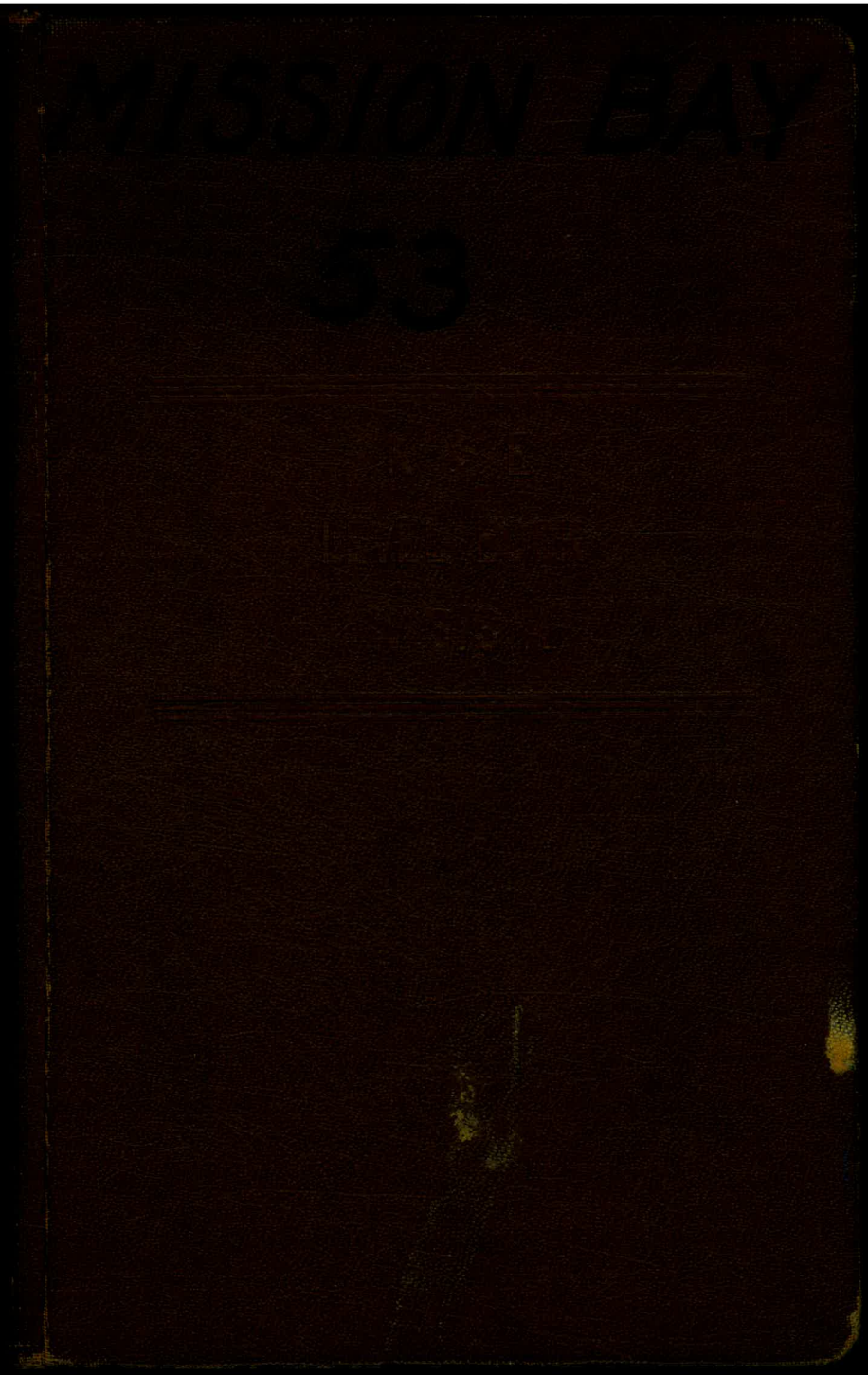
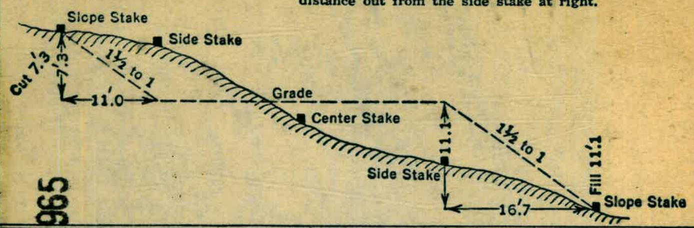

MISSION: E.A.Y.
53

DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING
Roadway of any Width. Side Slopes 1½ to 1.

In the figure below: opposite 7 under "Cut or Fill" and under .3 read 11.0, the distance out from the side stake at left. Also, opposite 11 under "Cut or Fill" and under .1 read 16.7, the distance out from the side stake at right.



Cut or Fill	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	Cut or Fill
	Distance out from Side or Shoulder Stake										
0	0.0	0.2	0.3	0.5	0.6	0.8	0.9	1.1	1.2	1.4	0
1	1.5	1.7	1.8	2.0	2.1	2.3	2.4	2.6	2.7	2.9	1
2	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1	4.2	4.4	2
3	4.5	4.7	4.8	5.0	5.1	5.3	5.4	5.6	5.7	5.9	3
4	6.0	6.2	6.3	6.5	6.6	6.8	6.9	7.1	7.2	7.4	4
5	7.5	7.7	7.8	8.0	8.1	8.3	8.4	8.6	8.7	8.9	5
6	9.0	9.2	9.3	9.5	9.6	9.8	9.9	10.1	10.2	10.4	6
7	10.5	10.7	10.8	11.0	11.1	11.3	11.4	11.6	11.7	11.9	7
8	12.0	12.2	12.3	12.5	12.6	12.8	12.9	13.1	13.2	13.4	8
9	13.5	13.7	13.8	14.0	14.1	14.3	14.4	14.6	14.7	14.9	9
10	15.0	15.2	15.3	15.5	15.6	15.8	15.9	16.1	16.2	16.4	10
11	16.5	16.7	16.8	17.0	17.1	17.3	17.4	17.6	17.7	17.9	11
12	18.0	18.2	18.3	18.5	18.6	18.8	18.9	19.1	19.2	19.4	12
13	19.5	19.7	19.8	20.0	20.1	20.3	20.4	20.6	20.7	20.9	13
14	21.0	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.4	14
15	22.5	22.7	22.8	23.0	23.1	23.3	23.4	23.6	23.7	23.9	15
16	24.0	24.2	24.3	24.5	24.6	24.8	24.9	25.1	25.2	25.4	16
17	25.5	25.7	25.8	26.0	26.1	26.3	26.4	26.6	26.7	26.9	17
18	27.0	27.2	27.3	27.5	27.6	27.8	27.9	28.1	28.2	28.4	18
19	28.5	28.7	28.8	29.0	29.1	29.3	29.4	29.6	29.7	29.9	19
20	30.0	30.2	30.3	30.5	30.6	30.8	30.9	31.1	31.2	31.4	20
21	31.5	31.7	31.8	32.0	32.1	32.3	32.4	32.6	32.7	32.9	21
22	33.0	33.2	33.3	33.5	33.6	38.8	33.9	34.1	34.2	34.4	22
23	34.5	34.7	34.8	35.0	35.1	35.3	35.4	35.6	35.7	35.9	23
24	36.0	36.2	36.3	36.5	36.6	36.8	36.9	37.1	37.2	37.4	24
25	37.5	37.7	37.8	38.0	38.1	38.3	38.4	38.6	38.7	38.9	25
26	39.0	39.2	39.3	39.5	39.6	39.8	39.9	40.1	40.2	40.4	26
27	40.5	40.7	40.8	41.0	41.1	41.3	41.4	41.6	41.7	41.9	27
28	42.0	42.2	42.3	42.5	42.6	42.8	42.9	43.1	43.2	43.4	28
29	43.5	43.7	43.8	44.0	44.1	44.3	44.4	44.6	44.7	44.9	29
30	45.0	45.2	45.3	45.5	45.6	45.8	45.9	46.1	46.2	46.4	30
31	46.5	46.7	46.8	47.0	47.1	47.3	47.4	47.6	47.7	47.9	31
32	48.0	48.2	48.3	48.5	48.6	48.8	48.9	49.1	49.2	49.4	32
33	49.5	49.7	49.8	50.0	50.1	50.3	50.4	50.6	50.7	50.9	33
34	51.0	51.2	51.3	51.5	51.6	51.8	51.9	52.1	52.2	52.4	34
35	52.5	52.7	52.8	53.0	53.1	53.3	53.4	53.6	53.7	53.9	35
36	54.0	54.2	54.3	54.5	54.6	54.8	54.9	55.1	55.2	55.4	36
37	55.5	55.7	55.8	56.0	56.1	56.3	56.4	56.6	56.7	56.9	37
38	57.0	57.2	57.3	57.5	57.6	57.8	57.9	58.1	58.2	58.4	38
39	58.5	58.7	58.8	59.0	59.1	59.3	59.4	59.6	59.7	59.9	39
40	60.0	60.2	60.3	60.5	60.6	60.8	60.9	61.1	61.2	61.4	40

KEUFFEL & ESSER CO., N. Y.

