S.U		5.5	386.9
cb		5.3	387.1
1/4		5.5	386.9
E		5.4	387.2
1/4		5.5	386.9
cb		5.5	386.9
N.L		5.7	386.7
2400 N.L		6.3	386.1
cb		6.0	386.4
1/4		6.3	386.1
E		6.0	386.4
1/4		6.2	386.2
cb		6.0	386.4
S.U		5.9	386.5
2450 S.U		6.5	385.9
cb		6.4	386.0
1/4		6.4	386.0
E		6.0	386.4
1/4		6.4	386.0
cb		6.2	386.2
N.L		6.3	386.1
2470 = W.L Altadena Arc: N.L		5.8	386.6
cb		5.5	386.9
1/4		6.0	386.4

+	π 392.36	-	E/e
E		6.2	386.2
1/4		6.6	385.8
cb		6.4	386.0
S.U		6.2	386.2
#	5.95	393.24	5.07
0+0 = E.L Altadena Arc S.L			387.29 Nail fence Post MECor Altadena E. Madison.
cb		6.5	386.7
1/4		6.3	386.9
E		6.0	387.2
E		6.3	386.9
1/4		6.7	386.5
cb		6.7	386.5
N.L		6.6	386.6
0+10 N.L		6.2	387.0
cb		6.4	386.8
1/4		6.5	386.7
E		6.1	387.1
1/4		6.6	386.6
cb		6.6	386.6
S.U		6.4	386.8
1400 S.U		6.4	386.8
cb		6.3	386.9
1/4		6.2	387.0
E		5.8	387.4
1/4		6.2	387.0
cb		6.1	387.1
N.L		5.7	387.5

	+	π 393.24	-	E/G; Madison;
1+50 N.L			5.4	387.9
cb			5.6	387.6
1/4			5.6	387.6
±			5.7	388.1
1/4			5.5	387.7
cb			5.6	387.6
S.L.			5.4	387.8
2+00 S.L.			5.0	388.2
cb			5.1	388.1
1/4			5.2	388.0
±			4.8	388.4
1/4			5.3	387.9
cb			5.1	388.1
N.L.			4.9	388.3
2+50			4.9	388.3
cb			5.3	387.9
1/4			5.4	387.8
±			5.1	388.1
1/4			5.4	387.8
cb			5.2	388.0
S.L.			5.2	388.0
2+70 = N.L. 51st St produced North S.L.			5.5	387.7
cb			5.5	387.7
1/4			5.7	387.5
±			5.3	387.9
1/4			5.8	387.4

	+	π 393.24	-	E/G;	7
cb.			5.6	387.6	
N.L.			5.3	387.9	
Intersection 51st St: 10' cbs, 10' gts each way;					
W. C. 51st N.L.			5.3	387.9	
cb			5.6	387.6	
1/4			5.9	387.3	
±			5.5	387.7	
1/4			5.8	387.4	
cb			5.9	387.3	
S.L.			5.8	387.4	
W. 1/4 51st S.L.			5.7	387.5	
cd			5.9	387.3	
1/4			5.7	387.5	
±			5.7	387.5	
1/4			6.0	387.2	
cb			6.0	387.2	
N.L.			5.3	387.9	
±, L. 51st N.L.			5.1	388.1	
cb			5.9	387.3	
1/4			6.0	387.2	
±			5.7	387.5	
1/4			6.0	387.2	
cb			5.9	387.3	
S.L.			5.6	387.6	
E 1/4 51st S.L.			6.0	387.2	
cb			6.1	387.1	

	+	T 393.24	-	Madison;
1+50	1/2		6.1	387.1
cb	±		5.8	387.4
1/2	1/4		6.0	387.2
±	cb		5.9	387.3
1/2	N.L.		5.1	388.1
cb	E C 651 st N.C.		5.4	387.8
S.L.	cb		5.8	387.8
	1/2		6.2	387.0
2+00	±		6.0	387.2
cb	1/2		6.3	386.9
1/2	cb		6.4	386.8
±	S.L.		6.2	387.0
1/2	E.L. 51 st produced North S.L.		5.9	387.3
cb	cd		6.3	386.9
N.L.	1/2		6.5	386.7
2+00	±		6.4	387.0
cb	1/2		6.2	387.0
1/2	cb		5.8	387.4
±	N.L.		5.5	387.7
1/2		6.16	6.99	386.25
cb		392.41	3.94	388.47 = 388.40 See Page 2.
S.L.				
2+70				
cb				
1/2				
±				
1/2				

60' St
 10' Cb's
 10' B's
 July 20-27
 D. Mann
 Osborn
 Flood.
 Adams:
 Note: Not dedicated full width for entire length.
 X-section of Adams Ave from Alley west of Winona Ave
 to termination east of 51st St

	+	π	-	Elev.
0+00 = W.L. Winona Ave.				
#	4.93	290' 16"		390.53 Hvd N.E. Cor Winona and Adams
0+0 N.L.			5.0	390.5
Cb			4.9	390.6
1/4			5.3	390.2
±			5.7	389.8
1/4			5.7	389.8
Cb			5.5	390.0
S.U.			5.7	389.8
0+50 S.U.			5.5	390.0
Cb			5.7	389.8
1/4			4.9	390.6
±			5.3	390.2
1/4			5.6	389.9
Cb			5.7	389.8
N.L.			5.6	389.9
1+00 N.L.			5.6	389.9
Cb			5.6	389.9
1/4			5.5	390.0
±			6.1	389.9
1/4			6.1	389.9
Cb			6.1	389.9
S.U.			6.1	389.9

+ π
 390.46
 Elev.
 7
 184.10 N
 143305 = E.L. Alley lying west of Winona:

	S.L.	Elev.
	5.7	389.8
Cb	5.8	389.7
1/4	5.8	389.7
±	6.0	389.5
1/4	6.0	389.5
Cb	5.8	389.7
N.L.	6.0	389.5

From Winona to 50th:

		Elev.
0+00 = E.L. Winona Ave:		
N.L.	5.0	390.5
Cb	5.0	390.5
1/4	5.5	390.0
±	5.7	389.8
1/4	5.8	389.7
Cb	6.0	389.5
S.U.	6.3	389.2
0+50 S.U.	6.3	389.2
Cb	6.0	389.5
1/4	5.8	389.7
±	5.9	389.6
1/4	6.0	389.5
Cb	5.8	389.7
N.L.	5.6	389.9

	+	T 397.42	-	E/e Adams:
1400 N.L.			5.5	390.0
Cb			6.1	389.4
1/4			6.2	389.3
E			6.2	389.3
1/4			6.2	389.3
Cb			6.1	389.4
S.L.			5.7	389.8
1450 S.U.			6.2	388.8
Cb			6.6	388.9
1/4			6.5	389.0
E			6.3	389.2
1/4			6.3	389.2
Cb			6.2	389.3
N.L.			6.2	389.3
#	+1.47	393.62	6.27	387.19
2400 N.L.			4.8	388.9
Cb			4.9	388.8
1/4			5.0	388.7
E			5.0	388.7
1/4			5.2	388.5
Cb			5.1	388.6
S.L.			5.3	388.4
2500 S.U.			5.0	388.7
Cb			5.1	388.6
1/4			5.1	388.6
E			4.7	389.0

	+	T 393.66	-	E/e
1/4			4.2	389.5
Cb			4.1	389.6
N.L.			4.6	389.1
2470 = N.L. 50th St.				
N.L.			4.9	388.8
Cb			5.2	388.5
1/4			5.0	388.7
E			5.0	388.7
1/4			5.0	388.7
Cb			5.1	388.6
S.L.			5.3	388.4
0400 = E.L. 50th St.				
S.L.			4.2	389.5
Cb			4.8	388.9
1/4			4.7	389.0
E			4.6	389.1
1/4			4.0	389.7
Cb			3.7	390.0
N.L.			4.1	389.6
0450 N.L.				
Cb			3.7	390.0
1/4			4.2	389.5
E			4.3	389.4
1/4			4.0	389.7
Cb.			3.8	389.9
S.L.			3.7	390.0

	+	π	-	E/c:
		393.60		Adams:
1400 S.L.			4.1	389.6
cb			4.0	389.7
1/4			3.9	389.8
E			3.9	389.8
1/4			3.5	390.2
cb			3.3	390.4
N.L.			3.1	390.6
1450 N.L.			3.2	390.5
cb			3.5	390.2
1/4			3.6	390.1
E			3.5	390.2
1/4			3.6	390.1
cb			3.6	390.1
S.L.			3.7	390.0
2400 S.L.			3.1	390.6
cb			3.5	390.2
1/4			3.7	390.0
E			3.6	390.1
1/4			3.6	390.1
cb			3.5	390.2
N.L.			3.5	390.2
#	586	396.40	3.12	390.54 Hub S.W. Cor Adams & Altadena
2450 N.L.			5.9	390.5
cb			5.9	390.5
1/4			5.8	390.6
E			6.0	390.4

	+	π	-	E/c
		396.40		
1/4			6.0	390.4
cb			5.9	390.5
S.L.			5.3	391.1
2470 = N.L. Altadena Ave produced North;				
S.L.			5.9	390.5
cb			6.0	390.4
1/4			5.9	390.5
E			5.9	390.5
1/4			5.8	390.6
cb			5.9	390.5
N.L.			6.1	390.3
#	590	396.44	5.86	390.54 Hub S.W. Cor Adams & Altadena West Curb.
N.L.			6.1	390.3
cb			5.8	390.6
1/4			5.7	390.7
E			5.4	391.0
1/4			5.6	390.8
cb			5.7	390.7
S.L.			5.6	390.8
West 1/4				
S.L.			5.8	390.6
cb			5.5	390.9
1/4			5.6	390.8
E			5.5	390.9
1/4			5.4	391.0

	+	π	-	Adams:
		396.40		
cb			5.7	390.7
N.W.			5.6	390.8
	£			
N.W.			5.5	390.9
cb			5.7	390.7
1/4			5.4	391.0
£			5.4	391.0
1/4			5.6	390.8
cb			5.7	390.7
S.L.			5.7	390.7
	£ 1/4			
S.L.			5.8	390.6
cb			5.9	390.5
1/4			5.8	390.6
£			5.8	390.6
1/4			5.7	390.7
cb			5.5	390.9
N.W.			5.4	391.0
	£ Curb:			
N.W.			5.4	391.0
cb			5.5	390.9
1/4			5.4	391.0
£			5.5	390.9
1/4			5.8	390.6
cb			5.8	390.6
S.L.			5.6	390.8

	+	π	-	£/6
		396.44		12
E.L. Altadena Ave produced North = 0+00				
S.L.			5.7	390.7
cb			5.8	390.6
1/4			5.8	390.6
£			5.9	390.5
1/4			5.8	390.6
cb			5.5	390.9
N.W.			5.5	390.9
0+170 N.W.			5.6	390.8
cb			5.7	390.7
1/4			5.7	390.7
£			5.8	390.6
1/4			5.5	390.9
cb			5.4	391.0
S.L.			5.4	391.0
1400 S.L.			6.1	390.3
cb			5.7	390.7
1/4			5.3	391.1
£			5.2	391.2
1/4			5.5	390.9
cb			5.7	390.7
N.W.			5.7	390.7
# 437	395.64		5.7	391.27 stone
1450 N.W.			5.5	390.1
cb			5.3	390.3
1/4			5.2	390.4

395.64

Adams

395.64

E/C

13

E	5.2	390.4
1/4	5.2	390.4
Cb	5.3	390.3
S.U.	5.4	390.2
	5.5	390.1

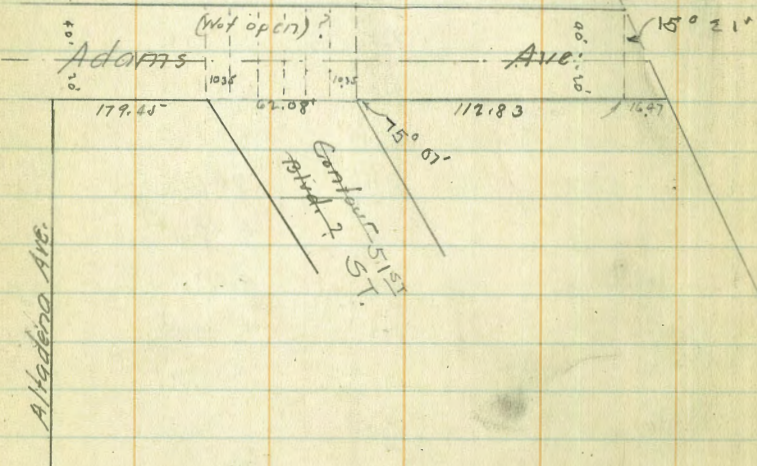
1+79.45 = W.U. ~~Contour~~ Blvd on the South (see sketch).

cb	5.4	390.2
1/4	5.4	390.2
E	5.4	390.2
1/4	5.8	389.8
cb	5.8	390.1
N.U.	5.6	390.0

E	5.4	390.2
1/4	5.3	390.3
cb	5.0	390.6
S.U.	5.1	390.5

West 1/4

S.U.	5.3	390.3
cb	5.2	390.4
1/4	5.3	390.3
E	5.4	390.2
1/4	5.8	389.8
cb	5.8	389.8
N.U.	5.9	389.7



N.U.	5.9	389.7
cb	5.9	389.7
1/4	5.7	389.9
E	5.7	389.9
1/4	5.7	389.9
cb	5.7	389.9
S.U.	5.7	389.9

E 1/4

N.U.	5.6	390.0
cb	5.7	389.9
1/4	5.8	389.8

S.U.	6.3	389.3
cb	6.2	389.4
1/4	6.2	389.4
E	6.0	389.6
1/4	6.0	389.6

Adams:				19			
+	π 395.60	-	E/c	+	π 389.92	-	E/c
cb		6.0	389.6	1400 S.W.		5.5	384.4
N.W.		5.8	389.8	cb		5.5	384.4
	EC6:			1/4		5.4	384.5
N.W.		6.1	389.5	±		5.1	384.8
cb		6.3	389.3	1/4		5.5	384.4
1/4		6.2	389.4	cb		6.0	383.9
±		6.1	389.5	N.W.		7.5	382.4
1/4		6.3	389.3	141283 See sketch: N.W.		12.8	377.1
cb		6.1	389.5	cb.		12.1	377.8
S.W.		6.3	389.3	1/4		9.1	380.8
	5151 ST			±		8.2	381.7
5000 E.L. Contour	placed on the South.			1/4		10.1	379.8
S.C.		6.4	389.2	cb		9.9	380.0
cb.		6.3	389.3	S.W.		9.3	380.6
1/4		6.1	389.5				
±		5.8	389.8	{ 11283 North = Diagonal. See sketch			
1/4		6.1	389.5	{ 12930 South			
cb		6.6	389.0	S.W.		15.6	374.3
N.W.		6.7	388.9	cb		15.6	374.3
0+50 N.W.		8.6	387.0	1/4		12.4	376.5
cb		8.4	387.2	±		11.7	378.2
1/4		8.1	387.5	1/4		11.6	378.3
±		7.9	387.7	cb		13.6	376.3
1/4		7.9	387.7	N.W.		12.8	377.1
cb		7.8	387.8				
S.W.		7.6	387.8	Note: Deep canyon: Improvements should end at 1400			
#	4.15	389.92	9.87	# 6.18	395.41	0.69	389.23
			385.77 stang;	# 4.45	395.17	4.69	390.72
						3.62	391.55 - 391.15 / See Report

July 22nd 27
Dennan
Osborne
Flood.

E/c: Collier.

π 398.26

E/c

15

Xsection Collier from E.L. of alley west of Winona Ave to
a line 17.2 east of 5th st.

Note: This st is only 30' in width but we xsectioned it 60' wide
as it will probably be opened to that: 10' Cbs 16' Qts:

6.33 398.26

391.93 Se Cor Hub Winona and
Collier.

146.55 = E.L. of Alley lying west of Winona Ave; Alley line produced N.

146.55 S.U

Blk from Winona to alley west of Winona

0+00 = W.L. of Winona Ave produced North.

0+00 S.L. 5.4 392.9

cb 5.3 393.0

1/2 5.5 392.7

ε 5.4 392.9

1/4 5.4 392.9

cb 5.3 393.0

N.L. 5.4 392.9

0+50 M.U. 4.5 393.8

cd 4.4 393.9

1/2 4.4 393.9

ε 4.7 393.6

1/4 4.6 393.7

cb 4.7 393.6

S.U. 4.9 393.4

1+00 S.U. 4.3 394.0

cb 4.3 394.0

1/4 4.5 393.8

ε 4.1 393.8

146.55 = E.L. of Alley lying west of Winona Ave; Alley line produced N.

146.55 S.U

cb 5.0 393.3

1/4 4.9 393.4

ε 5.1 393.2

1/2 5.0 393.3

cb 5.0 393.3

N.L. 5.0 393.3

Intersection of Winona Ave and Collier 60' wide: 10' Cbs, 16' Qts.

6.31

398.24

391.93 S.E. Cor hub Winona and
Collier.

W.L. of Winona Ave produced North

S.L. 5.4 392.9

cb 5.3 393.0

1/2 5.5 392.8

ε 5.4 392.9

1/4 5.4 392.9

cb 5.3 393.0

N.L. 5.4 392.9

West curb.

N.L. 5.4 392.9

cb 5.5 392.8

T. π
398.24

Elev.
Collier

1/4	5.0	392.7
E	5.6	392.6
1/4	5.4	392.8
cb	5.0	392.7
S.W.	5.5	392.7
West 1/4		
S.W.	5.6	392.6
cb	5.1	392.7
1/4	5.4	392.8
E	5.6	392.6
1/4	5.6	392.6
cb	5.5	392.7
N.W.	5.0	393.2
E		
N.W.	5.3	392.9
cb	6.0	392.2
1/4	5.8	392.4
E	5.9	392.3
1/4	5.6	392.6
cb	5.3	392.9
S.W.	5.1	393.1
E 1/4		
S.W.	5.6	392.6
cb	5.9	392.3
1/4	5.8	392.4
E	6.1	392.1

T. π
398.24

Elev

16

1/4	6.4	391.8
cb	6.2	392.0
N.W.	6.1	392.1
East Curb		
N.W.	6.6	391.6
cb	6.7	391.5
1/4	6.6	391.6
E	6.4	391.8
1/4	6.2	392.0
cb	6.0	392.2
S.W.	5.6	392.6
E.L. of Winona Ave = 0+00		
S.W.	6.3	391.9
cb	6.2	392.0
1/4	6.4	391.8
E	6.7	391.5
1/4	6.8	391.4
cb	6.8	391.4
N.W.	6.8	391.4
0+50, E.L.	7.4	390.8
cb	7.2	391.0
1/4	7.2	391.0
E	6.8	391.4
1/4	7.1	391.1
cb	7.4	390.8
S.W.	7.5	390.7

+

π
398.24

-

E/e

Collier.