Book # 53

104+00W 7.37
105+00W 7.82
106+00W 8.37
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2"x4" 20'E 155+00
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152+00 N } 9.91

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106+00

The paper in this book **No. 373A** is made of **50%** high grade rag stock with a **WATER RESISTING** surface sizing.

INDEX

LOCATION OF STABILIZER
& BASELINE FOR X-SECTIONS
MISSION BAY PROJECT No 33

March 9, 1950

T. Stamper
C. Barragan
A. Sherry
H. Brown

Sta	object	Angle	Mean
	Anza	1. 89° 52' 30"	
Conc Mon Wly Line Bond St.	R ⊼	2. 179° 45' 00"	
	Wly Line Bond ℄ 2"x2" Sly Line Grand		
	Conc Mon. Wly Line Bond	1. 90° 00' 30"	
Sly Grand 2x2 wly Bond	R ⊼ Sly Line Grand	2.	

160
150
14
108

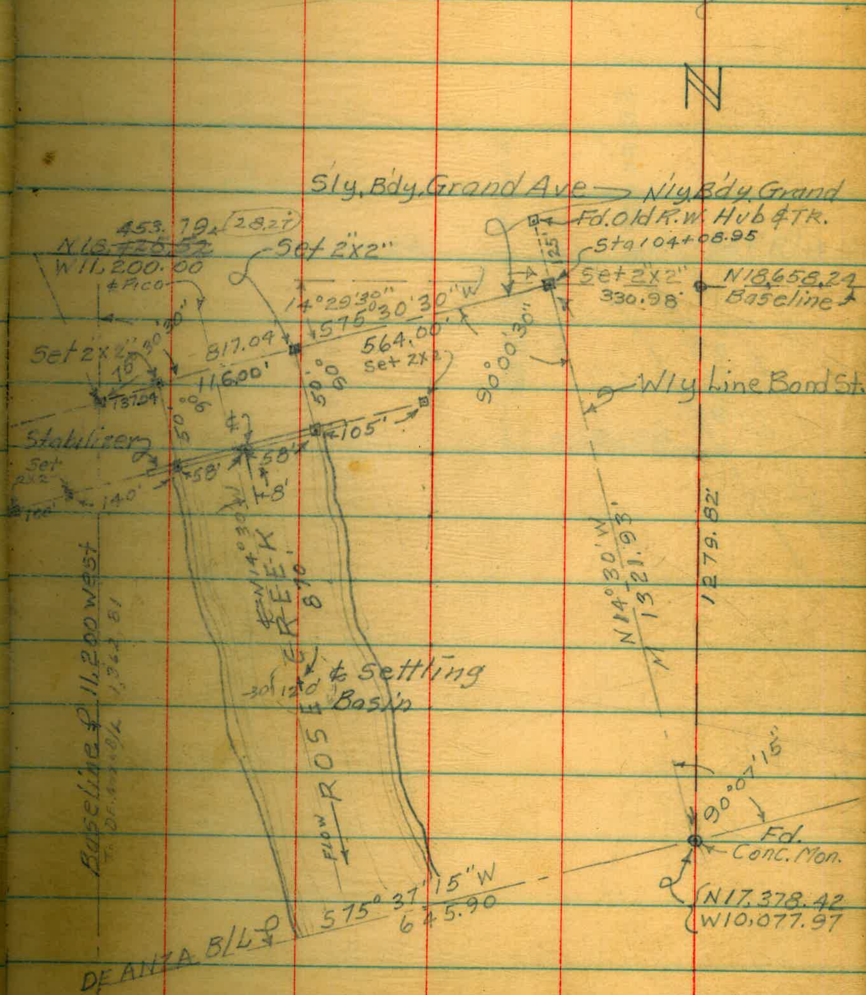
62.71
37.29
100.00

179-59-60
75-30-30
104-29-30

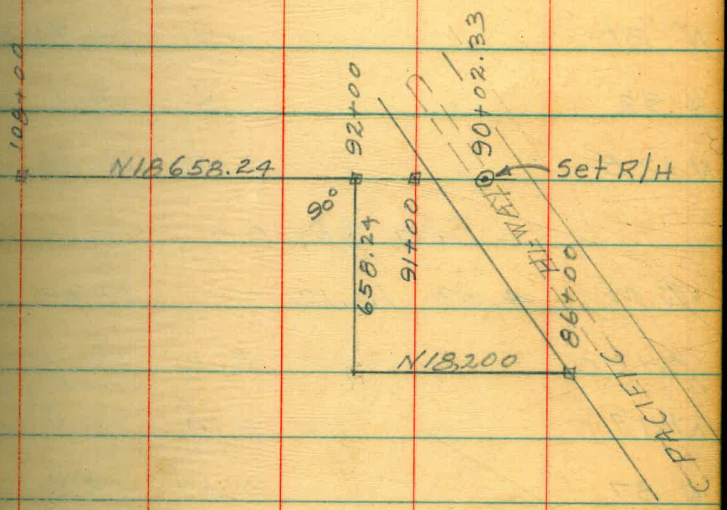
18,425.52
17,100.00
1,325.52
37.29
1,362.81

90-00-30
14-29-30
104-30-00

179 59 60
75 30 30
104 29 30



BASELINE CONT'D.



CROSS SECTIONS PROJ #33

DE-ANZA POINT BASELINE

3-16-50

T Stamper
C. Barragan
H. Brown

Visibility - Good

Sta	+	H.I	−	Elev	
	Sta. 79+00				
B.M.	4.52	16.61		12.09	State
0+00			5.1	11.5	
N 42			3.5	13.1	
N 81			1.9	14.71	W. Shldr
N 92			1.5	15.1	W. Pav.
N 125			1.03	15.58	W. Profile
	Sta 80+00				
B.M.	4.03	16.12		12.09	State
0+00			5.1	11.1	
N 17			4.0	12.1	
N 87			2.4	13.7	
N 137			0.8	15.3	
N 154			1.3	14.8	
N 178			1.1	15.12	W. Shldr
N 190			0.66	15.46	W. Pavmt
N 223			0.29	1583	W. Prof.
TP.			5.00	11.12	Sta 82+01 2x2 Hub

Proj #33 — PK

CROSS SECTIONS CONTD

Sta 81+00 DE-ANZA B/L

Sta	+	H.I	−	Elev	
TP. 2x2"	5.22	16.34		11.12	Sec Pg 3
0+00			5.1	11.2	
N 44			5.1	11.2	
N 68			4.8	11.5	
N 75			2.9	13.4	
N 121			1.9	14.4	
N 172			0.7	15.6	
↑ N 170					
TP. (70)	6.11	20.66	1.79	14.55	
N 240 (76)			2.2	18.5	
N 246 (106)			4.8	15.9	
N 276 (117)			5.20	15.46	W. Shld.
N 287 (151)			4.85	15.81	W.E. Pav.
N 321			4.47	16.19	W. Profile

3-16-50 — PK — (7)

Sta 82+00 DE-ANZA B/L

Sta	+	H.I	−	Elev	
	5.00	16.12		11.12	Sta 82+00 2x2
N 7			4.6	11.5	
N 8			4.0	12.1	
N 19			5.0	11.1	
N 25			7.0	9.1	
N 73			5.6	10.5	
N 111			3.3	12.8	
N 131			4.0	12.1	
N 166			3.2	12.9	
N 176			1.2	14.9	
N 227			0.3	15.8	
↑ N 220					
T.P. 45	8.07	20.68	12.61	3.51	
N 265			3.8	16.9	
93 N 313			2.2	18.5	
115 N 335			1.4	19.3	
120 N 340			4.8	15.9	

3-16-50 PX

Sta 82+00 DeANZA B/L

Sta	−	H.I.	+	ELEV	
156 N 376		20.68	4.77	15.91	W. Shoulder
167 N 387			4.50	16.18	W Edge
202 N 422			4.10	16.58	W ℄ Slope

3-16-50 PX (5)

Sta 83+00 Pt 30' South DeAnza B/L.

Sta	+	H.I.	−	ELEV	
	5.91	17.03		11.12	Sta 82+00 2x2
0+00			4.9	12.1	
N 2			5.2	11.8	
N 11			9.4	7.6	
N 37			10.2	6.8	
N 85			9.8	7.2	
N 140			7.8	9.2	
N 193			4.9	12.1	
N 242			3.5	13.5	
N 262			4.7	12.3	
N 300			4.0	13.0	
N 306			1.9	15.1	
π N 360			1.2	15.8	
T.P.	7.77	20.89	3.91	13.12	
47 N 407			4.7	16.2	
106 N 466			2.6	18.3	
109 N 469			4.5	16.4	

3-16-50

Sta 83+00 Cont'd

Sta	+	H.I.	−	ELEV	
360 143 N.503		20.89	5.00	15.89	West Shoulder
155 N N515			4.46	16.43	W. Edge
188 N N548			4.01	16.88	W. Profile
N					

Sta 84+00 = Pt 30' South DeAnza @ Sta 82+00 2X2

Sta.	+	H.I.	−	ELEV.
	5.79	16.91		11.12
0+00			4.9	12.0
N 2			5.0	11.9
N 11			9.3	7.6
N 30			10.0	6.9
N 152			9.7	7.2
N 202			8.0	8.9
N 256			5.8	11.1
N 311			4.9	12.0
N 345			4.2	12.7
N 358			5.2	11.7
N 395			4.7	12.2

3-16-50

Sta 84+00 Cont'd.

Sta	+	H.I.	−	ELEV.	
N406		16.91	2.4	14.5	
N 460			2.5	14.4	
N 509			1.4	15.5	
N 565			0.0	16.9	
N 575			3.6 0.7	16.21	W. Shoulder
N 617			3.25 0.17	16.74	W Edge
N 647			3.0 -0.28	17.19	W Profile

LEVELS

Sta	+	H.I.	−	ELEV.	
T.B.M	6.33	17.45		11.12	2" x 2" Sta 82+00
T.P.	4.36	10+00	5.64	11.81	
T.P.	4.36	16:17			
T.P.			5.52	10.65	
	4.64	15.29			
T.P.			6.45	8.84	
T.P.	9.90	18.74	3.17	15.57	
T.P.	3.28	19.85	2.70	17.15	N 18658.24 Hub Sta 92+00
			8.27	11.58	Hub Sta 93+00 N 18658.24

11.12
6.33
17.45

Sta 85+00 = PT. 30' South De Anza ℄ PT

Sta	+	H.I.	−	ELEV.	
T.B.M.	5.30	16.42		11.12	2x2 Sta 82+
N 0+00			5.1	11.3	
N N 395			5.6	10.8	
N N 448			4.4	12.0	
N 455			5.3	11.1	
N 477			4.4	12.0	
N 560			3.2	13.2	
N 563			4.0	12.4	
N 572			5.7	10.7	
N 585			1.3	15.1	
N 638			0.4	16.0	
N 769			-1.4	17.8	
N 800			-0.65	17.07	W. Shldr
N 815			-1.02	17.44	W. Pav
N 845			-1.72	18.14	W. Prof
TP.			1.86	14.56	
	6.82	21.38			

3-16-50

Sta 86+00 = N 18,200

Sta	+	H.I.	−	Elev.	
		21.38			
S 272			10.0	11.4	
S 253			9.0	12.4	
S 245			10.2	11.2	
S 196			9.8	11.6	
S 186			7.7	13.7	
S 133			7.5	13.9	
S 84			6.6	14.8	
S 32			6.0	15.4	
0+00			5.3	16.1	
N 11			4.48	16.90	W. Shldr
N 19			4.09	17.29	W. Paving
N 55			3.47	17.91	W. Profile
TP.			11.55	9.83	N 18,200 2x2-88+00
	8.69	18.52			

Sta 87+00 = N 18,200

	Sta	+	H.I.	−	Elev.	
			18.52			See Pg #7
N	N 155			0.25	18.27	W. Post
N	N 119			0.71	17.81	W. Post
N	N 109			1.11	17.41	W. Stk
	N 97			0.9	17.6	
	N 92			3.0	15.5	
	N 63			5.0	13.5	
	N 16			5.1	13.4	
	0+00			5.1	13.4	
	S 39			4.2	14.3	
	S 86			4.4	14.1	
	S 97			7.2	11.3	
	S 146			7.8	10.7	
	S 153			6.0	12.3	
	S 210			8.0	10.5	
	S 263			9.9	8.6	

PX

3-16-30

PX 17-50

Sta 88+00 = N 18,200

Sta	+	H.I.	−	Elev	
IBM.	7.67	17.50		9.83	N 18,200 2X2-88+00
130	NOTE: All Distances From this Point.				
S 335			9.4	8.1	
S 284			7.4	10.1	
S 255			6.2	11.3	
S 211			5.6	11.9	
S 187			5.9	11.6	
S 179			7.5	10.0	
S 90			7.0	10.5	
S 78			6.9	10.6	
S 75			8.0	9.5	
S 64			7.7	9.8	
S 60			7.0	10.5	
S 30			6.3	11.2	
S 27			7.3	10.2	
S 24			7.0	10.5	
S 18			6.1	11.4	
0+00					

N 18,200 = B/L.
Sta 88+00 Cont'd

Sta	+	H.I	−	Elev
		17.50		
N 130 — of B/L, Distances Indicated from this Pt.				
N 16			4.9	12.6
N 20			6.4	11.1
N 26			5.8	11.7
N 27			4.3	13.2
N 64			2.5	15.0
N 76			0.30	17.20 W. Sh.
N 88			[−0.66]	18.16 W. Pt.
N 122			[−1.22]	18.72 W. Pt.

C. BARRAGAN
A. SHERRY
H. BROWN

3-17-50

(3)

STA 89+00

STA	+	H.I.	−	ELEV
T.P.M.	3.49	13.32		9.83
2+00 = (N-18,200 E-8,900) SECTION DUE NORTH & SOUTH.				
2-3.05			6.3	7.9
2+69			4.4	8.9
2+27			4.4	8.9
1+85			5.8	7.5
1+36			6.3	7.0
1+01			6.0	7.3
0+43			5.8	7.5
0+00			5.3	8.0
N. 0+27			5.0	8.3
0+74			4.3	9.0
1+54			2.4	10.9
N. 1+70			1.5	11.8
T.P.	7.30	17.13		9.83
T N. 1+70				
0+00			5.3	11.8
1+15			2.9	14.1

7.83
7.49
13.32

2 x 3" Sta. 88+00 on N-18,200 B/L

9.83
7.30
17.13

2 (2 Sta 88+00 N. 18

PX PX

1.70

Sta 89+00

Sta	+	H.I.	−	Elev
π 0+50 N 2+20		17.13		14.4
T.P.	5.82	19.68	3.27	13.86
0+00			5.1	14.6
0+08 N.2+28			47.	15.0
0+11 N.2+31			5.5	14.2
0+22 N.2+42			4.1	15.6
0+35 N.2+55			4.1	15.6
0+48 N.2+68			3.6	16.1
0+86 N-3.06			1.45	18.23
0+96 N-3+16			1.15	18.53
1+32 N-3+52			0.72	18.96

Sta 90+00 W

Sta.	+	H.I.	−	Elev	
T.B.M.	3.16	12.99		9.83	2x2 Hub Sta 88+50 18,200 B/L
T.P.			4.88	8.11	2x2 Hub Sta 89+00 18,200 B/L 2350
T.P.	10.03	20.10	2.92	10.07	