+

π
398.24

-

17

1400 S.L.	7.9	390.3
cb	8.0	390.2
1/4	7.5	390.7
E	7.6	390.6
1/2	7.6	390.6
cb	7.7	390.5
N.L.	7.5	390.7
1400 N.L.	7.5	390.7
cb	7.6	390.6
1/4	7.6	390.6
E	7.5	390.7
1/4	7.5	390.7
cb	7.8	390.4
S.L.	7.9	390.3
2400 S.L.	7.6	390.6
cb	7.1	391.1
1/4	7.2	391.0
E	7.3	390.9
1/2	7.2	391.0
cb	7.1	391.1
N.L.	6.9	391.3
2400 N.L.	6.4	391.8
cb	6.5	391.7
1/4	6.6	391.6
E	6.5	391.7
1/2	6.5	391.7

cb	6.5	391.7
S.L.	6.8	391.4
2470 = W.L. 50 th st produced North.		
S.L.	6.50	391.7
cb	6.1	392.1
1/4	5.9	392.3
E	6.2	392.0
1/4	6.4	391.8
cb	6.3	391.9
N.L.	6.5	391.7
#	6.00	392.74
Intersection of 50 th st: 60 wide 10 Cds 10 Cts; West Curb 50 th st		
N.L.	5.6	392.1
cb	5.7	392.0
1/4	5.8	391.9
E	5.8	391.9
1/4	5.7	392.0
cb	5.9	391.8
S.L.	6.0	391.7
N 1/4		
S.L.	5.9	391.8
cb	5.6	392.1
1/4	5.5	392.2
E	5.7	392.0
1/4	5.4	392.3

+

π
397.74

Collier.

cb	5.6	392.1
N.L.	5.5	392.2
N.L.	5.0	392.7
cb	5.2	392.5
1/4	5.5	392.2
E	5.4	392.3
1/4	5.4	392.3
cb	5.3	392.4
S.L.	5.4	392.3

E 1/4

S.L.	5.6	392.1
cb	5.6	392.1
1/4	5.4	392.3
E	5.3	392.4
1/4	5.4	392.3
cb	4.7	393.0
N.L.	4.7	393.0

E CB

N.L.	5.3	392.4
cb	5.2	392.5
1/4	5.4	392.3
E	5.5	392.2
1/4	5.4	392.3
cb	5.6	392.1
S.L.	5.6	392.1

+

π
397.74

E 1/4

18

0+00 = 'E.L. 50th St produced North.

S.L.	5.75	391.99	Hub S.E. Cor
cb	5.6	392.1	
1/4	5.5	392.2	
E	5.7	392.0	
1/4	5.8	391.9	
cb	5.5	392.2	
N.L.	5.5	392.2	

0+17 = End of St.

N.L.	5.6	392.1
cb	5.5	392.2
1/4	5.7	392.0
E	5.6	392.1
1/4	5.7	392.0
cb	5.7	392.0
S.L.	5.9	391.8

#

G.O. = 391.74 = 391.74 Hub S.W. Cor
50th & Collier. See Page 1.

+

π

-

Elev: Dannan
Osborne
Flood

July 23-27

Xsection Sampson St from Colton to P.T.S.F. +

1.61 31.66 29.99 S.P.M.W. Cor. Sampson & Main

2.05 25.47 9.18 22.42

Colton 80' - 14 cbs, 13' ats.
Sampson = 60', 10' cbs, 10' ats.

N.L. Colton:

E.L.	4.1	21.4
cb	5.1	20.4
1/4	5.0	20.5
1/2	4.6	20.9
3/4	5.0	20.5
cb	5.0	20.5
N.L.	7.2	21.3

N. 1/2 Colton

W.L.	4.7	20.8
cb	5.1	20.4
1/4	5.2	20.3
1/2	5.0	20.5
3/4	5.3	20.2
cb	5.3	20.2
E.L.	5.1	20.4

N. 3/4 Colton:

E.L.	5.3	20.2
cb	5.6	19.9
1/4	5.4	20.1
1/2	5.3	20.2
3/4	5.2	20.3
cb	5.1	20.4

Main:

st

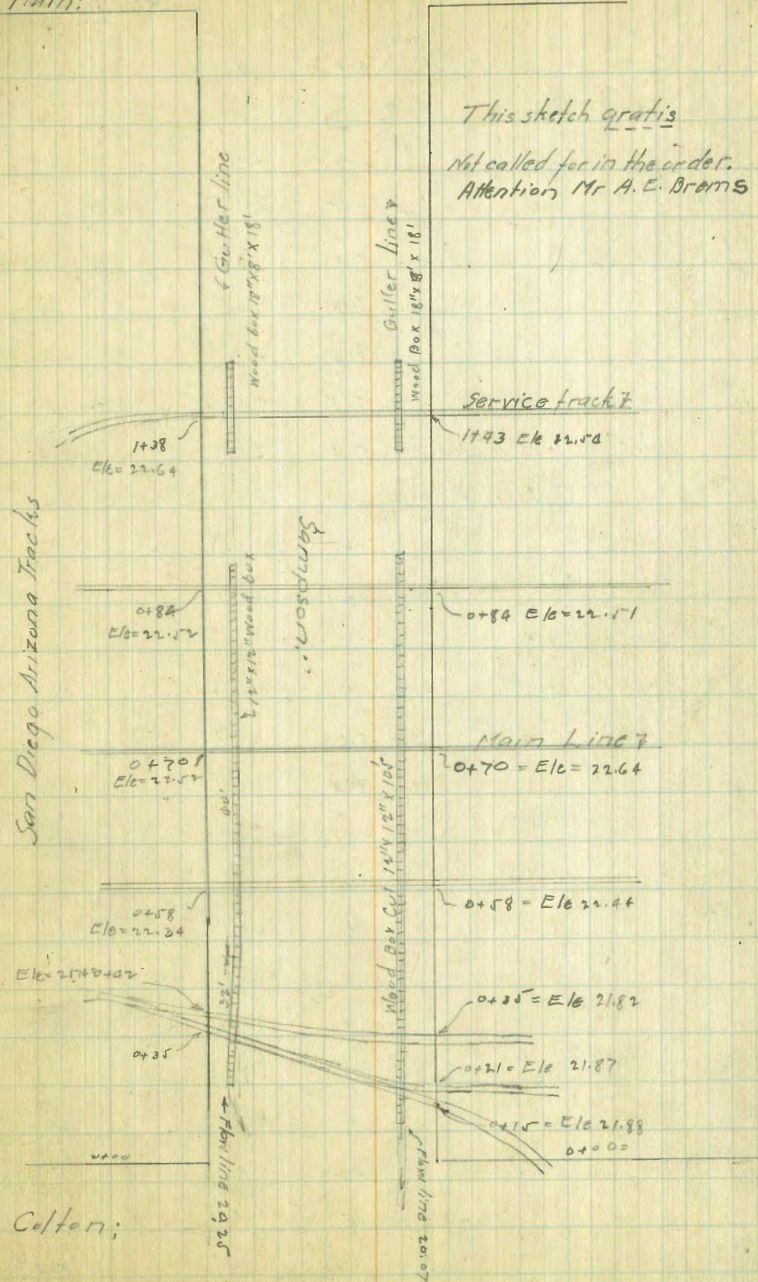
19

This sketch gratis

Not called for in the order.
Attention Mr. A. E. Broms

San Diego Arizona Tracks

Colton:



Yardage
in Y.B. 12 B. 29
1-25-29 F.C.

+ T
25.47

E/61

Sampson

W.U	4.9	20.6
€ Cotton:		
W.U	4.9	20.6
cb	5.5	20.0
1/4	5.4	20.1
€	5.3	20.2
1/4	5.4	20.1
cb	5.5	20.0
E.U	5.4	20.1

5/4 Cotton:

E.U	5.2	20.3
cb	5.5	20.0
1/4	6.0	19.5
€	6.0	19.5
1/4	5.1	20.4
cb	5.4	20.1
W.U	4.7	20.8

5cd Cotton

W.U	4.9	20.4
cb	4.9	20.4
1/4	4.9	20.6
€	5.7	19.8
1/4	6.7	18.8
cb	6.3	19.2
E.U	5.5	20.0

+ T
25.47

E/6

20

S.U Cotton = 0+00		
E.U	5.7	19.8
cb	6.6	18.9
1/4	6.7	18.8
+8	6.4	19.1
€	5.8	19.7
+4	5.1	20.4
1/4	5.0	20.5
cb	4.9	20.6
W.U	5.0	20.0

0+50

W.U	6.4	19.1
cb	6.3	19.2
1/4	6.3	19.2
€	6.2	19.3
+3	7.3	18.2
1/4	7.4	18.1
cb	7.6	17.9
E.U	7.1	18.4

1400

E.U	8.4	17.1
cb	8.5	17.0
1/4	8.0	17.5
+8	8.0	17.5
€	6.3	19.2
+8	6.5	19.0
1/4	7.6	17.9

	+	π 25.47	-	Sampson.
C6			7.4	18.1
W.L.			7.4	18.1
1450 W.L.			8.5	17.0
1450 W.L. = Elev on Sewer Manhole Rim			8.24	17.23
" " " " Flow line Sewer			16.04	9.43
C6			8.6	16.9
1/4			8.5	17.0
+7			7.9	17.6
±			9.1	16.4
1/4			9.3	16.2
C6			9.1	16.4
E.L.			9.0	16.5
2100 E.L.			10.7	14.8
C6			11.5	14.0
1/4			12.2	13.3
+7			11.6	13.9
±			9.2	16.3
1/4			10.0	15.5
C6			9.8	15.7
W.L.			9.6	15.9
#	1.90	12.05	10.32	15.15
2450 W.L.			2.9	14.2
C6			2.5	14.6
1/4			2.7	14.4
±			2.3	14.8
+2			4.1	13.0

	+	π 17.05	-	E16	21
1/4			4.4	12.7	
C6			4.4	12.7	
E.L.			3.9	13.2	
34018 - ML Railroad Ave on the east:					
Intersection Railroad Ave 80' 14" C6s 12' Gts:					
E.L.			4.7	12.4	
C6			5.0	12.0	
1/4			5.0	12.0	
±			4.9	12.2	
±			3.2	13.9	
1/4			3.7	13.4	
C6			3.5	13.6	
W.L.			3.3	13.8	
North Curb of Railroad Ave					
W.L.			3.6	13.5	
C6			3.7	13.4	
1/4			3.9	13.2	
±			4.2	12.9	
+3			5.1	12.0	
1/4			5.1	12.0	
C6			5.1	12.0	
E.L.			4.4	12.7	
N 1/4 of Railroad Ave:					
E.L.			4.8	12.3	
C6			5.2	11.9	
1/4			5.2	11.9	

+ π
17.05

- E/e;

Sampson.

+8	5.4	11.9
E	4.0	13.1
1/4	4.2	12.9
cb	4.0	13.1
W.L.	4.0	13.1

E Railroad Ave

W.L.	4.3	12.8
cb	4.3	12.8
1/4	4.1	13.0
E	4.3	12.8
+3	5.4	11.7
1/2	5.4	11.9
cb	5.3	11.8
E.L.	4.9	12.2

S 1/4 Railroad Ave:

E.L.	4.9	12.2
cb	5.6	11.5
1/4	5.6	11.5
E	5.6	11.5
+2	4.2	12.9
1/2	4.4	12.7
cb	4.5	12.6
W.L.	4.3	12.8

S curb Railroad Ave:

W.L.	4.7	12.4
cb	4.8	12.3

+ π
17.05

- E/e

22

1/4	4.8	12.3
+8	4.9	12.2
E	5.9	11.2
1/4	5.8	11.3
cb	5.8	11.3
E.L.	5.4	11.9

0+00 = S.L. Railroad Ave on the east:

E.L.	5.8	11.3
cb	6.0	11.4
1/4	6.0	11.4
E	6.0	11.4
+2	4.6	12.5
1/4	5.0	12.4
cb	5.0	12.1
W.L.	4.9	12.2

0+50 W.L.

cb	5.9	11.2
1/4	5.7	11.4
E	6.0	11.1
1/4	6.3	10.8
cb	6.3	10.8
E.L.	6.3	10.8

1+00 E.L.

cb	6.3	10.8
1/4	6.4	10.7
E	6.6	10.5

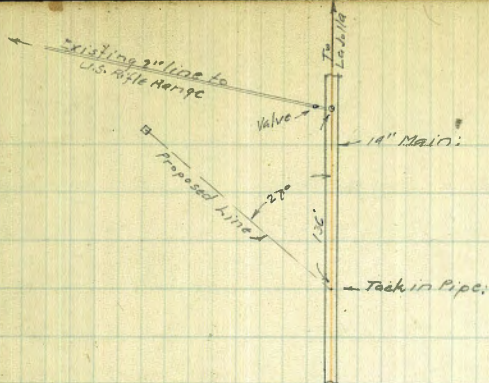
	+	π 17.00	-	Elev. Sampson:
1/4			7.1	10.0
cb			6.7	10.4
W.L.			6.9	10.2
1+32 W.L. Top cut			8.5	8.6
cb			10.3	6.8
1/4			8.4	8.7
+7			8.0	9.1
±			5.4	11.7
1/4			4.8	12.3
+6			4.8	12.3
+7			11.8	5.3
+9			11.8	5.3
cb			5.0	12.1
E.L.			5.2	11.9
#	3.88	12.28	8.65	8.0 On Track:
E.L.			5.7	6.6
1+38 = ditch turnout on gutter line; culvert under A.T. & S.F.R.R. Timber 2'x3'x26' opening 10' N of ± of tracks.				
cb			5.5	6.8
1/4			6.7	5.7
±			6.7	5.7
1/4			6.4	5.9
cb			6.0	6.3
W.L.			5.9	6.4
1+44 on A.T. & S.F. Roadbed:				
W.L.			4.5	7.8

	+	π 12.28	-	Elev.
cb			4.4	7.9
1/4			4.2	8.1
±			4.6	7.7
1/4			4.4	7.9
cb			4.5	7.8
S.L.			4.7	7.6
1+48 ± = ± A.T. & S.F.R.R.				
#	9.82	18.22	3.88	9.40 Rail
#	9.22	25.44	1.00	17.22
#	9.41	31.92	2.93	22.51
			1.95	29.97 = 29.99 initial B.M.
Note: this improvement should not go beyond the A.T. & S.F. ±				

RY

LT

24



19+90

34° 40'

17+80

18° 30'

15+72

26° 10'

12+40

15° 55'

9+30

30° 0'

4+20

46° 10'

2+40

29° 20'

0+00 tack Pipe

27° 0'

El. assumed:	+	π	-	E/G	Runoff Flood Bichet
U.S. Rifle Range Pipe Line					
	11.58	111.58		10000 Assumed Top of main See Page 1.	
0+00 Top of main at takeoff			6.93	104.65	103.00
1			4.7	106.9 ✓	102.90 +4.10
2			5.9	105.7 ✓	102.80 +2.9
2+40 Δ Lt			6.79	104.79 ✓	hub: 102.76 +2.0
3			5.9	105.7 ✓	102.70 +3.0
4			7.0	104.6 ✓	102.60 +2.0
#					102.58
4+20 Δ Lt	6.68	111.35	6.91	104.67 ✓	hub: 102.58 +2.1
5			5.1	106.3 ✓	102.00 +3.8
6			4.8	106.6 ✓	102.40 +4.4
7			5.4	106.0 ✓	102.30 +3.7
8			4.8	106.6 ✓	102.20 +4.4
9			4.6	106.8 ✓	102.10 +4.7
9+35 Δ Rt	8.38	110.60	4.13	107.22 ✓	hub: 102.00 +5.16
10			6.4	109.2 ✓	102.00 +7.2
10+037 = Edge pavement			6.37	109.23 ✓	102.00 +7.23
10+37 = " "			5.64	109.96 ✓	101.96 +8.0
11			5.0	110.6 ✓	101.90 +8.7
11+70 ² ± Hog canyon Road:			3.6	117.0 ✓	101.82 +10.2
12			5.4	110.2 ✓	101.80 +8.4
#					101.80 +6.86
12+40 Δ Lt	1.38	110.00	6.98	108.6 ✓	hub: 101.76 +4.9
13			3.4	106.6 ✓	101.70 +4.9
13+40 Break					101.66
14			8.6	101.40 ✓	100.26 +1.1
15			11.0	99.00 ✓	97.93 +1.1
#	2.21	102.01	10.20	99.80 ✓	stake +1.46
15+92 Δ Lt			4.76	97.25 ✓	95.79

	+	π	-	E/G	
		102.01			20
16.			5.1	96.9 ✓	95.60 +1.3
17			5.2	86.8 ✓	95.40 +1.4
#					
17+80 Δ Lt C7C		102.60	6.17	95.84 ✓	hub: 95.24 +0.60
18			6.8	95.8 ✓	95.20 +0.6
19			5.1	97.5 ✓	95.00 +2.5
19+90 Δ Lt 4.62		100.49	6.73	95.87 ✓	hub: 94.82 +1.05
20			4.4	96.1 ✓	94.80 +1.3
21			3.6	96.9 ✓	94.59 +2.3
22			4.6	95.9 ✓	94.38 +1.5
23			4.9	95.6 ✓	94.17 +1.4
24			5.9	94.6 ✓	93.96 +0.6
#	4.87	100.08	5.28	95.21	
24			5.0	95.1 ✓	93.86 +1.2
25			3.6	96.5 ✓	93.76 +2.7
+35			4.7	95.4 ✓	93.68 +1.7
25+75 end Line at tanks			4.25	95.33 ✓	hub: 93.60 +1.73
10			2.70	97.38	Nail Pole.
Bottom of intake pipe to tank			6.20	93.88	
					Book 1029

Sep 1927.

Flood.
Bicket

44+66.7 P.T.

43+16.0 P.I. $R=1400'$
 $\Delta 12^{\circ}24'15''$
 $E=82.3'$
 $T=152.108'$
 $L=302.99'$

6 Chords
 $50.48'$
 $1^{\circ}2'$
 $2^{\circ}4'$
 $3^{\circ}6'$
 $4^{\circ}8'$
 $5^{\circ}10'$
 $6^{\circ}12'$

44+16.47 ✓
 43+65.97 ✓
 43+15.48 ✓
 42+64.98 ✓
 42+14.48 ✓

$60-43-30$
 $60-43-30$
 $121-27-00$
 $2/121-26$
 $60-44$

41+63.98 P.C.

40+42.40 P.O.T.

39+94.19 P.O.T.

30+00 P.O.T.

22+00 P.O.T.