π @ Pt. 250' North of Sta-W. 90+00 = {N-18,450 W-9,000} = 0+00

Sta.	+	H.I.	−	Elev
S.4+55		20.10	13.1	7.0
S.4+05			13.1	7.0
S.3+50			12.7	7.4
W. Edge Shoulder S.3+00			12.5	7.6
W. Edge Paving S.2+50			12.3	7.8
W. Curb Point S.1+75			12.0	8.1
S.1+38			11.5	8.6
S.0+85			9.8	[illegible] 3
S.0+31			7.3	13.8
0+00			5.2	14.9
N.0+26			4.3	16.8
N.0+50			4.9	15.2
N.0+80			3.4	16.7

Sta - 90+00 W

	Sta	+	HI	-	Elev
	N0+92		20.10	3.1	17.0
N	N. 1+00			2.4	18.7
N	N. 1+18			4.2	16.9
N	N. 1+22			4.4	16.7
	N. 1+29			3.4	17.7
	N. 1+56			1.82	18.28
	N 1+66			1.40	18.70
	N. 2+01			0.85	19.35

3-17-80

Sta 91+00 W

Sta	+	HI	-	Elev
TBM	10.16	18.27		8.11
TBM			10.45	7.82
0+00 =	(18,200 N, 91+00 W)			
0+18			11.0	7.27
0+12			9.9	8.37
0+75			10.5	7.77
1+32			10.1	8.17
1+20			8.5	9.77
0+85			6.4	11.87
0+58			6.0	12.27
0+06			5.4	12.87
0+50			5.3	12.97
1+00			5.5	12.77
1+56			4.5	13.77
2+28			3.8	14.47
2+92			2.5	15.77
3+25			1.5	16.77

2x2 Hub sta 89+00 W N18,200 B/L

2x2 Hub sta 90+00 W N18,200 B/L

STA - 91+00 W

Sta	+	H.I.	−	Elev
N 3+50		18.21	2.5	15.8
N 3+84			T 2.15 / 1.92 / 0.23 — 0.23	18.0
N 4+20			T 3.55 / 2.10 / 1.45 — 1.45	16.8
N 4+30			T 5.6 / 2.15 / 3.45 — 3.45	14.8
N 4+58			T 5.65 / 2.29 / 3.36 — 3.36	14.8
N 4+85			T 5.2 / 2.42 / 2.78 — 2.78	15.3
N 4+96			T 1.95 / 2.48 — -0.53	18.8
N 5+10			T 1.70 / 2.55 — -0.85	19.1
N 5+45			T 1.46 / 2.72 — -1.26	19.6

3-17-50

PX

STA - 92+00 W

STA	+	H.I.	−	ELEV
T.B.M	10.65	18.47		7.82
E © {N-18,200 W-9,200} = 0+00 SEC. N & S.				
2+61		18.47	11.0	7.5
2+55			9.3	9.2
2+10			9.5	9.0
1+80			8.4	10.1
1+70			5.5	13.0
1+25			5.3	13.2
0+75			4.4	14.1
0+42			4.2	14.3
0+00			5.1	13.4
N 0+52			5.9	12.6
N 1+25			6.7	11.8
N 1+65			5.8	12.7
N 2+00			4.9	13.6
N 2+50			5.1	12.4
(W 92+00 N 18,658.24) = 0+00 SECTION N & S				
T.B.M	4.82	21.97		17.15
S-1+65			7.4	14.7 (.6)

STA-Hub W Sta. 90+00.

STA-92+00 W 18,658.24 B/L Top HUB

22.0
17.4
4.6

PX

STA - 92+00 WT

	Sta	+	HI	−	
	S. 1+20	21.97	21.97	6.8	~~16.2~~ ~~12.2~~ T 3
N	S. 0+80			6.6	14.5
N	S. 0+51			7.1	14.0
N	S. 0+15			4.2	17.9
	T 0+00			4.8	17.3
	N-0+14			6.8	15.3
	N. 0+53			6.8	15.3
	N. 0+76			6.8	15.3
	N. 1+11			6.0	15.1
	N 1+30			5.8	15.3

3-17-50

(13)

STA 93+00

PX

Sta	+	HI	−	Elev
P.C. Ft. 20 N. STA 93+00 - 18,658.0/4 = { N-18,678.29 W-9,300 } = 0+00				
STA	10.02	21.60		11.58
0+32			11.2	9.7
0+80			11.8	9.8
1+35			11.3	10.3
1+90			11.2	10.4
2+40			12.0	9.6
2+75			10.7	10.9
1+75			11.7	9.9
1+25			11.1	10.5
0+74			10.6	11.0
0+24			10.1	11.5
0+10			4.3	15.3
0+00			3.0	16.6
0+18			5.2	16.4
0+19			9.6	12.0
0+32			8.6	13.0
0+78			8.5	13.1

Hub. 93+00
18,658.29 0/4
Top Hub

℄ CENTER OF R.R. GR.

PX

Sta 93+00

Sta	+	HI	−	El	
N 1+28		21.60	8.2	13.4	
N N 1+72			7.3	14.3	
N N 2+07			5.4	16.2	Elev
N N 2+26			0.8	Shoulder	20.8[illegible]
N 2+36			0.65	Edge of Pavement	20.9[illegible]
N 2+70			0.35	Center Profile	21.[illegible]
Recheck TBM	10.08	21.66		11.58	Hub 3[illegible]
N 8			5.2	16.5	
N 20			9.6	12.1	
N 27			8.8	12.9	
N 63			8.8	12.9	
N 1+21			8.5	13.2	
N 1+69			7.5	14.2	
N 2+00			5.7	16.0	
N 2+10			5.4	16.3	
N 2+23			0.8	20.9	
N 2+26			0.92	20.74	Shoulder
N 2+38			0.75	20.91	Edge Pavement
N 2+70			0.40	21.26	Profile

3-17-50

Sta 94+00

PX

STA	+	H.I.	−	ELEV	
T.B.M	4.81	16.39		11.58	STA-93+00 W 18,658 B/L T.P HUB
⊼ @ {N-18,658 W-9,300} = 0+00			SECTION	N, E S.	
[illegible] - 5+00		16.4	8.7 ~~5.7~~	7.7	
[illegible] - 4+00			8.1	8.3	
[illegible] - 2+95			7.8	8.6	
[illegible] - 1+98			6.9	9.5	
[illegible] - 0+97			6.4	10.0	
0+00			5.7	10.7	
[illegible] - 0+30			4.8	11.6	
[illegible] - 0+41			1.6	14.8	
[illegible] - 0+92			0.4 (T.H)	16.0	⊥ CENTER R.R. SR.
[illegible] 0+58			0.8 (T.H. 4.8)	15.6	
[illegible] 1+20			4.4 (T.H 4.7)	12.6	
[illegible] 1+39			4.1 (4.4)	12.3	
N 1+88			3.5 (3.6)	12.9	
[illegible] - 2+34			2.4	14.0	

PX

STA - 95+00 W

STA	+	H.I.	−	ELEV	
T.B.M	4.62	16.20		11.58	97+00W 18,658 B/L Top
@ (N-18,658 W-9,500) = 0+00 Sec. N. & S.					
S -2+10		16.2	6.6	9.6	
S -1+09			6.6	9.6	
0+00			5.4	10.8	
N-0+22			5.3	10.9	
N-0+30			5.9	10.3	
N-0+55			4.9	11.3	
N-0+65			1.6	14.6	
N-0+78			0.8 (1.6)	15.4	
N-0+85			1.2 (5.6)	15.0	
N-0+99			5.1 (5.7)	11.1	
N-1+38			5.0 (4.8)	11.2	
N-1+68			4.0	12.2	
T.B.M			5.13	10.07	STA-97+00 18,658 B/L Top Hub

3-17-50 (15)

PX

Sta - 96+00 W

Sta	+	H.I.	−	Elev	
TBM	5.04	15.11		10.07	sta 97+00 W 18,658 B/L Top Hub
S 2+16			6.1	9.01	
S 1+15			5.8	9.31	
0+00			5.3	9.81	
0+21			5.7	9.41	
0+64			4.5	10.61	
0+79			4.4	10.71	
0+94			1.1	14.01	
1+08			0.7	14.41	
1+06			1.4	13.71	
1+18			3.8	11.31	
N 1+26			5.9	9.21	
N 1+60			5.5	9.61	
N 1+70			3.8	11.31	
N 2+12			3.05	12.06	