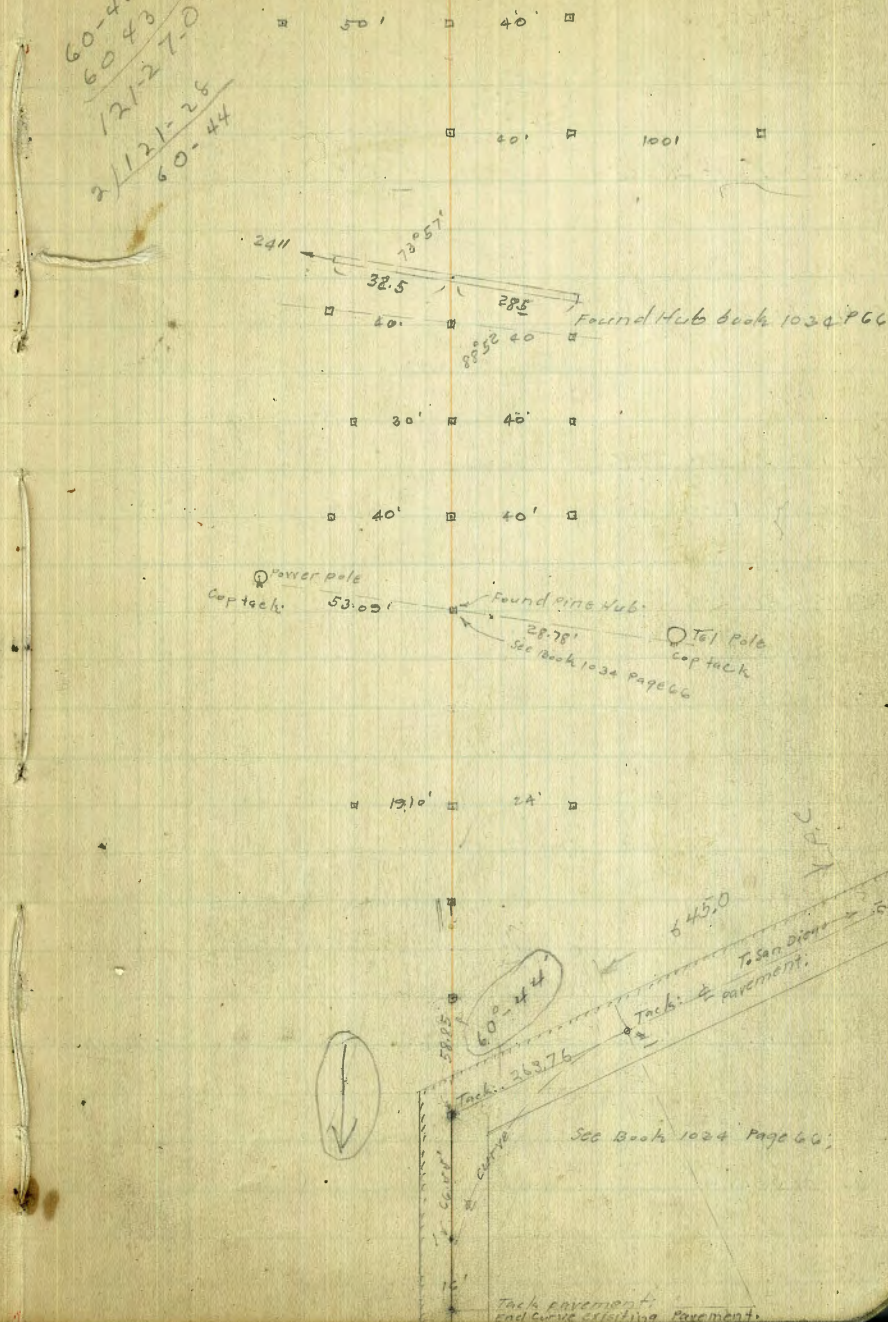
16+73.00 P.O.T.

7+00 P.O.T.

2+52.63 P.T.

P.I. $A=9939'$ Rt.
 $E=6.12$
 $R=1500'$
 $T=120.40$
 $L=252.63$

2500' B. Con pavement; no tack



Found Hub Book 1034 Page 66

Found Fine Hub
 Tel Pole
 Cap tack
 See Book 1034 Page 66

See Book 1024 Page 66

Tack pavement
 end curve existing pavement.

60+20.25 P.C.C.

R=190'
Δ=41° 0'
T=710.4'
L=135.96'

1 Chord of 14.48' = d of 2° 11' 00"
2 Chords of 50'
d = 7° 33' 40" 59+34.44
? 10° 7' 20" 59+84.59
21° 00' 00" 60+20.25

59+55.33 P.I. R+4100'

58+84.29 P.C.C.

7 Chords 50.98'

2° 51' 9" 55+79.51
5 42 18 56+30.21
8 33 27 56+81.10
11 24 36 57+31.20
14 15 45 57+82.10
17 06 54 58+33.09
19 58' 00" 58+84.23

57+14.00 P.I. Δ R+399.56'

R=510.18'
T=185.35'
L=355.58'

55+28.21 P.C.

55+00 P.O.T.

52+17

P.T. 51+40.41

50+82.82
50+25.22
49+67.63

50+25.23 P.I. 6° 0' Δ

R=2700
T=1105.30
E=3.01
L=220.38'

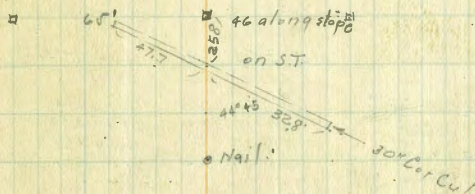
4 chords 57.59'
0° 45'
1° 30'
2° 15'
3° 00'

49+10° P.C.

49+00 P.O.T.

88' 35° on slope of

40° 45'



50' 77' along slope of



50' on slope of ground

70+61.8 P.C.

73+28.8

71+00.87 P.T. +

6 chords of 53.08'

$$d = 5^{\circ} 4' 30'' = 68 + 35 \frac{15}{16}$$

$$10^{\circ} 7' 00'' = 68 + 88 \frac{25}{16}$$

$$15^{\circ} 13' 30'' = 69 + 41 \frac{11}{16}$$

$$20^{\circ} 18' 00'' = 69 + 94 \frac{5}{8}$$

$$25^{\circ} 22' 30'' = 70 + 47 \frac{13}{16}$$

$$30^{\circ} 27' 00'' = 71 + 00 \frac{7}{8}$$

P.I. 69+58.36 Δ 60° 54' Lt.

R = 200'

T = 176.36'

E = 48.00'

69+142 on St.

67+82°° P.C.

60+20.12 P.T.

$$\Delta = 29^{\circ} 24'$$

$$R = 200'$$

$$T = 78.70'$$

$$E = 10.15'$$

$$L = 153.34'$$

3 chords of 51.25'

$$d = 4^{\circ} 54' = 64 + 17 \frac{5}{8}$$

$$'' = 9^{\circ} 48' = 64 + 68 \frac{8}{16}$$

$$'' = 14^{\circ} 42' = 64 + 20 \frac{15}{16}$$

64+44.9 P.I. Δ 29° 24' Lt.

64+26.8° on St.

P.C. 62+66.2° Lt. P.G.

P.T. = 62+35.2°

$$\Delta = 16^{\circ} 10'$$

$$R = 761.98'$$

$$T = 108.21'$$

$$L = 215.90'$$

4 chords of 53.74'

$$d = 2^{\circ} 1' 10'' = 60 + 74 \frac{00}{16}$$

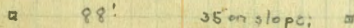
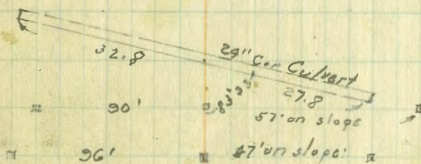
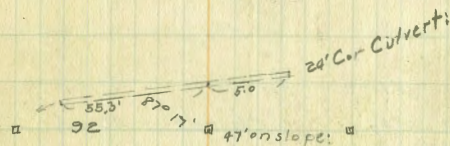
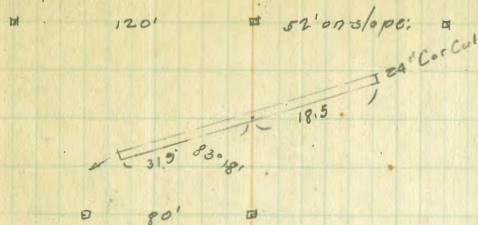
$$4^{\circ} 2' 30'' = 61 + 27 \frac{15}{16}$$

$$6^{\circ} 3' 40'' = 61 + 81 \frac{50}{16}$$

$$8^{\circ} 5' 00'' = 62 + 35 \frac{24}{16}$$

P.I. 61+28.4 Δ R.I. 16° 10'

60+20.2° P.C.C.



88+91.55 P.C. R.I.

88+115.6

81+34.00 P.T.

30° 34'

P.I. 80+17.30 $\Delta R = 30^\circ 34'$

6 Chords of 40.00'

R = 450'

T = 122.97'

E = 16.00'

L = 240.07'

d = 2° 32' 58" = 79+3+39

" = 5° 05' 40" = 79+79+20

" = 7° 38' 30" = 80+14+11

" = 10° 11' 20" = 80+54+3

" = 12° 44' 10" = 80+54+24

" = 15° 17' 00" = 81+34+0

P.E. 78+94.08 P.C.

78+65.29

78+06.19 P.T.

5 Chords of 48.84'

76+87.06 P.I. $\Delta 35^\circ 00' L$

R = 400'

T = 126.12'

E = 19.41'

L = 244.35'

d = 3° 30' = 76+1071

" = 7° 00' = 76+5758

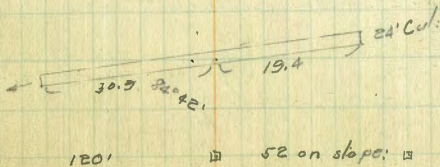
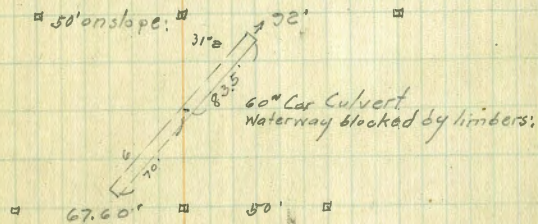
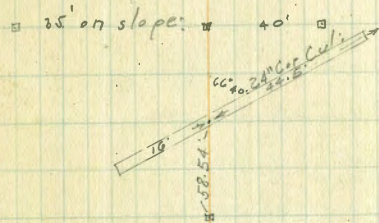
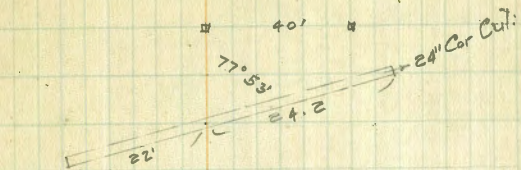
" = 10° 30' = 77+0925

" = 14° 00' = 77+5722

" = 17° 30' = 78+0615

76+38.64 on S.T.

75+61.84 P.C.



102+76.16 Pt.

Hoq Canyon.

On st:

3 Chords of 50.10'

$$d = 1' 41' 20'' = 99+75.02$$

$$n = 3' 22' 49'' = 100+25.54$$

$$n = 5' 4' 00'' = 100+70.66$$

$$n = 6' 45' 20'' = 101+25.79$$

$$n = 8' 26' 46'' = 101+70.21$$

$$n = 10' 08' 00'' = 102+26.03$$

$$n = 11' 49' 30'' = 102+76.16$$

101+03.20 P.I. 23° 39' Rt.

$$R = 850'$$

$$E = 18.43'$$

$$T = 177.56'$$

$$L = 350.86'$$

99+36.30 on S.T.

99+25.30 RC Rt

98+40.10 RT

6 chords of 43.68'

$$d = 4' 11' = 96+21.09$$

$$n = 8' 22' = 96+69.30$$

$$n = 12' 03' = 97+08.71$$

$$n = 16' 44' = 97+52.11$$

$$n = 20' 55' = 97+96.32$$

$$n = 25' 06' = 98+40.10$$

97+17.81 P.I. Δ Rt 50° 12'

$$R = 300'$$

$$T = 140.53'$$

$$E = 31.28'$$

$$L = 262.85'$$

96+30.10 on S.T.

95+77.28 RC Rt.

90+46.80

P.T. 89+81.10

Δ = 2° 34' Rt 2 Chords of 44.80

$$R = 2000'$$

$$E = 0.50'$$

$$L = 89.60'$$

$$T = 44.80'$$

P.I. 89+36.35 Rt

$$d = 0' 38' 30'' = 89+36.35$$

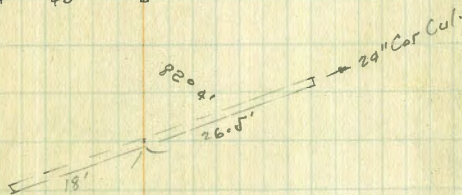
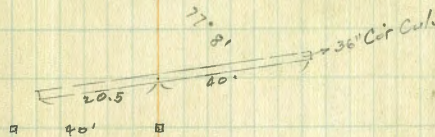
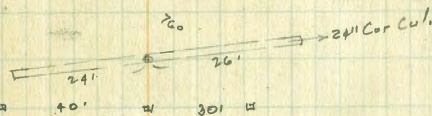
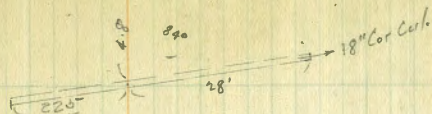
$$n = 1' 17' 00'' = 89+81.10$$

88+91.55 RC

54' on slope:

40'

30



131+08⁸⁵130+58⁸⁵ Approximate PC of existing pavement

+ chisel mark & existing paving:

129+94⁸⁵129+44⁸⁵ P.O.T. Nail in header board. East edge of existing paving:127+47⁸⁴126+97⁸⁴ P.T.

6 Chords of 46.85

$$d = 1^\circ 40' 40'' = 124+62.77$$

$$" = 3^\circ 21' 20'' = 125+09.03$$

$$" = 5^\circ 02' 00'' = 125+56.98$$

$$" = 6^\circ 42' 40'' = 126+03.33$$

$$" = 8^\circ 23' 20'' = 126+50.12$$

$$" = 10^\circ 04' 00'' = 126+97.05$$

126+07⁸⁴125+57⁸⁴ PI 20° 8' 15"

R=800'

T=142.62'

L=281.12'

E=12.51'

124+65⁸²124+70⁸² P.C. L123+47⁸¹122+57⁸¹ P.O.T.118+90⁸⁰118+00⁸⁰ P.T.

8 Chords of 99.44'

$$d = 1^\circ 20' = 114+94.04$$

$$" = 2^\circ 50' = 115+44.09$$

$$" = 4^\circ 15' = 115+93.57$$

$$" = 5^\circ 40' = 116+42.99$$

$$" = 7^\circ 05' = 116+92.23$$

$$" = 8^\circ 30' = 117+41.29$$

$$" = 9^\circ 55' = 117+91.39$$

$$" = 11^\circ 20' = 118+40.80$$

116+95⁶¹116+45⁶¹ PI 20° 40' RT

R=1000'

T=200.42'

E=19.89'

L=390.61'

114+95¹³114+45¹³ PC RT

106+50

106+00

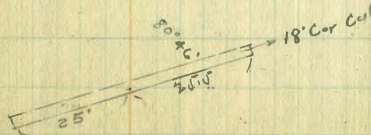
P.T. 102+76¹⁶

30' 40'



40 90 22'

30' 27'



45'

Hog Canyon.

135+43.45

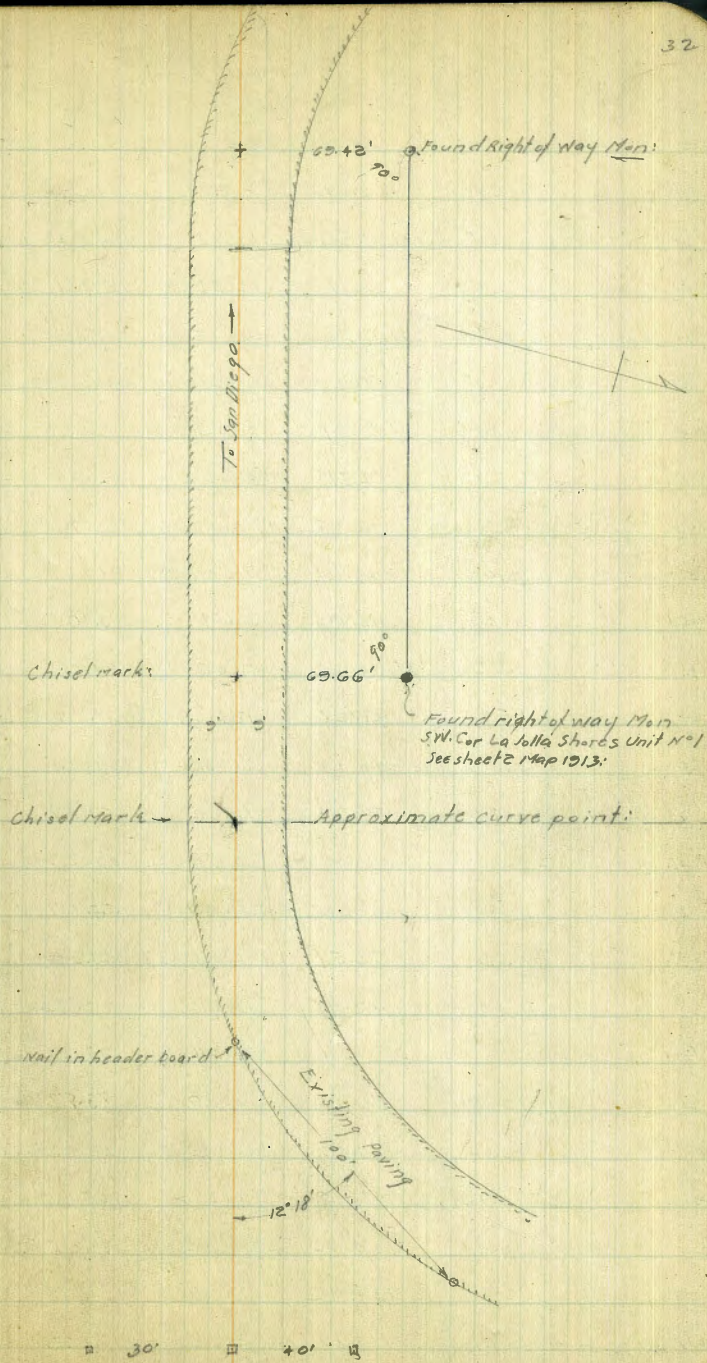
132+19.25 P.O.T.

130+58.81 P.O.T.

120+44.50 P.O.T.

126+07.04 P.T.

X



+ π - E/L
 B.M. Line for Hog Canyon Road,
 or La Jolla Canyon Drive.

#	12.23	144.31		132.08 B.P. South	Cor Prospect Place and Park Row. from official bench book.	
#	7.96	152.19	0.08	144.23 on North	curb Prospect Place:	1
#	0.18	139.52	12.85	139.34 on East	x Torrey Pines Road. South of entrance to private road.	2
#	0.70	127.71	12.51	127.01 " West	" " " " 75' S of end curve:	3
#	1.40	116.66	12.45	115.26 " "	" " " " North side of private driveway	4
#	1.30	105.20	12.81	103.85 " "	walk at North Cor driveway to House No 1628	5
#	0.49	93.69	12.00	93.20 " "	curb Torrey Pines Road at South line of Cypress hedge-Capri:	6
#	6.05	89.51	10.23	83.46 " "	" " " " 25' South of curb inlet	7
#	12.30	99.28	2.53	86.96 " "	" " " " North cor. of grated curb inlet	8
#	3.96	102.61	0.63	98.65 " N.W.	Cor of sidewalk at Hillside Drive:	9
#	3.46	96.56	9.51	93.10 " West	edge of paving nail N 1/4 of Newport Terrace	10
#	1.23	90.33	7.46	89.10 Bent Nail	W " " " South end of crack in pavement:	11
#	1.58	81.28	10.63	79.70 Nail in	header board W side pavement opposite pole #2280	12
#	0.18	70.13	11.33	69.95 " "	" " " " " " Brick house	13
#	0.87	58.34	12.66	57.97 " Spk	in pole #2350 Torrey Road and Calle Del Plata (La sheras B.M. #19) 57.115 christo	14
#	8.76	56.08	11.02	47.32	40' Rt R.P. for 126+97 of P.T.	15
#	5.37	61.06	0.39	55.69	Nail in top of North post of Rt guard fence for Cul at 122+97.9	16
#	11.53	72.59	0.00	61.06	Nail in peg 17' L 119+18	17
#	11.42	83.95	0.06	72.53	Nail in Road 126+00	
o			5.49	78.46	30' L. R.P. for 114+25 ¹² P.C. Rt	18
#	12.77	96.64	0.08	83.87	Rock 110+28 in Road: 5' R ⁺ of C.	
#	12.74	105.66	3.72	92.92	peg Rt of 106+20 at foot of embankment:	19
#	12.70	118.08	0.28	105.38	" " " 103 in field	20
#	12.31	129.96	0.43	117.65	Rock in Road 104+70	
#	12.85	137.43	5.38	124.58	30' Rt 99+25 ³⁰ P.C. Rt:	21
#	11.21	148.44	0.20	137.23	Rt of 97+50 Nail in 4th post from end of guard fence:	22

+ π
148.44 -

E/I:

#	+	π	-	E/I:
#	10.79	158.74	0.49	147.95
#	11.67	168.39	2.02	156.72
#	12.10	180.29	0.20	168.19 ✓
#	11.80	192.05	0.04	180.25
#	12.57	204.52	0.10	191.95
#	10.05	213.87	0.70	203.82
⊙			3.97	209.90
#	10.90	224.17	0.10	213.77
#	12.74	236.42	0.49	223.68
#	12.28	248.34	0.36	236.06
#	12.35	260.58	0.11	248.23
#	12.36	272.66	0.28	260.30
#	11.40	283.34	0.72	271.94
#	12.75	295.50	0.59	282.75
#	10.82	305.97	0.35	295.15
#	11.29	317.19	0.07	305.90
#	11.91	328.59	0.51	316.68
⊙			1.49	327.10
#	12.11	340.51	0.19	328.40
#	11.28	351.64	0.15	340.36
#	12.00	363.43	0.21	351.43
⊙			4.60	358.83
#	12.13	375.55	0.01	363.42
#	7.94	383.11	0.38	375.17
#	6.23	387.88	1.46	381.65
#	7.04	396.15	0.77	387.11

3467
all
error

Lt of 94+15 second post from North end of guard fence	23
Rt of 90+00 Peg at toe of slope:	24
17' Lt 88+75 Peg:	25
Rock in Road 5' Rt 86+70	
" " " 8' " 84+30	
" " " 10' " 81+65	
Rt of 80+65 nail in top of post south end guard fence:	26
Lt of 79+05 " " side " " " " " "	27
Peg in gutter Rt of 75+70	28
" " " " " 72+70	29
2nd post from N end, Lt 68+15	30
Peg on Lt edge fill 65+61	31
on center post of guard fence for Cul 64+2685 Nail in top of	32
Nail in hard pan Rt gutter 61+00	33
cen Post of guard fence for Cul: Appe 58+40	34
Peg in Rt gutter Sta 55+282 P.C.	35
" " " " " 53+00	36
Nail in top of cen pos guard fence for Cul at 52+17	37
Peg in Rt gutter 50+95	38
" " " " " 48+85	39
" " " nail 46+40	40
50' E.R.P. for 44+6697 P.T.	41
Nail in bottom of ditch Lt 43+20	42
Nail in south post of guard for cul Lt of 40+60	43
" " fence post Lt 35+70	44
" " " " " 31+37	45

	+	+	-	Ele.
		396.14		
#	8.36	404.41	0.10	396.05
#	9.34	412.65	1.10	403.31
#	6.50	416.97	2.18	410.47
#	4.35	416.07	5.25	411.72
#	0.23	407.99	8.31	407.76
#	4.52	401.48	11.03	396.96
#			2.60	398.88
#			7.04	394.44

Check to Davis B.M.

5.64	408.95		403.31 = 47 above.
2.89	401.03	10.81	398.14
0.02	393.49	7.06	393.47
3.45	384.41	12.53	380.96
		6.57	377.89 = 377.24 Book 1011 Page 2

Check to Moores B.M. at Princess and Spindrift

0.75			86.26 = 8 th Page 33:
1.07	78.89	9.89	77.82
		9.78	69.11 = 69.06

Check to Gregory's B.M. = 21' R.R. Page 53 Book 1024 = Ele 392.57

1.73	400.61		398.88 = 52 th sec above.
		7.36	393.25 = dif 0.68

Nail fence Post Lt 27+40	46
Stake Rt 22+15	47
Nail pole 20219 tie Rt 28.78 for P.O.T. 16+7306	48
Nail fence Post Rt 10+70	49
" Cor " " Lt 5+05	50
3 nails in west post of No Shooting sign	51
Nail in top of South end of East ground sill for water tanks probably used as B.M. - Nail scribed around by circle; on pavement at cop track Marked 1 st on page 26	52
	53

Xsection of Hog Canyon Road

	+	T	-
39+94 19 ROT	3.69	378.81	375.17 DM #3 Page 34
20 RT Top of fill	2.0	375.8 ✓	375.8 ✓
±	2.7	376.1 ✓	376.1 ✓
13 L	2.7	376.1	
20 L Top fill			
Intake flow Line	9.03	369.78	
outlet " " 41+00	9.93	368.88	
23 L Top fill	5.1	373.7 ✓	
13 L	4.1	374.7	
±	4.0	374.8 ✓	
10 RT	4.0	374.8	
20 RT top fill			
41+63 78 PC #			
22 RT gutter	5.5	373.3 ✓	
10 RT	5.1	373.7	
±	5.1	373.7 ✓	
15 L	5.4	373.4	
20 L Top fill	5.8	373.0 ✓	
42+14 48			
22 L Top of fill	7.2	371.6 ✓	
15 L	7.1	371.7	
±	7.1	371.7 ✓	
10 RT	7.2	371.6	
18 RT Gutter	7.7	371.1 ✓	
42+64 98			

Donnan
Flood
Biket.

Sep 1927

	+	T	-	E/6	36
18 RT Gutter		378.81		10.2	368.6
8 RT				9.6	369.2
±				9.4	369.4 ✓
23 L Top fill				9.8	369.0 ✓
43+15 48					
43+51 28					
24 L Top fill				11.8	367.0 ✓
±				12.0	366.8 ✓
16 RT				11.9	366.9
16 RT gutter				12.6	366.2 ✓
# 1.26	367.13		12.57	366.24	
43+65 97					
23 L = Top fill				3.3	364.2 ✓
17 L				2.7	364.8
±				2.9	364.6 ✓
17 RT = Top of out				3.1	364.4 ✓
44+16 47					
20 RT Top of out				5.4	362.1 ✓
10 RT				5.3	362.2
±				5.0	362.5 ✓
23 L Top of fill				5.3	362.2 ✓
44+66 97 P.T.					
25 L Top of fill				7.9	359.6 ✓
18 L				7.3	360.2
±				7.3	360.2 ✓
13 RT				7.7	359.8
20 RT Bottom of bank				7.1	360.4 ✓

+

π
367.50

-

E/E

	+	π	-	E/E
		45700		
20 Rt = Bottom of bank			8.5	359.0 ✓
15 Rt			9.2	358.3
⊕			8.8	358.7 ✓
25 Lt Top of fill			9.7	357.8
		45+50		
24 Lt " "			12.2	355.3 ✓
15 Lt			11.3	356.2
⊕			11.2	356.3 ✓
5 Rt			11.2	356.3
20 Rt			12.1	355.4 ✓
30 Rt Borrow pit			11.8	355.7
#	0.79	355.49	12.79	354.71
		46+00		
35 Rt in borrow pit			1.9	353.6
20 Rt			2.2	353.3 ✓
10 Rt			1.9	353.6
⊕			1.6	353.9 ✓
15 Lt			1.7	353.8
25 Lt Top of fill			2.5	353.0 ✓
		46+50		
28 Lt Top of fill			4.9	350.6 ✓
15 Lt			2.8	351.7
⊕			3.8	351.7 ✓
7 Rt			3.7	351.8
20 Rt			4.3	351.2 ✓

+

π
355.49

-

37

	+	π	-	E/E
20 Rt in borrow pit			4.3	351.2
		47+00		
20 Rt in borrow pit			6.2	349.3
20 Rt			6.6	348.9 ✓
6 Rt			5.7	349.8
⊕			5.9	349.6 ✓
15 Lt			6.0	349.5
22 Lt			6.8	348.7 ✓
28 Lt Top of fill			6.7	348.8
		47+50		
27 Lt Top of fill			9.2	346.3 ✓
15 Lt			8.2	347.3
⊕			8.4	347.3 ✓
17 Rt			8.4	347.3 ✓
		can go out more than by moving a little loose dirt 48+00		
20 Rt			10.4	345.1 ✓
12 Rt			11.0	344.5
⊕			10.6	344.9 ✓
14 Lt			10.5	345.0
22 Lt			11.2	344.3 ✓
26 Lt Top fill			10.7	344.8
#	0.34	343.59	12.24	343.25
		48+50		
25 Lt Top of fill			1.6	342.0 ✓
11 Lt			0.7	342.9
⊕			1.0	342.6 ✓

	+	π	-	E/e
		343.59		
18 Rt			1.3	342.3 ✓
		49+00		
20' Rt bottom of cut - Burrow pit			3.7	339.9
10' Rt			3.3	340.3
±			3.1	340.5 ✓
10 ft			3.0	340.6
23 ft Top of fill			3.9	339.7
		49+10 ⁰³ P.C. ft		
22 ft Top of fill			4.3	339.3 ✓
10 ft			3.4	340.2
±			3.5	340.1 ✓
10 Rt			3.8	339.8
20 Rt bottom cut			4.1	339.5 ✓
		49+6763		
20 Rt bottom cut			6.7	336.9 ✓
±			6.7	336.9 ✓
13 ft			6.6	337.0
25 ft Top of fill			7.2	336.4 ✓
		50+2522		
23 ft Top of fill			10.8	332.8 ✓
10 ft			9.8	333.8
±			9.9	333.7 ✓
13 Rt			10.1	333.6
20 Rt bottom cut			10.9	332.7 ✓
#	0.44	331.12	12.91	330.68
		50+8282		

	+	π	-	E/e	38
		331.12			
20 Rt bottom cut			1.8	329.3 ✓	
13 Rt			1.2	329.9	
±			1.1	330.0 ✓	
10 ft			1.0	330.1	
18 ft Top of fill			1.4	329.7 ✓	
		51+40 ⁴¹ P.T.			
23 ft Top of fill			4.8	326.3	
10 ft			4.5	326.6	
±			4.6	326.5 ✓	
10 Rt			4.5	326.6	
21 R bottom of cut			5.4	325.7 ✓	
		52+00			
22 Rt bottom cut			9.0	322.1 ✓	
10 Rt			8.1	323.0	
±			8.0	323.1 ✓	
10 ft			8.3	322.8	
22 ft Top of fill			8.7	322.4 ✓	
		52+17 Culvert			
flow line intake			10.92	320.20	
" " Outlet			14.72	316.40	
		52+50			
21 ft Top fill			11.3	319.8 ✓	
13 ft			11.0	320.1	
±			10.7	320.4 ✓	
8 Rt			10.8	320.3	
20 Rt bottom cut			11.8	319.3 ✓	

	+	π	-	E/6
	1.01	319.68	12.45	318.67
		53+00		
20 Rt bottom cut			2.7	317.0 ^v
10 Rt			1.8	317.9
±			1.7	318.0 ^v
14 Lt			2.2	317.5
21 Lt Top of fill			2.8	316.9 ^v
		53+50		
23 Lt Top of fill			5.0	314.7 ^v
12 Lt			4.4	315.3
±			4.2	315.5 ^v
10 Rt			4.5	315.2
19 Rt bottom cut			5.2	314.5 ^v
		54+00		
20 Rt bottom cut			7.6	312.1 ^v
10 Rt			7.0	312.7
±			6.8	312.9 ^v
10 Lt			6.9	312.8
22 Lt Top of fill			7.1	312.6 ^v
		54+50		
28 Lt Top of fill			9.4	310.3 ^v
15 Lt			9.9	309.8
10 Lt			9.4	310.3
±			9.3	310.4 ^v
10 Rt			9.4	310.3
22 Rt Bottom of cut:			10.2	309.5 ^v

	+	π	-	E/6	
		319.68			39
		55+00			
25 Rt bottom of cut			12.9	306.8 ^v	
75 Rt			11.8	307.9	
±			11.6	308.1 ^v	
10 Lt			11.7	308.0	
15 Lt			12.0	307.7 ^v	
26 Lt Top of fill			14.2	308.5	
#	0.71	308.14	12.25	307.43	
		55+282 P.C Rt.			
23 Lt Top of fill			0.5	307.6 ^v	
13 Lt			1.4	306.7	
±			1.3	306.8 ^v	
15 Rt			1.4	306.7	
23 R Bottom of cut			2.3	305.8 ^v	
		55+7951			
20 Rt Bottom cut			4.8	303.3 ^v	
15 Rt			4.3	303.8	
±			3.7	304.4 ^v	
7 Lt			3.4	304.5	
15 Lt			3.9	304.2	
18.5 Lt = end fence:					
24 Lt Top of fill			3.4	304.7 ^v	
		56+303			
25 Lt = Top of fill			5.5	302.6	
22 Lt = guard fence					
15 Lt			6.0	302.1	

	+	π	-
		308.14	
9 Lt		5.7	302.4
±		6.1	302.0 ✓
16 Rt Bottom of cut.		6.5	301.6 ✓
		56+8110	
16 Rt Bottom of cut		7.2	298.9 ✓
±		8.7	299.4 ✓
10 Lt		8.2	299.9
22.5 Lt to Guard fence			300.0 ✓
25 Lt Top of fill		8.1	
		57+3190	
25 Lt Top of fill		10.5	297.6 ✓
18.5 Lt = Guard fence			
19 Lt		10.5	297.6
±		10.8	297.3 ✓
15 Rt		11.5	296.6
23 Rt		12.0	296.1 ✓
		57+8220	
25 Rt Bottom of cut		13.7	294.4 ✓
15 Rt		12.9	295.2
±		12.3	295.8 ✓
10 Lt		12.1	296.0
17 Lt = Guard fence			
22 Lt = Top of fill		12.2	295.9
#	0.76	296.90	13.00
		58+3349	295.14
18 Rt = Bottom cut		2.6	293.3 ✓

	+	π	-
		395.90	
			294.3 ✓
		10 Lt	294.7
		20.5 Lt = Guard fence	
		23 Lt Top of fill	294.2 ✓
		15 low line culvert (30") intake	7.27
		see sketch.	
		" " " Outlet	10.00
		58+8429 P.C.C.	
		29 Lt = Top of fill	2.8
		24.5 Lt = guard fence	
		10 Lt	2.6
		±	3.4
		14 Rt Bottom of cut:	4.3
		#	0.22
		29.5.37	0.76
		59+3444	295.14
		18 Rt bottom cut	2.7
		13 Rt "	5.5
		±	4.5
		8 Lt	3.9
		24.5 Lt to guard fence.	
		27 Lt to Top of slope	3.3
		59+8459	
		24 Lt Top of slope	6.2
		20 Lt to guard fence	
		15 Lt	5.8
		±	6.6
			289.6
			288.8 ✓

+	π 295.37	-	E/e
21Rt bottom of cut:		7.4	288.0 ✓
	60+2025 P.C.C.		
20Rt bottom of cut		9.0	286.4
±		8.0	287.4 ✓
8 Lt		7.4	288.0
21 Lt fence			
24 Lt Top of fill		7.3	288.1 ✓
	60+79		
22 Lt Top of fill		10.2	285.2 ✓
19 Lt guard fence			
8 Lt		9.9	285.5
±		10.2 ✓	285.2 ✓
18 Rt bottom of cut:		11.3	284.1 ✓
#	0.19	282.93	12.63
	61+2725		282.74 = 282.25 = 33
19 Rt bottom of cut		1.5	281.4 ✓
±		0.1	282.8 ✓
16 Lt guard fence		0.0	282.9
20 Lt Top of fill		0.3	282.6 ✓
	61+8150		
22 Lt Top of fill		2.2	280.7 ✓
17 Lt guard fence			
10 Lt		1.8	281.1
±		2.2	280.7 ✓
17 Rt bottom of cut:		2.9	280.0 ✓
	62+3525 P.P.		