PX

Sta. 97+00

Sta	+	HI	−	Elev	
Total 0+00	{N. 18,658 W 97+00				
TB.M	5.20	15.27		10.07	Sta 97+00
S. 2+10		15.3	5.6	9.7	
S. 1+06			6.1	9.1	
0+0			5.2	10.0	
N. 0+51			4.8	10.5	
N. 0+97			4.2	11.1	
N 1+05			1.9	13.4	
N 1+15			1.2	14.1	
N. 1+30			3.7	11.6	
N. 1+36			4.0	11.3	
N. 1+42			5.6	9.7	
N. 2+06			5.4	9.9	
N-2+20			-0.4	15.7	

3-17-50

Sta 98+00

(16)

PX

Sta	+	HI	−	Elev	
0+00	{N. 18,658 W 97+00				
TB.N	5.55	15.12		10.07	Sta 97+00
S 2+12			5.8	9.3	
S 1+15			5.6	9.5	
0+00			5.2	9.9	
N 2+46			5.0	10.1	
N 1+00			4.4	10.7	
N. 1+08			2.2	12.9	
N 1+27			1.5	13.6	
N 1+37			4.4	10.7	
N 1+52			4.9	10.2	
N 1+60			5.9	9.2	
N 1+86			4.9	10.2	

3-20-50

Sta 99+00

Sta.	+	H.I.	-	Elev	
		N18,658			
0+00 = ~~N18,200~~					
TBM	5.46	15.53		10.07	2x2 N18,6 N18,2
0+00			5.3	10.2	
S 209			5.6	9.9	
S 108			5.6	9.9	
N 52			4.9	10.6	
N 86			4.6	10.9	
N 103			4.2	11.3	Toc
N 110			2.3	13.2	Toc
N 122			1.6	13.9	T
N 131			1.6	13.9	Toc
N 138			3.9	11.6	Toc
N 148			3.9	~~12.5~~ 11.5	
N 152			5.2	10.3	
N 173			5.9	9.6	
N 191			3.9	11.6	
TP			4.30	11.23	2x2 ~~N18,6~~ N18,4

3-20-50

Sta 100+00

N 18,658

0+00 = ~~N18,200~~

Sta	+	H.I.	-	Elev	
100+00					100+00 2x2 ~~N18,200~~ N18,658 B/L
TBM	4.24	15.47		11.23	
0+00			5.2	10.3	
N 36			5.3	10.2	
N 77			4.6	10.9	
N 102			4.1	11.4	
N 107			2.4	13.1	
N 120			1.2	14.3	
N 130			1.4	14.1	
N 136			3.6	11.9	Toc
N 145			3.6	11.9	
N 150			5.1	10.4	
N 187			4.9	10.6	
N 192			2.6	12.9	
S 200			5.9	9.6	
S 110			5.0	10.5	

(17)

PX

3-20-50

Sta 101+00

N-18,658

0+00 = ~~N18,200~~

Sta	+	H.I.	−	Elev	
T.B.M. 101+00	5.30	16.53		11.23	2x2 T.B.M. 101+00 N18,658
0+00			5.3	11.2	
N.42			5.2	11.3	
N-72			5.3	11.2	
N-90			5.0	11.5	
N-97			3.3	13.2	
N-101			2.2	14.3	
N-125			2.5	14.0	
N-130			4.5	12.0	
N-143			4.7	11.8	
N-145			5.8	10.7	
N-181			5.7	10.8	
N-185			3.8	12.7	
S-203			6.8	9.7	
S 106			5.8	10.7	

3-20-50

Sta 102+00

N 18,658

0+00 = ~~N 18,200~~

Sta	+	H.I.	−	Elev	
T.B.M. 102+00	5.20	16.43		11.23	2x2 ~~N18,200~~ N 18,658 B/L
0+00			5.2	11.2	
N 42			5.3	11.1	
N 75			4.5	11.9	Toc
N 81			2.8	13.6	
N 99			2.0	14.4	
N 116			2.2	14.2	
N 125			4.1	12.3	
N 131			3.7	12.7	
N 136			5.6	10.8	
N 170			4.9	11.5	
N 174			3.4	13.0	
S 214			7.5	8.9	
S 108			6.0	10.4	

(18)

3-20-50

Sta 103+00

N 18,658

0+00 = ~~N 18,200~~

Sta	+	H.I.	−	Elev	
TBM 101+00	5.42	16.65		11.23	2x2 N18,200 N-19,0
0+00			5.3	11.3	
N 40			5.5	11.1	
N 60			4.6	12.0	
N 63			3.6	13.0	
N 85			2.3	14.3	
N 111			2.8	13.8	
N 113			5.4	11.2	
N 138			5.3	11.3	
N 151			4.8	11.8	
N 155			3.6	13.0	
S 224			6.6	10.0	
S 124			7.0	9.6	
105+00 TP	2.52	13.95	5.22	11.43	2x2 N 18
TP	5.62	14.41	5.16	8.79	
B.M.			5.61	8.80	U.S.E. Bm 8.80

3-20-50

(19)

Sta 104+00

N 18,658

0+00 = ~~N 18,200~~

Sta	+	H.I.	−	Elev	
TBM 105+00	3.23	14.66		11.43	2x2 ~~N18,200~~ N18,658
0+00			5.1	9.6	
52			5.1	9.6	
101			4.4	10.3	
133			4.4	10.3	
158			4.8	9.9	
191			6.2	8.5	
200			5.4	9.3	

3-20-50

Sta 105+00

N 18,658

0+00 = ~~N 18,200~~

Sta	+	H.I	−	Elev
TBM 105+00	4.95	16.38		11.43
0+00			5.0	11.4
N 25			4.8	11.6
N 29			3.8	12.6
N 51			3.5	12.9
N 90			5.0	11.4
N 114			3.9	12.5
S 605			6.6	9.8
S 540			6.4	10.0
S 495			6.3	10.1
S 487			8.1	8.3
S 395			8.0	8.4
S 295			7.3	9.1
S 195			8.0	8.4
S 93			7.3	9.1
S 26			7.3	9.1
S 13			6.0	10.4

2x2 ~~N18,200~~ N18,658

3-20-50 PX (20)

Sta 106+00

N 18,658

0+00 = ~~N 18,200~~

Sta	+	H.I	−	Elev
TBM 105+00	6.70	18.13		11.43
0+00			4.8	13.3
1+16			4.2	13.9
1+30			6.3	11.8
1+70			6.5	11.6
1+107			5.9	12.2
5+64			8.4	9.7
5+664			8.6	9.5
5+572			8.4	9.7
5+520			8.3	9.8
5+4			4.0	14.1
5+518			11.8	6.3
5+48			11.0	7.1
5+20			6.5	11.6
5+445			13.0	5.1
5+430			12.3	5.8
5+46			7.3	10.8
5+412			10.0	8.1
5+26			7.0	11.1
5370			9.0	9.1
5280			9.5	8.6
5222			8.4	9.7
5202			8.3	9.8
164			9.6	8.5
82			9.6	8.5

2x2 ~~N18,200~~ 18,658

3-20-50

Sta 107+00

DX

0+00 = N 18,658 ~~N 18,200~~

Sta	+	H.I	−	Elev
TBM 105+00	5.75	17.18		11.93
0+00			5.2	12.0
N 30			5.2	12.0
N 55			5.2	12.0
N 103			5.0	12.2
S 805			7.3	9.9
S 800			9.0	8.2
S 784			7.7	9.5
S 664			7.0	10.2
S 580			6.3	10.9
S 565			10.4	6.8
S 495			9.5	7.7
S 435			10.3	6.9
S 430			6.2	11.0
S 420			6.3	10.9
S 410			9.2	8.0
S 330			7.7	9.5
S 238			8.7	8.5

2 X 2 ~~N 18,658~~ N 18,658

3-20-50

Sta 107+00 Contd

DX

(21)