+	π 282.93	-	E/e	41
15 Lt Bottom of cut:		5.5	277.4 ✓	
±		4.8	278.1 ✓	
10 Lt		4.2 ✓	278.7	
22 Lt guard fence				
25 Lt Top of fill:		4.2	278.7 ✓	
	63+00			
21 Lt Top of fill		8.3	274.6 ✓	
18 Lt guard fence				
10 Lt		7.9	275.0	
±		8.1	274.8 ✓	
10 Rt		8.3	274.6	
14 Rt bottom of cut:		9.0	273.9 ✓	
	63+6625 P.C.C.			
26 Rt Bottom of cut		12.3	270.6 ✓	
20 Rt		11.8	271.1	
±		11.8	271.1 ✓	
10 Lt		12.0	270.9	
15 guard fence				
17 Lt top of bank:		12.8	270.1	
#	0.33	272.25	11.01	271.92 = T.P. 32 = 271.94
	64+1766			
30 ft guard fence for cut		4.2	268.1 ✓	
Line of cut 35' Rt				
10 Rt		3.4	268.9	
±		4.0	268.3 ✓	
15 Lt at guard fence for cut		4.3	268.0	
18 Lt Top of bank:		5.0	267.3 ✓	

	+	π	-	E/e
		272.25		
Flowline 24' Cut intake:		8.87		263.38
" " " " Outlet		11.41		260.84
		68+68.87		
20' Top of fill		6.9		265.4 ✓
16' U guard fence				
12' U		6.4		265.9
t		6.6		265.7 ✓
10' RT		6.0		266.3
24' RT batt of cut		6.6		265.7 ✓
60' end of guard fence				
		65+20.19 P.T.		
17' RT bottom of cut		9.7		262.6 ✓
7' RT		8.9		263.4
t		8.9		263.4 ✓
12' U		9.1		263.2
21' U Top of fill		10.4		261.9 ✓
		65+25.0		
23' U Top of fill		11.7		260.6 ✓
10' U		10.5		261.8
t		10.5		261.8 ✓
10' RT		10.8		261.5
20' RT bottom of cut		11.2		261.1 ✓
#	0.40	260.68	11.97	260.28
		66+00		
17' RT bottom of cut		1.8		258.9 ✓

	+	π	-	E/e	
		260.68			42
8' RT			1.4		259.3
t			1.1		259.6 ✓
12' U			0.9		259.8
24' U Top of bank:			1.4		259.3 ✓
		66+50			
26' U Top of fill			4.0		256.7 ✓
12' U			3.2		257.5
t			3.3		257.4 ✓
15' RT bottom of cut			3.7		258.0 ✓
		67+00			
15' RT bottom of cut			5.7		255.0 ✓
t			5.6		255.1 ✓
13' U			5.7		255.0
25' U Top of slope			6.7		254.0 ✓
		67+82 P.C.			
26' U Top of slope			10.4		250.3 ✓
15' U			9.9		250.8
t			9.9		250.8 ✓
8' RT			9.7		251.0
17' RT bottom of cut:			10.2		250.5 ✓
#	0.06	248.28	12.46	248.22	T.P. #30 = 248.23
		68+12 guard fence commences:			
		68+35' N			
20' RT bottom of cut			0.9		247.3 ✓
10' RT			0.2		248.1
t			0.4		247.9 ✓

	+	π	-	Ele
		248.28		
13 Lt			0.5	247.8
22 Lt = guard fence			1.1	247.2 ✓
25 Lt Top of slope			1.1	247.2
	68+8829			
20 Lt Top of bank:			4.2	244.1 ✓
17 Lt = guard fence				
10 Lt			3.4	244.9
±			3.1	245.2 ✓
10 Rt			2.6	245.7
20 Rt			2.7	245.6 ✓
28 Rt bottom of cut			3.6	244.7
Intake flow line 20' Cul			7.47	240.81
Outlet " " " "			10.84	237.44
	69+4444			
28 Rt bottom of cut			5.4	242.9 ✓
22 Rt			5.9	242.4
15 Rt			4.8	243.5
±			5.2	243.1 ✓
14 Lt to guard fence			6.1	242.2
17 Lt Top of slope:			6.6	241.7 ✓
	69+9458			
20 Lt Top of slope			7.6	240.7
16 Lt guard fence:				
±			6.9	241.4 ✓
11 Rt			6.2	242.1
18 Rt			6.6	241.7 ✓
24 Rt bottom of cut			7.9	240.4

	+	π	-	Ele	
		248.28			42
70+45 = End of fence					
					70+473
22 Rt bottom of cut			9.0	239.3 ✓	
13 Rt			8.0	240.3	
±			8.4	239.9 ✓	
19.5 Line of fence					
22 Lt Top of fill			9.1	239.2	
	71+0087 P.T.				
20 Lt Top of bank			10.8	237.5 ✓	
12 Lt			10.3	238.0	
±			9.9	238.4 ✓	
10 Rt			9.8	238.5	
23 Rt Bottom of cut			10.8	237.5 ✓	
	71+50				
25 Rt Bottom of cut			11.8	236.5 ✓	
10 Rt			10.8	237.5	
±			10.9	237.4 ✓	
10 Lt			11.3	237.0	
21 Lt Top of fill			11.9	236.4 ✓	
#	1.35	237.39	12.24	236.04 = 236.06	
	72+00				
20 Lt top of fill			2.1	235.3 ✓	
10 Lt			1.4	236.0	
±			1.2	236.2 ✓	
10 Rt			1.3	236.1	
20 Rt Bot. of cut			2.0	235.4 ✓	

+ T
237.39

E/C

72+50

20RT Bottom of cut 2.2

17RT Bottom of cut 3.1

10RT 2.7

E 2.3

12U 2.0

24U Top of fill 3.3

73+00

26U Top of fill 4.0

13U 3.8

E 3.8

10RT 4.2

16RT Bottom of cut 4.8

73+288 24" Cul

Front line intake 8.34

" " Outlet 10.95

73+50

15RT Bottom of cut 6.1

8RT 5.7

E 5.3

12U 5.4

27U Top of fill 5.7

74+00

28U Top of fill 7.8

13U 7.2

Keep away from this fill with Location. It is not even a 1/2 slope, and danger of wash.

235.2

234.3

234.7

235.1

234.9

234.1

232.9

233.6

233.6

233.2

232.6

229.05

226.44

231.3

231.7

232.1

232.0

231.7

229.6

230.2

+ T
237.39

E/C

44

7.1

9RT edge of diving 7.4

12RT 7.7

17RT Bottom of cut 6.8

74+50

18RT Bottom of cut 8.5

15RT 9.7

19RT 9.0

E 8.6

13U 8.8

25U Top of fill 9.4

75+00

23U Top of fill 10.5

13U 10.4

E 10.3

15RT 11.2

20RT Bottom of cut 10.2

75+50

21RT Bottom of cut 12.3

15RT 13.2

10RT 12.6

E 12.2

13U 12.4

22U Top of fill 13.0

0.51 225.05 12.85 224.54

75+6184 P.C.

230.3

230.0

229.7

230.6

228.9

227.7

228.4

228.8

228.6

228.0

226.9

227.0

227.1

226.2

227.2

225.1

224.2

224.8

225.2

225.0

224.4

+ π
237.39

72+50

20RT Bottom of cut 2.2

17RT 3.1

10RT 2.7

E 2.3

12L 2.0

24L Top of fill 3.3

73+00

26L Top of fill 4.0

13L 3.8

E 3.8

10RT 4.2

16RT Bottom of cut 4.8

73+288 24" Cul

Flow line intake 8.34

" " Outlet 10.95

73+50

15RT Bottom of cut 6.1

8RT 5.7

E 5.3

* 10L 5.4

27L Top of fill 5.7

74+00

28L Top of fill 7.8

13L 7.2

Keep away from this fill with Location. It is not even a Hololope, and danger of wash.

E/e

235.2

234.3

234.7

235.1 ✓

234.9

234.1 ✓

232.9 ✓

233.6

233.6 ✓

233.2

232.6 ✓

229.05

226.44

231.3 ✓

231.7

232.1 ✓

232.0

231.7 ✓

229.6 ✓

230.2

+ π
237.39

E 7.1

9RT edge of diving 7.4

12RT 7.7

17RT Bottom of cut 6.8

74+50

18RT Bottom of cut 8.5

15RT 9.7

19RT 9.0

E 8.6

13L 8.8

25L Top of fill 9.4

75+00

23L Top of fill 10.0

13L 10.4

E 10.3

15RT 11.2

20RT Bottom of cut 10.2

75+50

21RT Bottom of cut 12.3

25RT 13.2

10RT 12.6

E 12.2

13L 12.4

22L Top of fill 13.0

0.51 225.05 12.85

75+6184 P.C.

E/e

230.3 ✓

230.0

229.7

230.6 ✓

228.9 ✓

227.7

228.4

228.8 ✓

228.6

228.0 ✓

226.9 ✓

227.0

227.1 ✓

226.2

227.2 ✓

225.1 ✓

224.2

224.8

225.2 ✓

225.0

224.4 ✓

224.54

	+	π 225.05	-	E/E
22 th Top of slope			0.8	224.2
±			0.3	224.7
9 Rt			0.7	224.3
15 Rt			1.3	223.7
22 Rt Bottom of cut:			0.4	224.6
		76+101 th P.O.C. 761702 th P.C.		
23 Rt bottom of cut			2.1	222.5
19 Rt			3.2	221.8
8 Rt			2.2	222.8
±			2.3	222.7
10 th			2.6	222.4
20 th Top of slope			3.2	221.8
Inlet flow line 20' Cul.			7.31	217.74
Outlet " " "			9.18	215.87
		76+59 th P.O.C. 76110 th this section in through cut.		
18 th Top of cut			3.5	221.5
12 th Bottom of cut			9.5	220.5
±			9.4	220.6
10 Rt			2.9	222.1
26 Rt Bottom of cut:			4.3	220.7
		76+84 Fence starts on Lt; Appro 15 th of ± P.O.C. 77+084 th this section in through cut;		
26 Rt to bottom of bank			6.3	218.7
10 Rt			5.6	219.4
±			6.0	219.0
13 th to fence				

	+	π 225.05	-	E/E
15 th to bottom of cut			6.1	218.9
16 th to top of cut			4.3	220.7
20 th " " "			4.9	220.1
At 77+05 on Rt guard fence begins: 20' from ±				
		77+5732	P.O.C.	
17 th Top of fill			7.5	217.5
145 th guard fence				
±			7.0	217.5
10 Rt			7.1	217.9
19 Rt guard fence			7.0	217.5
95 Rt			8.1	216.9
30 Rt Bottom of cut			7.5	217.5
		78+0619 P.T.		
30 Rt in old road			9.0	216.0
20 Rt			9.0	216.0
18 Rt guard fence			8.6	216.4
4 Rt			8.7	216.3
±			9.0	216.0
15 th guard fence and top of fill			9.5	215.5
		78+6022=60" Cor Cul		
Flow line inlet of cut			25.20	199.85
" " Outlet " "			36.0	189.05
		78+9438 Rt Rt;		
25 th bottom of cut			12.1	212.9
19 th guard fence			12.2	212.8
10 th			12.0	213.0

	+	π 225.05	-	E/E
±			12.0	212.5 ✓
14 Rt guard fence			12.8	212.2
20 Rt Top of fill			13.2	211.8 ✓
#	0.10	212.86	11.29	213.76 - TP 17 = 213.77
79+05 = End of fence on Lt.				
			79+34.39	
17 Rt Top of fill			3.7	210.2 ✓
13.5 Rt guard fence			3.1	210.8
±			2.6	211.3 ✓
12 Lt			2.1	211.8
20 Lt bottom of cut			3.0	210.9 ✓
			79+79.0	
21 Lt Bottom of cut:			4.2	209.7 ✓
6 Lt			3.4	210.5 ✓
±			3.8	210.1 ✓
16.5 Rt = Guard fence				
20 Rt Top of slope			4.4	209.5 ✓
			80+14.41	
20 Rt Top of slope			5.2	208.7
18.5 Rt Guard fence:			5.1	208.8
10 Rt			4.9	209.0 ✓
±			4.6	209.3
6 Lt			5.2	208.7
19 Lt Bottom of cut				
			80+54.92	Thru cut:
17 Lt Bottom of cut			6.0	207.9 ✓

	+	π 213.86	-	E/E	46
6 Lt			5.8	208.1	
±			6.1	207.8 ✓	
10 Rt			6.3	207.6	
19 Rt guard fence					
22 Rt Bottom of cut			6.4	207.5 ✓	
23 Rt Top of cut			5.1	208.8	
80+67 end of fence on Rt					
Flow line 24" Cor Cut inlet			10.10	203.76	
" " " " " Outlet			14.21	199.65	
80+94.03 Thru cut:					
25 Rt Top of cut			6.5	207.4	
21 Rt Bottom of cut			8.0	205.9 ✓	
10 Rt			7.7	206.2	
±			7.4	206.5 ✓	
7 Lt			7.2	206.7	
17 Lt Bottom of cut:			8.2	205.7 ✓	
81+34.25 Rt Thru cut:					
18 Lt Bottom of cut			9.2	204.7 ✓	
7 Lt			8.0	205.4	
±			8.8	205.1 ✓	
12 Rt			9.0	204.9	
20 Rt bottom of cut			9.5	204.4 ✓	
24 Rt Top of cut:			7.4	206.5	
82+00					
23 Rt Top of cut			11.1	202.8	
18 Rt Bottom of cut			12.0	201.9 ✓	

	+	π	-	
		212.86		
10 Rt			11.4	202.5
±			11.2	202.7 ✓
10 Lt			11.0	202.9 ✓
18 Lt to bottom of cut			11.8	202.1 ✓
#	0.55	201.71	12.70	201.16
		83+00 Thru Cut		
19 Lt Bottom cut			3.7	198.0 ✓
10 Lt			3.0	198.7
±			3.1	198.6 ✓
12 Rt			2.2	199.5
20 Rt Bottom of cut			2.8	197.9 ✓
27 Rt Top of cut			+1.0	202.7
		84+00 Thru cut		
22 Rt Top of cut			8.9	192.8
20 Rt Bottom of cut			9.4	192.3 ✓
10 Rt			8.1	193.6
±			8.0	193.7 ✓
10 Lt			8.1	193.6
20 Lt Bottom of cut			8.9	192.8 ✓
#	1.11	190.25	12.57	189.14
		85+00 Thru cut		
20 Lt Bottom of cut			2.3	187.9 ✓
10 Lt			1.7	188.5
±			1.6	188.6 ✓
11 Rt			1.9	188.3
20 Rt Bottom of cut			2.4	187.8 ✓

	+	π	-	E/C
		190.25		47
26 Rt Top of cut			+1.6	191.8
		86+00 Thru cut		
25 Rt Top of cut			4.6	185.6
19 Rt Bottom of cut			7.2	183.0 ✓
12 Rt			6.7	183.5
±			6.4	183.8 ✓
10 Lt			6.4	183.8
19 Lt Bottom of cut			7.0	183.2 ✓
#	0.68	180.91	10.02	180.23 = 180.25 T.P. Rock
		87+00		
19 Lt Bottom of cut			2.8	178.1 ✓
10 Lt			2.0	178.9
±			2.0	178.9 ✓
10 Rt			2.1	178.8
18 Rt Top of fill			2.8	178.1 ✓
		88+00		
15 Rt Top of fill			8.6	172.3 ✓
12 Rt			7.8	173.1
±			7.9	173.0 ✓
10 Lt			7.2	173.2
18 Lt edge road			8.8	172.1 ✓
		88+11.56 = 24" intake F.L.	12.50	168.41
		Outlet "	14.27	166.44
#	0.61	168.78	12.74	168.17 = T.P. 25 = 168.19
		88+91.5 T.P.C. Rt.		
18 Lt Bottom of cut			1.4	167.4 ✓

+

π
168.78

-

E/6

+

π
157.86

-

E/6:

48

9 ^{ft}	0.5	168.3	
±	0.6	168.2 ✓	
12 ^{ft}	1.1	167.7	
20 ^{ft} Top of fill	2.0	166.8 ✓	
89+36.30			
20 ^{ft} Top of fill	4.6	164.2 ✓	
15 ^{ft}	3.7	165.1	
±	3.2	165.6 ✓	
8 ^{ft}	3.2	165.6	
17 ^{ft} Bottom of cut	4.3	164.5 ✓	
89+81.10 P.T.			
18 ^{ft} Bottom of cut	6.9	161.9 ✓	
7 ^{ft}	5.4	163.4	
±	5.3	163.5 ✓	
18 ^{ft} Top of bank:	5.8	163.0 ✓	
90+00			
20 ^{ft} Top of bank:	7.4	161.4 ✓	
18 ^{ft}	6.7	162.1	
±	6.3	162.5 ✓	
8 ^{ft}	6.3	162.5	
18 ^{ft} Bottom of cut:	7.0	161.3 ✓	
90+46.80			
Flow line intake 24" Cul	12.34	156.44	
" " Outlet " "	14.58	154.20	
#	1.16	152.86	12.08
		156.70 = 24" = 156.70	
	91+00		

17 ^{ft} Bottom of cut	0.2	157.7 ✓	
8 ^{ft}	10.2	158.1	
±	10.1	158.0 ✓	
11 ^{ft}	0.0	157.9	
20 ^{ft} Top of fill	0.9	157.0 ✓	
92+00			
20 ^{ft} Top of fill	5.0	152.9 ✓	
13 ^{ft}	3.7	154.2	
±	3.3	154.6 ✓	
10 ^{ft}	3.0	154.9	
17 ^{ft} Bottom of cut:	3.6	154.3 ✓	
93+00			
19 ^{ft} Bottom of cut	7.3	150.6 ✓	
10 ^{ft}	6.8	151.1	
±	7.1	150.8 ✓	
10 ^{ft}	7.3	150.6	
18 ^{ft} Top of fill	8.1	149.8 ✓	
94+00			
20 ^{ft} Top of fill	11.5	146.4 ✓	
10 ^{ft}	10.2	147.7	
±	9.9	148.0 ✓	
10 ^{ft}	9.9	148.0	
15 ^{ft} Bottom of cut:	10.8	148.1 ✓	
#	0.68	148.64	9.90
147.96 = T.R. 23 = 147.95			
14+0.8 begins fence 16' lt			
	95+00		

+
π
148.64-
E/e

17 th Top of fill	3.1	145.5
15 th guard fence	2.2	146.4
E	2.7	145.9 ✓
10R+	3.0	145.6
20R+ Top of fill	4.3	144.3 ✓
95+7738 PC RT		
21R+ Top of fill	5.5	143.1 ✓
10R+	5.0	143.6
E	4.4	144.2 ✓
14 th guard fence	3.7	144.9
16 th Top of fill	3.9	144.7 ✓
95791 on Rt guard fence begins, 19' Rt.		
96+2109		
17 th Top of fill	4.8	141.8 ✓
15 th guard fence	4.4	144.2
E	5.3	143.4 ✓
10R+	6.1	142.5
18R+ guard fence		
20R+ Top of fill	7.0	141.6 ✓
96+6498		
18R+ Top of fill	8.3	140.3 ✓
15R+ guard fence	7.8	140.8
7R+	7.7	140.9
E	6.9	141.7 ✓
10 th	6.2	142.4
20 th guard fence top of fill	5.8	142.8 ✓
96+84 end of fence on Lt		

+
π
148.64-
E/e

29

		97+0871	
22 th bottom of cut	8.3	140.3 ✓	
17 th	7.7	140.9	
10 th	7.9	140.7	
E	8.4	140.2 ✓	
5R+	9.3	139.3	
15R+ fence	9.8	138.8	
19R+ Top of fill	10.3	138.3 ✓	
97+5251			
22R+ Top of fill	12.1	136.5 ✓	
16 th R+ guard fence	12.0	136.6	
5R+	11.0	137.6	
E	10.4	138.2 ✓	
5 th	9.9	138.7	
18 th bottom of cut	10.3	138.3 ✓	
Flow line 30' cul intake	11.22	see sketch for location 136.72	
" " " " outlet	10.25	132.39	
# 0.12	137.38	11.40	137.24 = #22 = 137.23
97+73 fence ends on Rt			
97+9032			
21 th bottom of cut	0.5	136.9 ✓	
17 th	1.3	136.1	
5 th	1.1	136.3	
E	1.5	135.9 ✓	
10R+	2.5	134.9	
21R+ Top of fill	3.2	134.2 ✓	

+ π
137.38

98+4013 PT.

21 Rt Top of fill	5.1	132.3 ✓
±	3.8	133.6 ✓
10 Lt	3.2	134.2
20 Lt bottom of cut	3.5	133.9 ✓
99+00		
21 Lt bottom of cut	6.5	130.9 ✓
17 Lt	6.8	130.6
10 Lt	6.5	130.9
±	6.8	130.6 ✓
20 Rt Top of fill	8.1	129.3 ✓
99+25 ³⁰ PC RT		
20 Rt Top of fill	8.7	128.7 ✓
±	8.0	129.4 ✓
10 Lt	7.9	129.5
21 Lt bottom of cut	8.1	129.3 ✓
Intake to culvert flow line:	12.34	125.04
Outlet " " " "	14.72 12.72 ✓	122.66
99+25 ⁹²		
24 Lt bottom of cut	10.0	127.4
19 Lt Existing gutter	11.1	126.3 ✓
10 Lt	10.3	127.1
±	10.5	126.9 ✓
10 Rt	11.1	126.3
19 Rt Top of fill	10.2	127.2
#	174	126.32
	12.80	129.58 = 21 = 124.58

+ π
126.32

50

100+25⁵⁴

17 Rt Top of fill	3.0	123.3 ✓
12 Rt	2.5	123.8
±	1.8	124.5 ✓
10 Lt	1.6	124.7
19 Lt existing gutter	2.2	124.1
24 Lt bottom of cut	2.0	124.3 ✓
100+25 ⁶⁰		
20 Lt bottom of cut	3.2	122.1 ✓
18 Lt existing gutter	4.2	122.1
10 Lt	3.6	122.7
±	3.8	122.5 ✓
12 Rt	4.6	121.7
18 Rt Top of fill	4.7	121.6 ✓
101+25 ⁷⁹		
18 Rt Top of fill	6.8	119.5 ✓
10 Rt	6.8	119.5
±	6.1	120.2 ✓
10 Lt	5.8	120.5
18 Lt bottom of cut and existing gutter	6.2	120.1 ✓
101+25 ⁹¹		
19 Lt bottom of cut and existing gutter	8.6	117.7 ✓
10 Lt	8.0	118.3
±	8.4	117.9 ✓
10 Rt	9.1	117.2
120 Rt Top of fill	9.6	116.7 ✓

+	π	-	Elev
	126.32 ✓		
	102+2603		
18 Rt Top of fill	11.8		114.5 ✓
10 Rt	11.2		115.1
±	10.6		115.7 ✓
10 Lt	10.5		115.8
19 Lt bottom of cut and existing gutter	11.1		115.1 ✓
#	0.18	114.17	12.33
			113.99
Intake flow line 18" Cul. see sketch	3.50		110.67
Outlet " " " "	5.45		108.72
	102+7616 P.T. guard fence		
18 Lt bottom of cut and line culvert	0.5		113.7 ✓
10	0.3		113.9
±	0.6		113.6 ✓
10 Rt	1.1		113.1
19 Rt Top of fill	1.4		112.8 ✓
	102+7600 = 103+00		
19 Rt Top of fill	2.8		111.4 ✓
10 Rt	2.2		112.0
±	1.7		112.5 ✓
10 Lt	1.5		112.7
19 Lt bottom of cut:	1.7		112.5 ✓
	102+7600 = 103+50		
20 Lt bottom of cut	4.2		110.0 ✓
10 Lt	3.8		110.4
±	4.0		110.2 ✓
10 Rt	4.6		109.6

+	π	-	Elev
	114.17		
20 Rt Top of fill	5.0		109.2
	104+00 = 104+50		
20 Rt Top of fill	9.0		104.7 ✓
10 Rt	8.9		105.3
±	8.4		105.9 ✓
10 Lt	8.1		106.1
20 Lt bottom of cut:	8.7		105.5 ✓
	105+00 = 105+50		
20 Lt bottom of cut	12.8		101.4 ✓
10 Lt	12.3		101.9
±	12.4		101.8 ✓
10 Rt	12.8		101.4
20 Rt Top of fill	13.1		101.1 ✓
#	0.76	104.38	12.55
			101.62
	106+00 = 106+50		
Intake flow line 18" Cul	7.53		94.85
Outlet " " " "	9.28		93.00
19 Rt Top of fill	2.9		97.5 ✓
10 Rt	4.5		97.9
±	4.1		98.3 ✓
10 Lt	4.0		98.4
19 Lt guard fence for cul	4.8		97.6 ✓
	107+00 = 107+50		
19 Lt bottom of cut	7.9		94.5 ✓
10 Lt	7.5		94.9
±	7.5		94.9 ✓

10 Rt	7.8	94.6
21 Rt	8.4	94.0
108+00		=108+50
23 Rt Top of fill	11.3	91.1 ✓
10 Rt	10.7	91.7
±	10.4	92.0 ✓
10 Lt	10.6	91.8
19 Lt bottom of cut	10.9	91.5 ✓
#	0.80 90.51 12.67 89.71	
109+00		=109+50
19 Lt bottom of slope	2.9	87.6 ✓
10 Lt	2.3	88.2
±	2.3	88.2 ✓
10 Rt	2.6	87.9
21 Rt Top of slope	3.0	87.5 ✓
110+00		=110+50
22 Rt Top of slope	6.8	83.7 ✓
10 Rt	5.9	83.6
±	5.6	83.9 ✓
10 Lt	5.7	83.8
19 Lt bottom of cut	6.5	84.0
111+00		=111+50
23 Lt bottom of cut	9.5	81.0 ✓
10 Lt	8.0	82.0
±	8.6	81.9 ✓
10 Rt	8.8	81.7

20 Rt Top of slope	9.2	81.3 ✓
#	3.16 83.06	10.61 79.90
#	3.85 82.30	4.61 78.45 = 78 - 78.26
112+00		=112+50
20 Rt Top of slope	3.0	79.3 ✓
10 Rt	2.7	79.6
±	2.4	79.9 ✓
10 Lt	2.4	79.9
20 Lt bottom of cut	3.3	79.0 ✓
113+00		=113+50
18 Lt bottom of cut	4.6	77.7 ✓
10 Lt	4.2	78.1
±	4.1	78.2 ✓
10 Rt	4.6	77.7
20 Rt Top of slope	5.5	76.8 ✓
114+00		Thru cut =114+50
18 Rt bottom of cut	7.5	74.8 ✓
10 Rt	6.9	75.4
±	6.6	75.7 ✓
10 Lt	6.3	76.0 ✓
18 Lt bottom of cut	6.8	75.5 ✓
114+45.19		P.C. Rt Thru cut =114+95.19
18 Lt bottom of cut	7.0	74.8 ✓
10 Lt	7.2	75.1
±	7.2	74.7 ✓
10 Rt	8.1	74.2
18 Rt bottom of cut	8.4	73.9

~~114+946~~ Thru cut = 115 + 44.64

18 Rt	bottom of cut	10.1	72.1 ✓
10 Rt		9.4	72.8 ✓
±		9.0	73.3 ✓
10 Lt		8.7	73.6 ✓
19 Lt	bottom of cut	9.1	73.2 ✓

~~117+940~~ Thru cut = 115 + 94.09

21 Lt	bottom of cut	10.7	71.6 ✓
10 Lt		10.1	72.2 ✓
±		10.5	71.8 ✓
10 Rt		11.1	71.2 ✓
17 Rt	bottom of cut	11.5	70.8 ✓

~~115+932~~ Thru cut = 116 + 43.24

18 Rt	bottom of cut	13.0	69.3 ✓
10 Rt		12.7	69.6 ✓
±		12.1	70.2 ✓
10 Lt		11.7	70.6 ✓
20 Lt	bottom of cut	12.4	69.9 ✓

0.45 69.89 12.86 69.44

~~116+929~~ Thru cut = 116 + 92.99

19 Lt	bottom of cut	1.7	68.2 ✓
10 Lt		0.9	69.0 ✓
±		1.1	68.8 ✓
10 Rt		1.6	68.3 ✓
17 Rt	bottom of slight cut	2.0	67.9 ✓

116+924 End of cut on both sides = 117 + 42.44

18 Rt		3.3	66.6 ✓
10 Rt		2.0	66.9 ✓
±		2.4	67.3 ✓
10 Lt		2.2	67.7 ✓
20 Rt		2.8	67.1 ✓

~~117+918~~ Level out either side = 117 + 91.89

20 Rt		4.6	65.3 ✓
10 Rt		4.4	65.5 ✓
±		3.7	66.0 ✓
10 Lt		3.6	66.3 ✓
20 Lt		3.9	66.0 ✓

~~117+912~~ Level out on either side = 118 + 41.34

20 Lt		5.5	64.4 ✓
10 Lt		5.0	64.9 ✓
±		5.2	64.7 ✓
10 Rt		5.6	64.6 ✓
15 Rt edge of road		5.8	64.1 ✓
20 Rt		6.6	63.3 ✓

~~118+908~~ P.T. = 118 + 90.80

21 Rt	bottom of fill	8.6	61.3 ✓
17 Rt	top of fill	7.2	62.7 ✓
10 Rt		6.9	63.0 ✓
±		6.7	63.2 ✓
10 Lt		6.4	63.5 ✓
20 Lt		6.7	63.2 ✓

119+00 = 119 + 50

	+	π	-	c/c
		69.89		
20 ^L Top of fill		8.4		61.5
10 ^U		8.1		61.8
E		8.2		61.7 ✓
10 ^R †		8.4		61.5
20 ^R † Top of fill		8.9		61.0
		120+50		
Note: from 122+70 to 122+92 = Cut, there is a ditch on the Lt. that might wash.				
20 ^R † Top of fill		12.0		57.9 ✓
10 ^R †		11.5		58.4
E		11.1		58.8 ✓
10 ^U		11.0		58.9
20 ^L Top of fill		11.3		58.6 ✓
#	206	57.74	12.21	52.68
		121+50		
20 ^L Top of fill		1.8		55.9 ✓
10 ^U		1.4		56.3
E		1.5		56.2 ✓
10 ^R †		1.9		55.8
20 ^R † Top of fill		2.4		55.3 ✓
		122+50		
20 ^R † Top of fill		5.2		52.5 ✓
15 ^R †		4.2		53.5
10 ^R †		3.9		53.8
E		3.5		54.2 ✓
10 ^U		3.6		54.1
18 ^L Top of fill		3.7		54.0 ✓

	+	π	-	c/c
		57.74		54
122+92 double barrel cut - Twin 36' = 123+474				
Intake flow line		10.24		47.50
Outlet " "		11.55		46.19
		123+50		
18 ^L Top of fill		5.3		52.4 ✓
10 ^U		5.4		52.3
E		5.3		52.4 ✓
10 ^R †		5.4		52.3
18 ^R † Top of fill		6.0		51.7 ✓
		124+50		
18 ^R † Top of fill		7.4		50.3 ✓
10 ^R †		6.5		51.2
E		6.4		51.3 ✓
10 ^U		6.7		51.5
19 ^L Top of fill		6.4		51.3 ✓
		124+6592		
19 ^L Top of fill		6.6		51.1 ✓
10 ^U		6.3		51.4
E		6.4		51.3 ✓
10 ^R †		6.6		51.1
20 ^R † Top of fill		7.1		50.6 ✓
		125+1227		
19 ^R † Top of fill		7.5		50.7 ✓
10 ^R †		6.8		50.9
E		6.5		51.2 ✓
10 ^U		6.6		51.1
18 ^L Top of fill		6.9		50.8 ✓

= 125 + 59.63

19L Top of fill	7.1	50.6 ✓
10L	7.1	50.6
+	6.7	51.0 ✓
10Rt	7.8	50.7
19Rt Top of fill	8.1	49.6 ✓
#	4.99	51.50

= 126 + 06.48

18Rt Top of fill	5.7	49.8 ✓
10Rt	5.0	50.5
+	4.9	50.6 ✓
10L	5.5	49.5
20L (Level out)	4.9	50.6

= 126 + 53.33

20L (Level out)	4.9	50.6 ✓
10L	5.7	49.8
+	5.2	50.3 ✓
10Rt	4.8	50.7
20Rt Top of fill	5.5	50.0

= 127 + 00.19

19Rt Top of fill	5.3	50.2 ✓
10Rt	4.9	50.6
+	4.9	50.6 ✓
13L	5.7	49.8
15L	4.5	51.0
20L (Level out)	4.0	51.5

= 127 + 47.04

20L (Level out)	4.0	51.5 ✓
15L	4.4	51.1
13L	5.5	50.0
+	4.7	50.8 ✓
10Rt	4.8	50.7
20Rt Top of fill	5.1	50.4 ✓

= 128 + 00

20Rt Top of fill	5.7	49.8 ✓
10Rt	5.0	50.5
+	4.8	50.7 ✓
13L	5.6	50.9
17L	4.4	51.1
20L (Level out)	4.1	51.4 ✓

= 128 + 50

20L (Level out)	4.3	51.2 ✓
15L	5.6	49.9
17L	4.7	50.8
+	4.7	50.8 ✓
10Rt	5.1	50.4
20Rt	5.6	50.0 ✓
40Rt approx to existing pavement	7.50	48.0

= 129 + 00

32Rt approx to existing pavement	6.22	49.08 ✓
22Rt " ridge " "	6.12	49.38 ✓
20Rt	5.9	49.6 ✓
10Rt	5.2	50.3

	+	π	-	E/c
		55.50		
±			9.7	50.8 ✓
19 10 th			4.5	51.0
10 20 th in road (level out):			4.6	50.9 ✓
±	129+00			= 129+50
1 20 th (level out)			3.5	52.0 ✓
15 10 th			3.6	51.9
# ±			4.0	51.5 ✓
8 th Approximate edge of paving			4.34	51.16
#	10.90	62.70	3.70	51.80 Rock
±	129+44 ⁵⁰ P.O.T.			= 129+94 ⁵⁰
± 10 th Approximate existing pavement			10.21	52.40 ✓
± = edge " "			9.93	52.77 ✓
10 th			9.4	53.3
17 th Top of fill			9.7	53.5 ✓
±				= 131+08 ⁵⁵
± 131+58 ⁵⁵ Approximate RT. existing pavement:				
20 th ground			5.3	57.4
9 th edge of existing pavement			5.46	57.24
± " "			5.70	57.0 ✓
#	12.22	69.67	5.25	57.45 = 14 th = 57.47
#	12.14	81.15	0.66	69.01
#	11.92	91.60	1.47	79.68 = 12 th = 79.70
#	8.23	97.32	2.51	89.09 = 11 th = 89.10
#	11.87	104.94	9.25	93.07 = 10 th = 93.10
1 #	0.42	99.03	6.33	98.61 = 9 th = 98.65
1 #	3.14	90.06	12.11	86.92 = 8 th = 86.96
±	12.81	96.23	5.64	83.42 = 7 th = 83.46

	+	π	-	E/c
		76.23		
#	12.97	108.98	0.22	96.05
#	9.94	118.51	0.41	108.57
#	11.15	129.64	0.04	118.49
#	11.67	140.73	0.58	129.00
#	11.94	151.23	1.44	139.29 = 2 nd = 139.34
#	1.13	146.56	5.80	145.43
#	1.68	136.90	11.34	135.22
0			4.91	131.99 = 132.08 = initial D.M. See page 33
#	0.60	129.14	8.36	128.54
#	1.24	120.85	9.53	119.61
0			7.48	113.37 = 113.11 B.R.N.W. Cor. Cave and Prospect.
#	1.61	115.06	7.40	113.45
#	2.25	110.91	6.40	108.66 = 108.46 B.R. S.V. Cor. Cave and Ivanhoe.
#			5.69	105.22 = 105.04 B.R. S.V. Cor. Ivanhoe and Prospect

for sections from 0+00 to 39+94.9 See page 57

Xsection of Hog Canyon Road
 From Sta 0+00 to 39+90.5
 See Page 36 for sections from 39+94.9 to 40+58.5

Dannan
 Flood.
 Soanermeyer.
 Oct-12-27

+ π
 402.23

E/c.

57

	+	π	-	E/c.
	3.30	402.23		398.88 = 52 ^{ft} = Page 35
		0+00		
20L ground			3.6	398.6 ✓
8L on edge existing pavement			3.43	398.80 ✓
± " " "			3.30	398.93 ✓
8Rt " " "			3.40	398.83 ✓
20Rt ground			3.10	399.13 ✓
Appx 70.8 on ST = end of existing pavement.				
20Rt on existing pavement			5.05	397.18 ✓
8Rt " " "			4.84	397.39 ✓
± " " "			4.78	397.45 ✓
8L " " "			4.75	397.48 ✓
20L ground			4.7	397.5 ✓
1+26.31 = Center of curve.				
20L			6.0	396.2 ✓
10L			5.0	397.2 ✓
±			5.1	397.1 ✓
10Rt			5.3	396.9 ✓
20Rt			5.7	396.5 ✓
20Rt 1480 Fence begins;				
1+89.97				
20Rt fence line			5.6	396.6 ✓
10Rt			4.8	397.4 ✓
±			4.7	397.5 ✓
10L			4.6	397.6 ✓
20L			5.9	396.3 ✓

	+	π	-	E/c.
		402.23		
2+52.63 P.T.				
20L			4.1	398.1 ✓
10L			3.3	398.9 ✓
±			3.3	398.9 ✓
10Rt			3.5	398.7 ✓
20Rt Fence line			4.0	398.2 ✓
3400				
20Rt Fence line			2.4	399.8 ✓
10Rt			2.0	400.2 ✓
±			1.8	400.4 ✓
10L			1.9	400.3 ✓
20L			2.3	399.9 ✓
3+03 fence on Rt joins from 205 to 245 from ±				
± 10.78 412.91			0.10	402.13
4+00				
20L			9.1	403.8 ✓
15L			10.0	402.9 ✓
±			9.4	403.5 ✓
10Rt			9.4	403.5 ✓
20Rt			9.6	403.3 ✓
24Rt - fence:			9.2	403.7 ✓
5+00				
24Rt - F			6.7	406.2 ✓
10Rt			6.4	406.5 ✓
±			6.4	406.5 ✓
10L			6.6	406.3 ✓
15L			7.1	405.8 ✓
20L			6.5	406.4 ✓

7
 412.91

E/6

5+02 on Lt fence begins 175 from E

6+00

182 Lt = Fence 4.4 408.5 ✓
 15 Lt 5.0 407.9
 E 4.5 408.4 ✓
 13-Rt 4.7 408.2
 24 Rt = Fence 4.9 408.0 ✓

7+00 P.O.T.