Sta	+	H.I	−	Elev
		17.18		
S 170			7.6	9.6
S 130			8.7	8.5
S 115			10.3	6.9
S 96			10.1	7.1
S 73			8.7	8.5
S 68			6.8	10.4
S 41			6.6	10.6
S 39			5.7	11.5
S 32			5.1	12.1
S 24			3.1	14.1
S 8			2.8	14.4

3-21-58

STA - W-105+00

STA	+	H.I.	−	ELEV
T.B.M.	4.57	12.75		8.18
0+00 = STA-105+00 DE-ANGLE B/L				
0+00		12.75	5.0	7.7
S-0+26			5.0	7.7
S-0+30			2.5	10.2
S-0+42			2.3	10.4
S-0+73			2.8	9.9
S-1+23			3.4	9.3
S-1+80			4.7	8.0
S-2+52			6.0	6.7
S-3+20			6.8	5.9
S-3+83			6.3	6.4
S-4+28			6.1	6.6
S-4+90			7.0	5.7
S-5+60			6.8	5.9
S-6+30			6.9	5.8
T.P.			4.39	8.36

STA 105+00 DE-ANGLE B/L

4"x4" 20'E OF SECTION LINE

(22)

28' - BACK TO STA 105+00W

STA - 105+00W

STA	+	H.I.	−	ELEV
T.P.	2.30	10.66		8.36
0+00 = P.T. 630' SOUTH STA-105+00W DE-ANGLE B/L				
0+25		10.66	6.2	4.5
0+68		10.7	6.3	4.4
1+19			6.5	4.2
1+79			8.1	2.6
0+36			7.0	3.7
6+10			6.7	4.0
3+25			6.1	4.6
1+90			6.3	4.4
1+23			5.7	5.0
0+77			5.7	5.0
0+00			4.8	5.9

3-21-50

STA - 106+00 W.

STA	+	H.I.	-	ELEV
				7.37
T.B.M.	5.83	13.20		8.37
0+00 = STA-106+00 W. DE-ANZA B/L.				
0+00		13.2	5.1	8.1
S 0+67			5.4	7.8
S - 1+33			6.1	7.1
S - 1+95			6.6	6.6
S - 2+12			6.2	7.0
S - 2+40			8.0	5.2
S - 3+25			7.9	5.3
S - 4+23			7.9	5.3
S - 5+05			8.2	5.0
S - 5+65			8.6	4.6
S - 7+05			8.9	4.3
S - 7+65			8.2	5.0
S - 8+50			8.0	5.2

COOL
CLEAR
CALM

3-22-50
C BARRAGAN
A BNEFRY

(23)

STA - 104+00 W.

STA	+	H.I.	-	ELEV
T.B.M.	4.13	12.31		8.18
T.P.			2.19	10.12
6+30 T.P. 630' S/STA-104+00 DE-ANZA B/L.				
T.P.	4.63	14.75		10.12
0+00 P.T. 630' S/STA-104+00 W. DE-ANZA B/L.				
0+00		14.75	5.1	9.6
0+20			6.1	8.6
0+73			8.2	6.5
1+20			9.0	5.5
2+06			9.5	5.2
2+90			9.6	5.1
3+67			10.4	4.3
4+58			10.7	4.0
5+42			10.9	3.8
5+67			11.0	3.7
5+87 MUD FURTHER SOUTH				

103+00 W. DE-ANZA

(1"x1" SLAT) 8.18
4.13
12.31

1"x1" SLAT ON TOP SHOULDER

Rechecks & Extensions

3-22-50

Sta 95+00

π @ 70' North of 95+00 on 18,658 B/L

Sta	+	H.I.	−	ELEV.	
TBM	8.23	19.81		11.58	Hub on 93+00 W 18,658
N 1+68			1.8	18.0	Against Fox & Hound Motel
N 1+50			2.7	17.1	
N 1+39			6.9	12.9	
N 1+17			7.8	12.0	
N. +92			7.2	12.6	
N. +72			7.4	12.4	

Location of Back Side of F&H Motel

H.I 19.81

AZIMUTH	DIST	−	ELEV.	
28° 05'	278'	0.50 −.89	20.70	Highway Shoulder
25° 25'	236'	0.30	19.51	SE Corn F&H.
11° 30'	244'	2.0	17.81	SW Corn F&H
340° 50'	275'	2.83 1.46		NW Corn F&H

Sta 96+00

3-22-50 (24)

π @ 100' North of 96+00 on 18,658 B/L

Sta.	+	H.I.	−	ELEV.	
TBM	9.24	19.33		10.07	97+00W HUB 18,658 N.
N 3+00			1.85 0.3	19.0	
N 2+66			5.23 3.90	15.43	Top ℄ Conc drain 24"
N 2+03			3.0	16.3	
N 1+94			7.0	12.3	
N 1+40			7.7	11.6	
N 0+68			8.2	11.1	
N 2+67					Point on ℄ 24" drain Extension

π @ PT 367' NORTH OF 18,658 B/L

AZIMUTH	DIST		
48° 50'	116'	LOCATION	west end of Culv. under HWY 101
47° 08'	197'	OF	East end Same Culv.
67° 30' 65° 10'	88'	24" CULVERT	N.E. Corn F&H Motel
225° 00'	168'		west end of 24" Culv. Extension

Extensions Cont'd 3-22-50

Sta 97+00

Sta.	+	H.I.	—	ELEV.	
TBM.	5.17	15.24		10.07	HUB ON 97+00W 18,658 B/L
115' (SIDE SHOT) N. To 24" Cul.			5.16 / 1.22 / 3.94	11.30?	FLOW LINE OF 24" CL. (FOR EL. ONLY)
⊙ T.P. N-110' To T.P. Top R.R. GR. For Set Up					

⊼ @ PT 110' N/OF STA — 97+00W 18658 B/L

Sta.	+	H.I.	—	ELEV.	
TBM	9.37	19.44		10.07	HUB ON 97+00W 18658 B/L
Side Shot			8.07	11.37 ok	F/L of cul Extension West end
N 2+28			2.6	16.8	
N 1+71			3.0	16.4	
N 1+30			3.5	15.9	
N 1+09			3.7	15.7	
N 0+97			9.4	10.0	
N 0+55			9.8	9.6	

Sta 98+00

⊼ @ Sta 98+00 on 18,658 B/L

Sta	+	H.I.	—	ELEV.	
TBM	5.57	15.64		10.07	HUB ON 97+00W 18,658 B/L
N. 2+46			5.9	9.7	
N. 2+04			5.9	9.7	
N. 1+89			4.2	11.4	
N 1+80			5.4	10.2	

LOCATION OF BRIT IN R.R. GR.

AZIMUTH	DIST.		—	ELEV.	
18° 45'	124'		1.6	14.0	West Top CUT IN DIKE
21° 35'	129'		6.4	9.2	West BOT.
27° 25'	134'		5.8	9.8	EAST BOT
31° 55'	135'		1.2	14.4	EAST Top

3-22-50

Sta 99+00

T @ Sta 99+00 on 18,658 B/L.

Sta	+	H.I.	−	Elev.	
T.B.M.	5.55	15.62		10.07	Sta 97+00 18,658
N 1+93			3.4	12.2	
N 1+73			5.9	9.7	

LOCATION OF HOUSE #1 (Fig. 8 GRAPH)

AZIMUTH	DIST				
4° 55'	219'		2.65	12.97	SE Corn. House
0° 0'	213'				SW Corn. House
358° 35'	236'				NW Corn House

Sta 100+00

T @ Sta 100+00 W on 18,658 B/L

HUB on 101+00

Sta.	+	H.I.	−	ELEV.
TBM	4.33	15.56		11.23
N 2+77			3,2	12.4
N. 2+32			2.9	12.7
N 1+93			2.6	13.0
N 1+90			4.8	10.8

3-22-50 (26)

Sta 101+00

T @ Sta 101+00 on 18,658 B/L

Sta	+	H.I.	−	ELEV.	
TBM	5.29	16.52		~~10.0~~ 11.23	Hub on 101+00
N 2+61			4.6	11.96	
N 2+31			4.3	12.2	
N 2+00			4.2	12.3	
N 1+86			3.8	12.7	
N 1+80			5.8	10.7	
N 1+66			6.1	10.4	