24 Rt = Fence 3.5 409.4 ✓
 15 R = 2.8 410.1
 E 2.7 410.2 ✓
 15 Lt 3.4 409.5 ✓
 19 Lt = Fence 3.4 409.5 ✓

8+00

20 Lt F 1.1 411.8 ✓
 15 Lt 2.2 410.7
 E 1.6 411.3 ✓
 15-Rt 1.8 411.1
 24 Rt = Fence 2.5 410.4 ✓
 # 5.82 416.71 2.02 410.89

9+00

24 Rt = Fence 5.6 411.1 ✓
 15-Rt 4.9 411.8
 E 4.6 412.1 ✓
 15 Lt 5.2 411.5
 21 Lt = Fence 4.0 412.7 ✓

7
 416.71

E/6

58

10+00

22 Lt = Fence 3.8 412.9 ✓
 17 Lt 4.1 412.6
 15 Lt 5.1 411.6
 E 4.5 412.2 ✓
 15-Rt 4.9 411.8
 24 Rt = Fence 5.9 410.8

11+00

23 Rt = Fence 6.0 410.7 ✓
 15-Rt 5.2 411.5
 E 4.6 412.1 ✓
 10 Lt 4.4 412.2
 15 Lt 4.9 411.8
 19 Lt 3.9 412.8 ✓
 23 Lt = Fence 3.2 413.5 ✓

4.53 416.31 4.93 411.78 = 42# 411.72

12+00

24 Lt = Fence 3.0 413.3 ✓
 17 Lt 3.6 412.7
 15 Lt 4.4 411.8
 E 4.4 411.9 ✓
 15-Rt 4.9 411.4
 23 Rt = Fence 5.8 410.5 ✓

13+00

23 Rt = Fence 5.7 410.6 ✓
 15-Rt 4.9 411.4
 E 4.2 412.1 ✓

+ π - E/C
416.31

10 Lt 4.1 412.2

15 Lt 4.6 411.7

25 Lt - Fence 3.4 ✓ 413.1 ✓

14+00

26 Lt - Fence 3.2 413.1 ✓

22 Lt 3.3 413.0

20 Lt 4.7 411.6

10 Lt 4.4 411.9

± 4.3 412.0 ✓

15 Rt 4.9 411.4

23 Rt - Fence 5.4 410.9

15+00

23 Rt - Fence 5.6 410.7 ✓

15 Rt 5.0 411.3

± 4.6 411.7 ✓

10 Lt 4.5 ✓ 411.8

22 Lt 5.2 411.1 ✓

23 Lt 3.7 412.6

27 Lt - Fence 3.5 ✓ 412.8

3.37 414.57 5.11 411.20 Nail

15+75 on the Lt fence ends, 28' Lt of ±

16+00

28 Lt 2.2 412.4

25 Lt 2.4 412.2

23 Lt 4.0 410.6 ✓

10 Lt 3.3 411.3

+ π - E/C
416.57

59

± 2.3 411.3 ✓

10 Rt 2.5 411.1

15 Rt 2.9 410.7

23 Rt - Fence 4.7 409.9 ✓

17+00

23 Rt - Fence 5.8 408.8 ✓

10 Rt 4.7 409.9

± 4.2 ✓ 410.4 ✓

10 Lt 4.4 410.2

23 Lt 5.0 409.6 ✓

26 Lt 2.8 411.8

28 Lt 2.8 411.8

17+10 = beginning of fence line on Lt = 28' Lt of ±

18+00

26 Lt - Fence 5.2 409.4

24 Lt 5.4 409.2

23 Lt 6.0 ✓ 408.1 ✓

10 Lt 5.6 409.0

± 5.6 409.0 ✓

10 Rt 6.0 408.6

25 Rt - Fence 7.4 407.2 ✓

19+00

22 Rt - Fence 9.2 405.4 ✓

18 Rt 8.9 405.7

10 Rt 7.3 407.3

± 6.8 407.8 ✓

	+	π +14.57	-	E/e
10 Lt			6.0	409.1
23 Lt			7.5	407.1 ✓
20 Lt			6.6	408.0
26 Lt = Fence			6.5	408.1
#	3.04	410.36	2.25	407.32
		20+00		
26 Lt = Fence			3.1	407.3
24 Lt			3.2	407.2
22 Lt			3.9	406.5 ✓
10 Lt			3.4	407.0
⊕			3.5	406.9 ✓
10 Rt			3.8	406.6
22 Rt = Fence			5.4	405.0 ✓
20x18 fence ends on Lt - 26' from ⊕				
20x30 " " " Rt 22 " ⊕				
		21+00		
20 Rt			5.7	404.7 ✓
10 Rt			5.0	405.4
⊕			4.5	405.9 ✓
10 Lt			4.5	405.9
21 Lt			5.4	405.0 ✓
23 Lt			3.5	406.9
28 Lt			3.5	406.9
		22+00		
27 Lt			4.3	406.1
25 Lt			4.4	406.0

	+	π +10.36	-	E/e	60
21 Lt			6.5	403.9 ✓	
10 Lt			5.8	404.6	
⊕			5.8	404.6 ✓	
10 Rt			6.1	404.3	
20 Rt			6.5	403.9 ✓	
2, 2+69 fence begins on Lt, 25' from ⊕					
		23+00			
20 Rt			8.4	402.0 ✓	
10 Rt			7.7	402.7	
⊕			7.4	403.0 ✓	
10 Lt			7.4	403.0	
21 Lt			8.5	401.9 ✓	
23 Lt			6.3	404.1	
25 Lt			6.3	404.1	
#	0.89	402.02	9.23	401.13	
		24+00			
26 Lt Fence			1.0	401.0	
23 Lt			1.1	400.9	
21 Lt			2.1	399.9 ✓	
10 Lt			0.9	401.1	
⊕			1.0	401.0 ✓	
10 Rt			1.4	400.6	
20 Rt			2.4	399.6 ✓	
		25+00			
20 Rt			4.0	397.5 ✓	
10 Rt			3.5	398.5	
⊕			3.2	398.8 ✓	

	+	π 402.02	-	E/E
10 U			2.6	399.4
22 U			3.9	398.1 ✓
23 U			3.4	398.6
26 U = Fence			3.3	398.7
	26+00			
26 U = Fence			4.7	397.3
23 U			4.7	397.3
21 U			5.6	396.4 ✓
10 U			4.4	397.6
±			4.8	397.2 ✓
10 Rt			5.1	396.9
20 Rt			5.6	396.4 ✓
	27+00			
25 Rt			6.7	395.3
20 Rt			6.8	395.2 ✓
18 Rt			7.4	394.6
10 Rt			6.9	395.1
±			6.5	395.5 ✓
10 U			6.1	395.9
21 U			7.5	394.5 ✓
23 U			5.7	396.3
27 U = Fence			5.7	396.3
	28+00			
28 U = Fence			7.6	394.4
23 U			8.2	393.8
21 U			9.3	392.7 ✓

	+	π 402.02	-	E/E	61
10 U			7.9	394.1	
±			8.2	393.8 ✓	
10 Rt			8.6	393.4	
20 Rt			9.1	392.9 ✓	
22 Rt			8.1	393.0	
25 Rt			8.2	393.8	
#	0.65	392.72	9.95	392.07	
	29+00				
25 Rt			1.6	391.1	
20 Rt			1.8	390.9 ✓	
10 Rt			1.2	391.5	
±			0.9	391.8 ✓	
10 U			0.7	392.0	
24 U			1.9	390.8 ✓	
26 U			1.3	391.4	
29 U = Fence			1.3	391.4	
	30+00				
29 U = Fence			4.1	388.6	
22 U			4.5	388.2 ✓	
10 U			3.0	389.7	
±			2.7	390.0 ✓	
10 Rt			3.0	389.7	
20 Rt			4.3	388.4 ✓	
	31+00				
20 Rt			6.2	386.5 ✓	
10 Rt			5.0	387.7	

	+	∑	-	E/c:
		392.7 ✓		
±			4.8	387.9 ✓
10 Lt			4.9	387.8
22 Lt			6.3	386.4 ✓
30 Lt = Fence			6.0	386.7
		32+00		
20 Lt = Fence			7.7	385.0
23 Lt			7.9	384.8 ✓
11 Lt			6.7	386.0
±			6.6	386.1 ✓
10 Rt			6.8	385.9
20 Rt			7.6	385.1 ✓
		33+00		
20 Rt Top of fill			9.7	383.0 ✓
10 Rt			8.5	384.2
±			8.2	384.5 ✓
11 Lt			8.3	384.4
25 Lt			10.2	382.5 ✓
27 Lt			9.4	383.3
31 Lt = Fence			9.4	383.2
#	1.60	385.0 ✓	8.7	384.0
		34+00		
32 Lt = Fence			4.2	381.3
29 Lt			4.3	381.2
28 Lt			5.0	380.5
24 Lt			5.0	380.5 ✓
12 Lt			2.7	381.8

	+	∑	-	E/c
		385.0		6 ✓
±			2.6	382.9 ✓
15 Rt			2.3	382.2
20 Rt Top of fill			4.1	381.4 ✓
		35+00		
20 Rt Top of fill			4.9	380.6 ✓
10 Rt			4.2	381.3
±			3.9	381.6 ✓
12 Lt			4.2	381.3
22 Lt			6.3	379.2 ✓
30 Lt			5.0	380.5
32 Lt = Fence			4.9	380.6
		36+00		
35 Lt = Fence			6.2	379.3
27 Lt			6.3	379.2
25 Lt			7.2	378.3
21 Lt			7.4	378.3 ✓
12 Lt			5.1	380.0
±			5.2	380.3 ✓
10 Rt			5.4	380.1
20 Rt Top of fill			6.0	379.5 ✓
		37+00		
20 Rt Top of fill			7.6	377.9 ✓
10 Rt			6.3	379.2
±			6.0	379.5 ✓
13 Lt			6.3	379.2 ✓
28 Lt			8.2	377.3

	+	π	-	E/c
		380.170		
30L			6.9	378.6
33L = Fence			6.8	378.7
#	3.05	381.30	7.20	378.30
	38+00			
338L = Fence			3.5	377.8
30L			3.7	377.6
28L			4.8	376.5
24L			5.0	376.3 ✓
16L			3.4	377.9
11L			3.0	378.3
±			2.9	378.4 ✓
10.19L			3.2	378.1
20R = Top of fill			3.9	377.4 ✓
	39+00			
20R = Top of fill			4.8	376.5 ✓
10R			4.3	377.0
±			4.0	377.3 ✓
12L			4.2	377.1
21L			5.0	376.3 ✓
21L			6.6	374.7
30L			6.3	375.0
32L			5.2	376.1
34L = Fence			5.0	376.3
Note: at 39+75 Fence angles about 10° to Lt and leaves Road;				
39+94 R.P.O.T. See page 36 for continued Levels;				
20L			5.0	375.8
13L			5.3	375.1

	+	π	-	E/c
		381.35		
			5.1	376.3 ✓
			5.5	375.9
			6.14	375.21 = 43 = 375.17

63

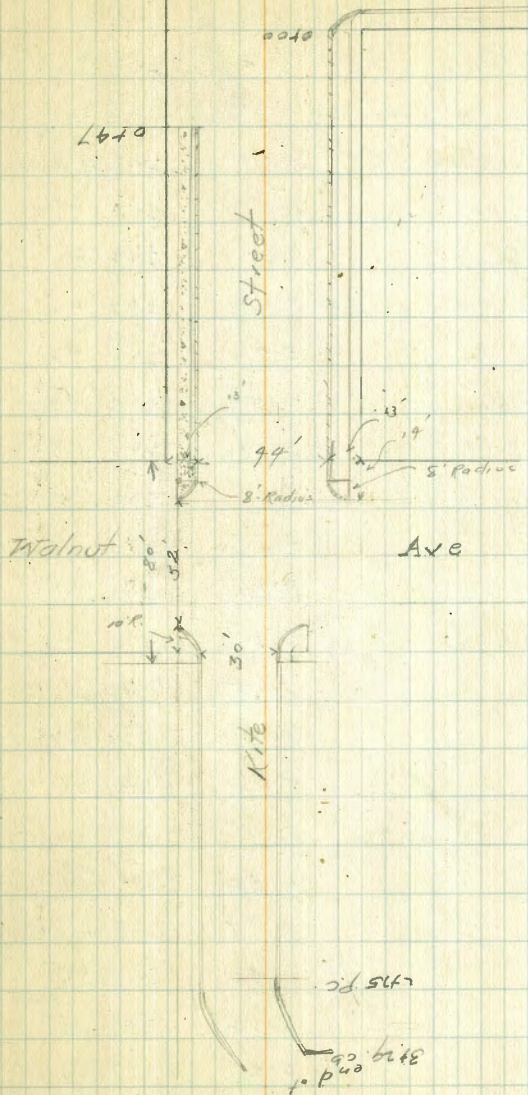
	+	π	-	E/c
		381.35		
20R = Top of fill			5.1	376.3 ✓
			5.5	375.9
			6.14	375.21 = 43 = 375.17

Bliss
Isbell
Pearson
B.M. 5 F Bolt
at H. & E Brooks
Kite

Curb Levels on Kite Street from
the S Line of Brooks to the N Line of
Upas

	+	x	-	z h v
Upas	2.07	258.10		256.03
0+00 E			2.16	255.94
0+25 E			2.92	255.68
0+47 E = 00 on West Side			2.72	255.38
0+47 W = 00 on West Side			2.07	256.03
0+75 W			3.37	254.73
0+75 E			3.98	254.12
1+00 E			5.09	253.01
1+00 W			4.91	253.69
1+25 W			5.60	252.50
1+25 E			6.38	251.72
1+50 E			7.65	250.45
1+50 W			6.78	251.32
1+75 W			7.99	250.11
1+75 E			8.90	249.20
2+00 E			10.17	247.93
2+00 W			9.20	248.90
2+25 W			10.45	247.65
2+25 E			11.42	246.68
2+50 E			12.65	245.45
2+50 W			11.66	246.44
2+75 W			12.86	245.24
T.P	0.12	245.36	12.86	245.24
2+75 E			1.18	244.18
3+00 E N Line of Walnut			2.92	242.94
East end of Return			2.51	242.85

W Brooks Ave 63



Σ
245.36

300 W. N. line of Walnut	1.35	244.01
West end of Return	1.90	243.96
S. Line of Walnut = 00		
West end of Return on W	1.83	243.53
Return of S. line of Walnut on W	1.88	243.48
East end of Return on E	2.89	242.47
Return on S. line of Walnut on East	2.93	242.43
0+25 E	3.46	241.90
0+25 W	2.54	242.82
0+50 W	3.17	242.19
0+50 E	4.01	241.35
0+75 E	4.57	240.79
0+75 W	3.82	241.54
1+00 W	4.43	240.93
1+00 E	5.15	240.21
1+25 E	5.75	239.61
1+25 W	5.15	240.21
1+50 W	5.75	239.61
1+50 E	6.30	239.06
1+75 E	6.89	238.47
1+75 W	6.40	238.96
2+00 W	7.00	238.36
2+00 E	7.49	237.92
2+25 E	8.00	237.36
2+25 W	7.70	237.66
2+50 W	8.35	237.01

Σ
245.36

Σ
266.55

64

2+50 E	8.59	236.77
2+75 E - PC to L.	9.14	236.22
T.P. 445	240.67	9.14
2+75 W - PC to L.	9.28	236.39
2+93 W	9.76	235.91
2+93 E	9.84	235.83
3+11 E	5.27	235.40
3+11 W	5.21	235.46
3+29 W End of cb	5.71	234.96
3+29 E End of cb	5.70	234.97
check on B.M. NE opposite	5.62	235.05

X- Section WINONA from S.L. University
to S.L. Landis, 60' wide, 12' S.W. 9' Qu.

JAEGER
Bailey } Sept. 25th 1928.
Claver+ }
Brooks } University

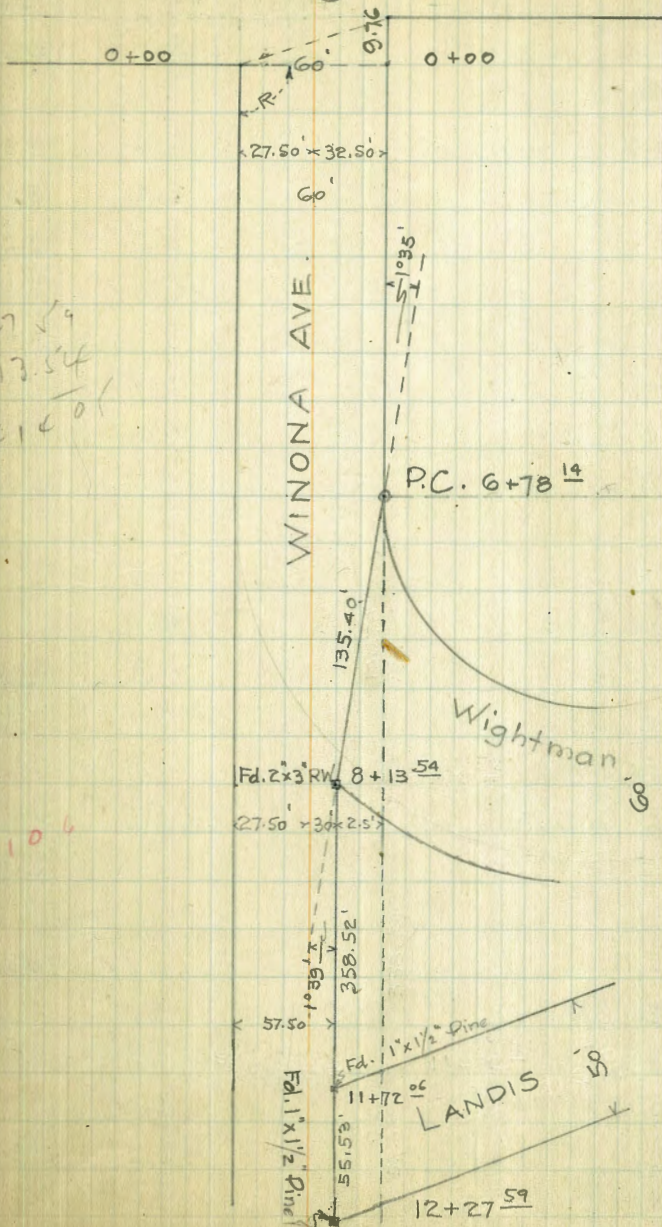
68

STA	+	H.I.	-	Elev.
BM. B.P. SW. Estrella & University				326.68
T.P.	12.71	339.39	9.11	330.28
S.L. University				
W.L. Bank Top			4.6	3348
✓ Bot.			10.7	328.7
W. Curb Top			11.3	328.1
✓ Bot.			11.79	327.6
W 1/4			11.03	328.4
¢			10.50	328.9
E 1/4			10.32	329.1
E. Curb Bot.			10.31	329.1
✓ Top			9.65	329.7
E.L. Bank Top			5.30	334.1
✓ Bot.			9.10	330.3
0+00				
W.L.			4.7	334.7
W. Curb			6.5	332.9
+3'			10.7	328.7
+6'			11.0	328.4
W 1/4			10.7	329.2
¢			9.8	329.6
E 1/4			9.6	329.8
+1'			5.4	334.0
+3'			5.2	334.2
E. Curb				

Plotted 9-28-1928 C.B.H.

1227 1/4
817.54
4160'

11106



339.39

STA	+	H.I.	-	Elev.
			5.0	334.4
0+30				
E.L.			5.0	334.4
E. Curb.			5.4	334.0
E 1/4			5.5	333.9
☐			6.0	333.4
W 1/4			5.7	333.7
+3'			5.0	334.4
W. Curb			4.6	334.8
W.L.			4.7	334.7
0+50				
W.L.			4.8	334.6
W. Curb			4.9	334.5
W 1/4			4.9	334.5
☐			5.0	334.4
E 1/4			4.9	334.5
E. Curb			5.3	334.1
E.L.			5.8	333.6
1+00				
E.L.			5.7	333.7
E. Curb			5.7	33.7
+3'			5.9	33.5
E 1/4			5.6	33.8
☐			5.5	333.9
W 1/4			5.7	33.7

339.39

66

STA	+	H.I.	-	Elev.
			+6'	5.8 33.6
			W. Curb	4.9 34.5
			W.L.	4.8 334.6
1+50				
			W.L.	6.1 333.3
			+10'	6.0 33.4
			W. Curb	6.5 32.9
			W 1/4	6.0 33.4
			☐	6.1 333.3
			E 1/4	6.5 32.9
			+3'	6.6 32.8
			E. Curb	6.1 33.3
			E.L.	6.2 333.2
2+00				
			E.L.	6.9 332.5
			E. Curb	6.8 32.6
			+5'	7.3 32.1
			E 1/4	7.1 32.3
			☐	6.8 332.6
			W 1/4	6.8 32.6
			+8'	7.2 32.2
			W. Curb	6.5 32.9
			W.L.	7.0 332.4
	3.86	334.14		
T.P.			12.26	321.88

334.14

STA	+	H.I.	-	Elev.
2+50				
W.L.			2.8	331.3
+10'			2.6	31.5
W.Curb			3.1	31.0
W/a			2.5	31.6
☐			2.3	331.8
E/a			2.8	31.3
+3'			2.3	31.8
E.Curb			-2.1	32.0
E.L.			2.3	331.8
3+00				
E.L.			2.8	331.3
E.Curb			2.7	31.4
E/a			3.6	30.5
☐			3.3	330.8
W/a			3.5	330.6
+7'			4.0	330.1
W.Curb			3.8	330.3
W.L.			3.9	330.3
3+50				
W.L.			5.8	328.3
+11'			5.0	329.1
W.Curb			5.2	328.9
W/a			4.6	329.5
☐			4.4	329.7

334.14

67

STA	+	H.I.	-	Elev.
E/a			4.9	329.2
+6'			4.1	330.0
E.Curb			3.9	330.2
E.L.			3.7	330.4
4+00				
E.L.			4.5	329.6
E.Curb			5.3	328.8
+2'			5.2	328.9
+6'			6.1	328.0
E/a			5.8	328.3
☐			5.7	328.4
W/a			5.8	328.3
W.Curb			6.5	327.6
+3'			7.3	326.8
W.L.			8.2	325.9
4+50				
+10'			12.2	321.9
W.L.			10.8	323.3
W.Curb			8.7	325.4
+2'			8.3	325.8
W/a			8.1	326.0
☐			7.7	326.4
E/a			7.6	326.5
+3'			6.8	326.3
E.Curb			6.7	326.4

334.14

STA	#	H.I.	-	Elev.
			6.0	328.1
5+00				
E.L.			7.6	326.5
E. Curb			8.2	25.9
+5'			8.6	25.5
E 1/4			10.1	24.0
¢			9.9	324.2
W 1/4			10.3	23.8
+6'			10.1	24.0
W. Curb			11.3	22.8
W.L.			13.1	321.0
+10'			14.7	319.4
	4.11	325.99 ✓		
T.P.			13.05	312.94
5+50				
+10'			9.7	16.3
W.L.			8.3	317.7
+9'			6.8	19.2
W. Curb			5.6	20.4
+3'			4.7	21.3
W 1/4			4.5	21.5
¢			4.5	321.5
E 1/4			4.7	21.3
+2'			2.6	23.4
E. Curb			1.8	24.2

68

STA	#	H.I.	-	Elev.
			0.8	325.2
6+00				
E.L.			3.5	322.5
E. Curb			5.8	20.2
+3'			6.2	19.8
+7'			9.3	16.7
E 1/4			8.6	17.4
¢			8.7	317.3
W 1/4			8.7	17.3
+4'			8.7	17.3
W. Curb			10.1	15.9
W.L.			12.6	313.4
+10'			14.0	12.0
6+50				
T.P.			13.05	312.94
Hand Level	0.20	313.14		
+10'			8.2	04.9
+4'			5.0	08.1
W.L.			4.5	308.6
W. Curb			2.4	10.7
+6'	Instr.	325.99 ✓	13.2	12.8
W 1/4			13.1	12.9
¢			13.0	313.0
E 1/4			12.5	13.5
+3'			13.7	12.3

325.99

STA	+	H.I.	-	Elev.
			11.5	314.5
			11.0	15.0
			8.0	318.0
	2.52	315.46 ✓		
	T.P. Hub at STA. 8+13.59		11.15	304.31
6+78 ¹⁴	P.C.			
			0.89	314.6
			2.7	12.8
			3.1	12.4
			5.1	10.4
			4.7	10.8
			4.7	10.8
			4.8	310.7
			4.6	10.9
			5.0	10.5
			7.0	08.5
			10.0	305.5
			12.3	3.2
			13.6	1.9
			17.0	298.5
7+00			13.0	302.46
	T.P.			
	HandLevel	1.0	303.46	
			6.5	297.0
			3.2	300.3
			12.5	303.0
	Instr.	315.46 ✓		

315.46

69

STA	+	H.I.	-	Elev.
			9.4	306.1
			6.8	308.7
			6.0	309.5
			6.0	309.5
			6.0	309.5
			6.1	309.4
			6.9	308.6
			5.4	311.1
			3.4	312.1
			8.8	306.7
			8.8	306.7
			11.3	304.2
			13.0	302.46
			13.0	302.46
			8.1	295.3
			11.8	291.56 ✓
			1.20	292.76
			9.2	283.6
			1.95	306.26 ✓
			12.97	293.29
			1.5	304.8
			0.8	305.5
			1.5	304.8

STA	+	H.I.	-	Elev.
+19'			6.0	300.3
+30'			10.0	296.3
T.P.			12.50	293.76
Hand Level	0.50	294.26		
+50'			6.5	287.8
T.P.			13.0	281.26
	0.30	281.56		
+70'			3.2	278.4
+80'			6.0	275.6
+100'	Bottom Canyon		9.1	272.5
8+13 ⁵⁴	Instr.	306.26 ✓		
+20'			1.9	304.4
E.L.			2.0	304.3
+16'			3.8	302.5
+24'			7.6	298.7
+32'			11.8	294.5
T.P.			13.0	293.26
Hand Level	0.7	293.96		
+50'			7.8	286.1
+60'	T.P.		13.0	280.96
	0.30	281.26		
+80'			8.0	272.3
+100'	Bottom Canyon		10.8	270.5
8+50	Instr.	306.26 ✓		
+20'			5.0	301.3

STA	+	H.I.	-	Elev.
		306.26		
				70
E.L.			4.9	301.4
+12'			6.6	
+20'			10.2	
+26'	T.P.		13.0	293.26
Hand Level	0.0	293.26		
+38'			4.0	
+55'			11.0	281.3
+60'	T.P.		13.0	280.26
+80'	0.8	281.06	7.4	
+100'	Bottom Canyon		11.7	
5.14		298.43 ✓		
T.P.			13.19	285.24
9+00				
+25'			3.2	
+22'			3.5	
+16'			5.6	
E.L.			5.7	292.7
+2'			4.8	
+30'			7.5	290.9
+40'			10.6	
+49'	T.P.		13.0	285.43
Hand Level	0.4	285.83		
+68'			8.2	277.6
+80'	T.P.		13.0	272.83
1.70		274.53		

STA	+	H.I.	-	Elev.
			5.4	
+90'			5.4	
+100'	Bottom Canyon		6.6	
9+50	Instr.	298.43 ✓		
+20'			8.6	
+7'			8.7	
E.L.			11.0	2874
+17'			11.1	
+18'			10.3	
+40'			11.6	286.8
+46'	T.P.		13.0	285.43
	Hand Level	1.20	286.63	
+67'			5.5	281.1
+77'	T.P.		13.0	273.63
		0.10	273.73	
+97'			8.2	
+100'	Bottom Canyon		11.0	
+105'			9.6	
+110'			9.4	
		3.22	288.46 ✓	
	T.P.		13.11	275.35
9+70				
+30'			0.4	
E.L.			0.7	287.8
+5'			2.5	

STA	+	H.I.	-	Elev.
				288.46
				71
+26'			2.9	
+28'			2.4	286.1
+60'			6.2	282.3
+70'	T.P.		13.0	275.46
	Hand Level	2.30	277.76	
+85'			10.3	
+93'			14.7	
+97'	Bottom Canyon		13.6	
+100'	✓	✓	13.6	
9+90	Instr.	288.46 ✓		
+25'			5.7	
E.L.			2.8	285.7
+14'			2.8	
+17'			5.2	
+19'			4.2	284.3
+40'			6.0	282.5
+43'			5.5	283.0
+75'			10.7	277.8
+79'	T.P.		13.0	275.46
	Hand Level	0.10	275.56	
+88'			6.3	
+100'			13.6	
+102'			12.3	
+110'	Bottom Canyon		11.7	

STA	+	H.I.	-	Elev.
	2.97	278.32 ✓		
T.P.			12.55	265.77
10+50				
+20'			11.9	
E.L.			11.2	267.1
+21'			9.2	269.1
+45'			5.0	273.3
+65'			6.2	272.1
+83'			7.5	
+91'			10.8	
+92 T.P.			13.0	265.32
Hand Level	4.50	269.82 ✓		
+96			5.9	
+97'			9.2	
+100'			8.2	
+110' Bottom Canyon			7.5	
	6.36	272.13 ✓		
T.P.			12.65	259.48
11+00				
+30'			11.30	
E.L.			10.4	261.7
+43'			8.3	263.8
+50'			5.8	266.3
+62'			6.1	266.0
+71'			8.0	

22

STA	+	H.I.	-	Elev.
+73'			12.3	
+77'			12.3	
+78' Bottom Canyon			8.8	
	7.74	267.22 ✓		
11+50				
+30'			7.6	
+25'			8.2	
+23' Bottom Creek			10.0	
+17' " "			10.6	
+13'			8.0	
E.L.			7.5	259.7
+40'			6.6	260.6
+48'			5.5	
+53'			5.1	
+57'			9.0	258.2
+60'			8.9	
+65'			5.7	
11+72 ⁰⁶				
N.L. Landis				
+30' On N.L. Landis			8.6	
+26' " "			9.3	
+22' " " Bottom Creek			11.1	
+15' " "			10.1	
E.L.			8.6	258.6
+19'			7.7	

267.22

STA	+	H.I.	-	Elev.
+51'			7.5	259.7
+52'			9.3	
+56'			7.9	259.3
+70'			8.2	

11+99.82 ♀ Landis

+25'	On ♀	"	8.1	
+19'	"	"	8.8	
+14'	"	"	7.9	
E.L.			8.4	258.8
+14'			8.2	
+17'			9.8	
+23'			10.8	
+35'			9.6	257.6
+42'			8.2	
+48'			8.5	
+51'			10.9	
+56'			8.7	258.5
+62'			8.9	

12+27.59 S.L. Landis

+20'	On	"	8.4	
E.L.			8.9	258.3
+12'			8.4	
+35'			8.9	258.3
+36'			10.9	
+45'			11.3	

73

STA	+	H.I.	-	Elev.
+50'			10.0	
+60'			11.6	255.6
+63'			9.4	
+70'			9.2	

STA + H.I. - Elev.

24
STA + H.I. - Elev.

STA

+

H.I.

-

Elev.

STA

+

H.I.

-

Elev.

98

STA

+

H.I.

-

Elev.

STA

+

H.I.

-

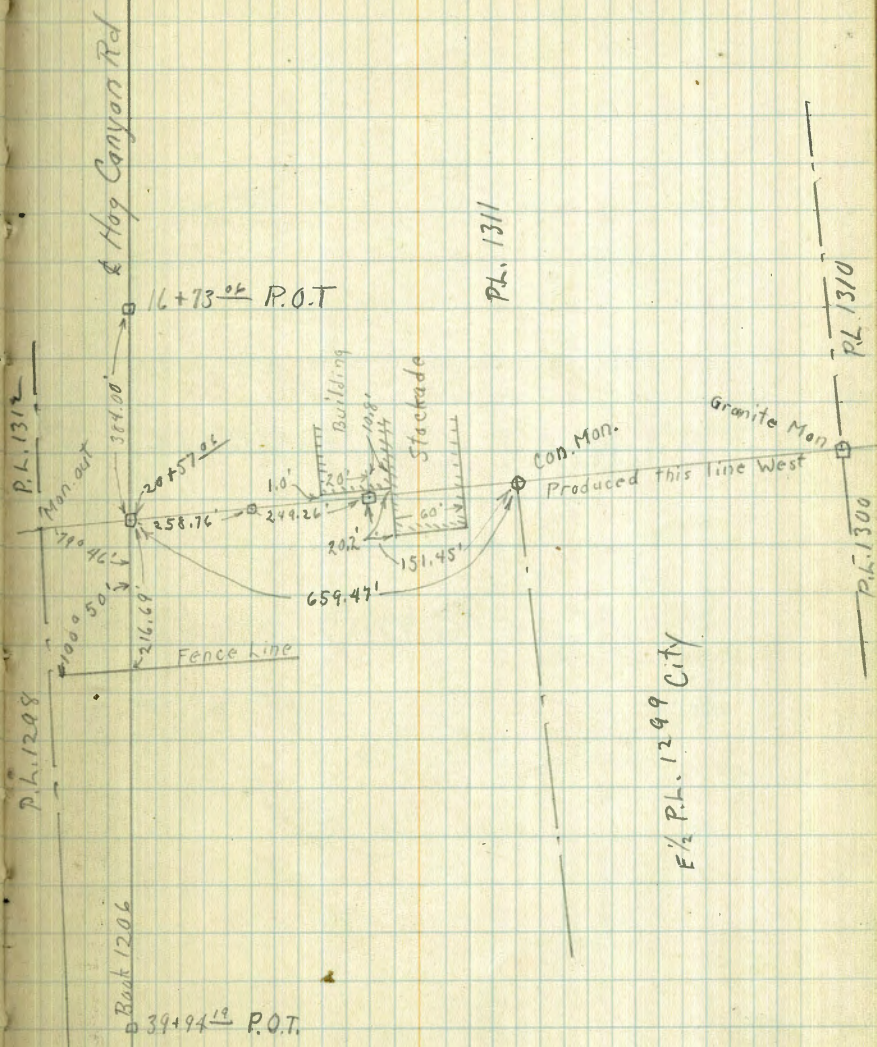
Elev.

Zt

STA

27

Tie Hog Canyon Road to P.L. bet. 1311 and 1299



DIRECTIONS FOR USE OF TABLES

TABLE No. 1.

Distance of slope stake from side or shoulder stake for any width roadway, slope $1\frac{1}{2}$ to 1. If ground is nearly level, the cut or fill at side stake is located by the double entry method in left column and top row. The number in body of table in same row and column gives distance from side stake to slope stake. If ground is not level estimate the difference in elevation between the side stake and slope stake, lower target by this amount if cut, elevate if fill. Add this amount to cut or fill and find distance in table. Set up rod at this point, and line of sight should cut target. If it does not make the slight adjustment necessary.

TABLE No. 9.

To find Tangent and External for curve of any other degree, divide by degree of curve and add correction found in column of corrections.

Degree of curve with a given I may be found by dividing tangent, (or external), opposite I by given tangent, (or external).

The distance from a point on the tangent to the curve is very nearly the square of the tangent length divided by twice the radius.

190.25
80.20

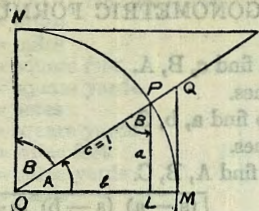


TABLE II
TRIGONOMETRIC FORMULÆ.

$$\angle A = \angle MOP \quad \angle B = \angle PON = \angle OPL$$

$$R = OB = c = 1$$

$$\sin A = \frac{a}{c} = \frac{a}{1} = a = \cos B = LP$$

$$\cos A = \frac{b}{c} = \frac{b}{1} = b = \sin B = OL$$

$$\tan A = \frac{a}{b} = \frac{MQ}{OM} = \frac{MQ}{1} = MQ = \cot B = MQ$$

$$\cot A = \frac{NT}{ON} = \frac{NT}{1} = NT = \tan B = NT$$

$$\sec A = \frac{OQ}{OM} = \frac{OQ}{1} = OQ = \csc B = OQ$$

$$\csc A = \frac{OT}{ON} = \frac{OT}{1} = OT = \sec B = OT$$

$$\text{vers } A = \frac{LM}{OP} = LM = \text{covers } B \#$$

$$\text{covers } A = \frac{OP - LP}{OP} = OP - LP = \text{vers } B$$

$$\text{exsec } A = PQ = \text{coexsec } B$$

$$\text{coexsec } A = PT = \text{exsec } B$$

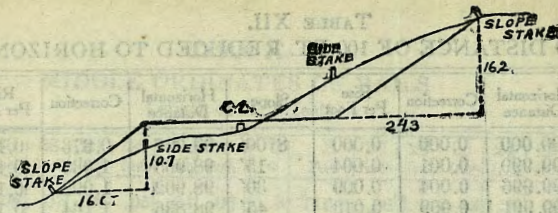
$$\sin \frac{1}{2} A = \sqrt{\frac{1 - \cos A}{2}} \quad \cos \frac{1}{2} A = \sqrt{\frac{1 + \cos A}{2}}$$

$$\sin 2A = 2 \sin A \cos A \quad \cos 2A = \cos^2 A - \sin^2 A$$

$$\text{Law of Lines} \quad \frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$$

$$\text{Law of Cosines} \quad c^2 = a^2 + b^2 - 2ab \cos C$$

$$\text{Law of Tangents} \quad \frac{a+b}{a-b} = \frac{\tan \frac{1}{2}(A+B)}{\tan \frac{1}{2}(A-B)}$$



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.

SLOPE 1 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	1.65	1.80	1.95	2.10	2.25	2.40	2.55	2.70	2.85	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.

6 + 78.14
1 35.90

8 + 13.54

2 | 55.53
27.76
11 72.06
11 + 99.82

To find

179 60
60 54
119 06
59 39

89.88
1300

ENGINEERING DEPARTMENT,
CITY OF SAN DIEGO,
CALIFORNIA.

Board: Prospect between Pearl

706 52
53° 4'

22° 00'
E 19.89
R = 1000
T = 200.42

gas station

250
625
15625 ✓
185 x 185
1480
925
34225
15625

18600 = ~~136.38~~
86 : 23 x 3
69
1700 : 266 x 6
1596

10400 : 2723 x 3
8169
223100 : 27268 x 8
218144
4956

gas station

326.68	303.36
<u>14.71</u>	<u>11.80</u>
339.39	291.56
<u>9.14</u>	306.26
330.25	<u>14.50</u>
<u>3.86</u>	293.76
334.14	
<u>14.26</u>	272.13
321.88	<u>12.65</u>
<u>4.11</u>	259.48
325.99	<u>7.74</u>
<u>13.05</u>	267.22
312.94	
<u>2.52</u>	
315.46	
<u>11.15</u>	
304.31	
<u>1.95</u>	
306.26	
<u>14.97</u>	
293.29	
<u>5.14</u>	
298.43	
<u>13.19</u>	
285.24	
<u>3.22</u>	
288.46	
<u>13.11</u>	
275.35	
<u>2.97</u>	
278.32	
<u>14.55</u>	
265.77	
<u>6.36</u>	
272.13	