Sta 102+00

T @ Sta 102+00 on 18,658 B.L

Sta	+	H.I.	−	Elev	
TBM	5.91	16.5 ~~16.64~~		11.23	Hub on Sta 101+00
N 2+40			4.3	12.3	
N 2+16			3.9	12.7	
N 1+87			3.8	12.8	
N 1+74			3.4	13.2 ~~12.2~~	
N 1+60			5.0	11.6	
N 1+58			5.3	11.3 ~~10.8~~	

Sta 103+00

T @ Sta 103+00 on 18,658 BL					
Sta	+	HI	−	Elev	
TBM	5.50	16.73		11.23	Hub Sta 103+00
N. 2+54			4.1	12.6	
N 2+17			4.2	12.5	
N 1+81			3.9	12.8	
N 1+55			3.8	12.9	
N 1+41			4.9	11.8	
N. 1+38			5.4	11.3	

Sta 104+00

T @ Sta 104+00 on 18,658 BL					
Sta	+	HI	−	Elev	
TBM.	3.39	14.82		11.43	Hub Sta 104+00
N. 2+72			3.25 1.35 1.89	12.9	
N. 2+40			2.70 1.20 1.50	13.3	
N. 2+21			1.20	13.6	
N. 1+96			4.2	10.6	
N. 1+66			3.9	10.9	
N. 1+53			4.44	10.38	Curb.
N. 1+53			4.97	9.85	Gutter

3-22-50

(27)

Sta 105+00

T @ Sta 105+00 on 18,658 BL					
Sta	+	HI	−	Elev	
TBM	5.22	16.65		11.43	Hub Sta 105+00
N. 0+82			5.3	11.3	
N 1+06			4.8	11.8	
N 1+30			4.0	12.6	
N 1+47			4.1	12.5	
N 1+74			3.7	12.9	@ Wall of House

Location Of House # (Grand & Bond)

Sta	Azim	Rod	Elev
(177')			
1+34'	355° 45'	-3.8	12.8
(179')	01° 10	-3.6	
	06° 00'		

3-23-50

EXTENSION NORTH OF 106+00 ℄

STA	+	H.I.	-	ELEV	
T.B.M	6.89	18.32		11.43	STA-105+00 18,658 ℄ 2"x2" Hub
N. 1+28			6.0	12.3	
N. 1+76			6.0	12.3	
N. 2+20			5.4	12.9	

EXTENSION Sta 107+00

℄ @ Sta 107+00 on 18,658 B.L

Sta	+	HI	-	Elev	
TTBM	5.72	17.15		11.43	
N. 1+00			5.0	12.1	
N. 1+45			5.0	12.1	
N. 1+95			4.6	12.5	
T.B.M			4.54	12.61	STA-107+00 18,658 ℄

C BARRAGAN
A SUERRAY
H BROWN

3-23-50
CAAM
WARM
CLEAR

(28)

STA - 108+00 W

STA	+	H.I.	-	ELEV
0+00 = STA - 108+00W ON 18658 B/L.				
T.B.M.	4.64	17.25		12.61
0+00			5.2	12.0
N. 0+45			4.8	12.4
N. 0+95			5.0	12.2
N. 1+47			5.0	12.2
N. 1+95			5.1	12.1
N. 2+44			4.9	12.3
S 0+26			4.8	12.4
S 0+35			2.5	14.7
S 0+51			2.5	14.7
S 0+60			5.7	11.5
S 1+01			6.4	10.8
S 1+21			6.1	11.1
S 1+28			9.4	7.8
S. 2+24			11.2	6.0
S. 3+25			10.5	6.7
S. 4+17			10.1	7.1

Sta. 108+00

Sta	+	HI	-	Elev
		17.25		
S 5+15			9.9	7.3
S 5+68			10.2	7.0
S 5+70			7.0	10.2

Sta 109+00

Sta	+	HI	-	Elev
P.G. 109+00 on 18658 BL				
TBM				
S 4+25			12.3	
S 4+35			12.1	
S 4+00			11.2	
S 3+68			7.9	
S 3+70			6.8	
S 2+47			7.8	
S 2+10			8.2	
S 1+92			6.3	
S 1+45			6.5	

Sta 109+00 W

Sta	+	HI	-	Elev	
S. 0+87		17.91	6.1	11.8	
S 0+76			2.4	15.5	
S 0+61			2.7	15.2	
S 0+56			5.1		
S. 0+23			6.5		
S 0+7			6.8		
0+00	5.30	17.91	5.3	12.61	Hub 109+00
N 0+49			5.3	12.6	
N. 1+00			5.4	12.5	
N 1+47			5.1	12.8	
N 2+00			5.3	12.6	
N					

Sta. 110+00

BM @ PZ 30' N/Sta. 110+00W 18.65 B/L

Sta	+	HI	-	Elev	
TBM	5.73	18.34		12.61	Hub. 109+00
0+00			5.2	13.1	
N 0+40			5.2	13.1	
N 0+94			5.4	12.9	
N 1+40			5.5	12.8	
N 1+80			5.4	12.9	
S 0+19			5.4	12.9	
S 0+36			10.4	7.9	
S 0+45			11.0	7.3	
S 0+52			12.7	5.6	
S 0+72			12.6	5.7	
S 0+95			12.7	5.6	
S 1+26			12.4	5.9	
S 1+35			9.9	8.4	
S 1+45			10.6	8.3	
S 1+50			13.1	5.2	
S 3+18			13.2	5.1	

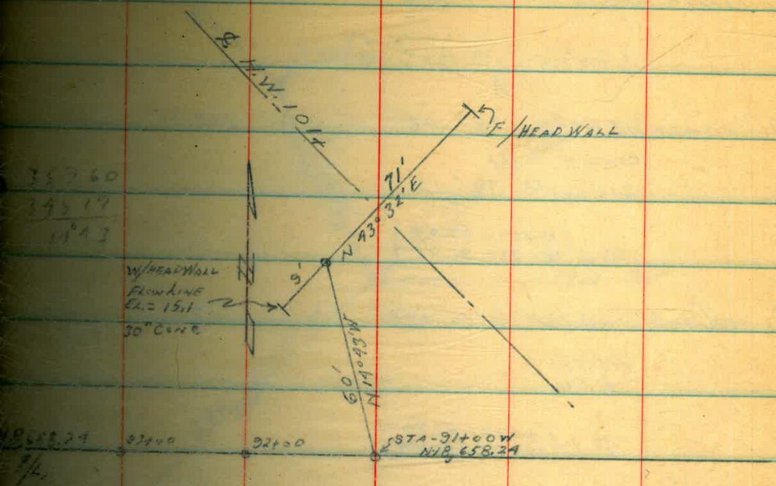
Sta 110+00

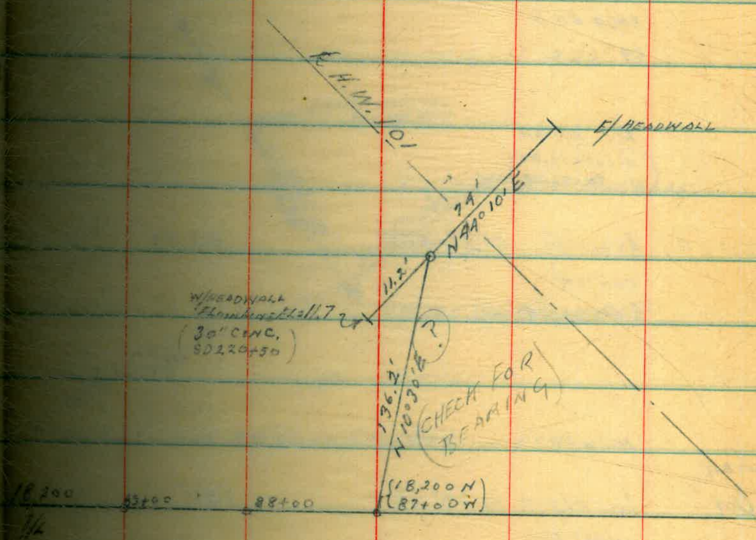
Sta	+	HI	-	Elev
S. 4+37		18.34	11.2	7.1
S. 4+65			8.5	9.8
E 5+62			8.6	9.8

Location & Flowline El. of 30" Cul

STA	+	H.I.	-	ELEV
T.B.M	3.86	21.01		17.15
F/L 30" Pipe			5.91	13.10
T.B.M	8.72	18.55		9.83
F/L 30" Cul			6.86	11.69

	AZIM.		DIST	ROD
PT. on ℄ Cul Top of Shoulder	345°	17'	60'	
⊼ @	ABOVE	POINT		
Along ℄ Cul				
E/END	43°	32'	71'	
W/END	223°	32'	9'	
PT on ℄ Cul # 220+50	10°	30'	136.15	
E/END	44°	10'	74'	
W/END	224°	10'	11.2	





LOCATION OF EXISTING CULVERTS H.W. 101

C. BARRAGAN
A. SHERRY
3-24-50

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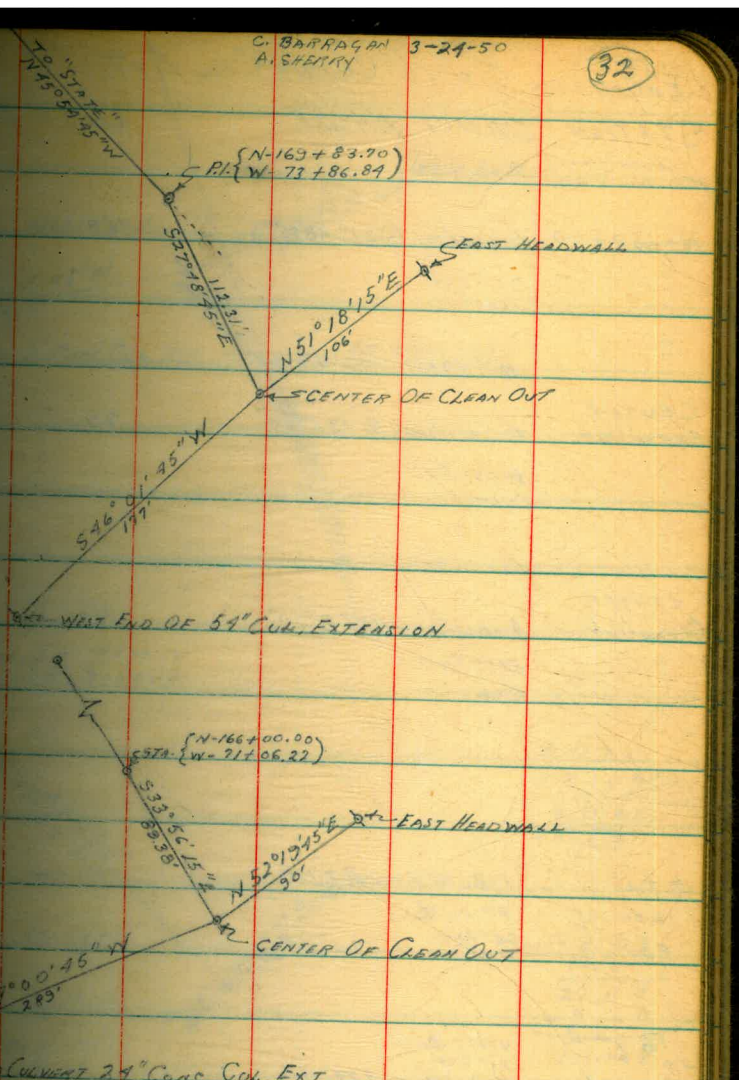
STATION	OBJECT	ANGLE	DIST	BEARING
	STATE			
O P.I.	DEE RT.	① 18° 06'	112.31'	
T	CENTER CLEAN OUT 54"	② 36° 12'		
C	P.I. (N-169+83.70 W-73+86.89)			
N.	② CENTER CLEAN OUT	ANGLE LEFT	① 106° 09' 30"	177'
N.	WEST END 54" CUL			
N.	P.I. (N-169+83.70 W-73+86.89)			
N.	② CENTER CLEAN OUT	ANGLE RIGHT	① 73° 07'	106'
N.	EAST END 54" CUL			
S	P.I. SOUTH (N-165+55.90 W-70+93.97)			
S			2°14'30"	
S	N-166+00	ANGLE RT.	① 2°14'30"	89.38
S	CENTER CLEAN OUT (24" CONC)			
S				
S	N-166+00			
S	CENTER CLEAN OUT	ANGLE LEFT	① 79° 03'	289'
S	WEST END CUL 24" CONC			
S	N-166+00			
S	CENTER	ANGLE RIGHT	① 86° 16'	90'
	EAST END CUL. 24" CONC			



LOCATION OF 18" CORR. CUL EXT.

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A. SHERRY
3-24-50

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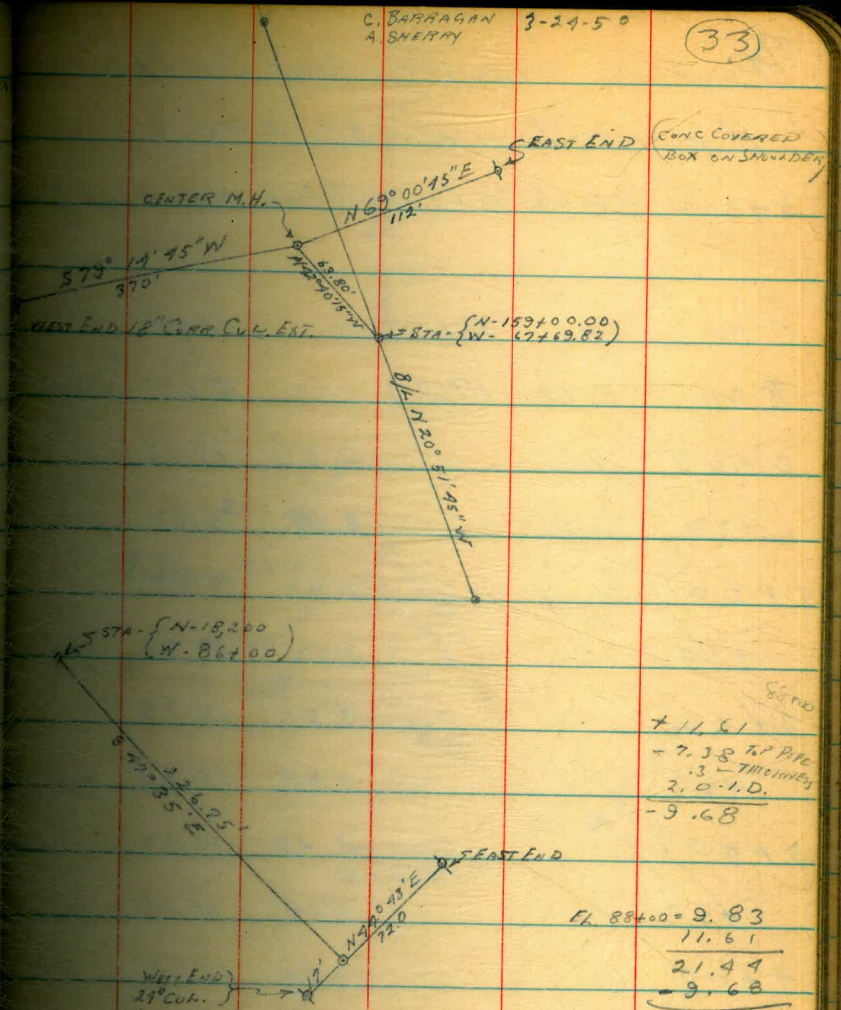
STATION	OBJECT	ANGLE	DIST	BEARI
	N-161+00	21.48		
N-159+00	ANGLE LEFT @	21° 48'30"	63.80'	
	CENTER CLEAN OUT			
	N-159+00			
CENTER CLEAN OUT	ANGLE RIGHT @	121°55'	370'	
	WEST END CUL.			
	N-159+00			
CENTER CLEAN OUT	ANGLE LEFT @	68°19'	112'	
	EAST END CUL.			

STA	OBJECT	AZIM	DIST	BEARI
18,200 ℄ 86+00	PT. ON ℄ 24" CUL. H.W.-101	132°25	226.75'	
PT. ON ℄ 24" CUL. H.W.-101	WEST END 24" CUL H.W.-101	224°41'	16.8'	
PT. ON ℄ 24" CUL H.W.-101	EAST END 24" CUL H.W.-101	44°43'	72.0'	



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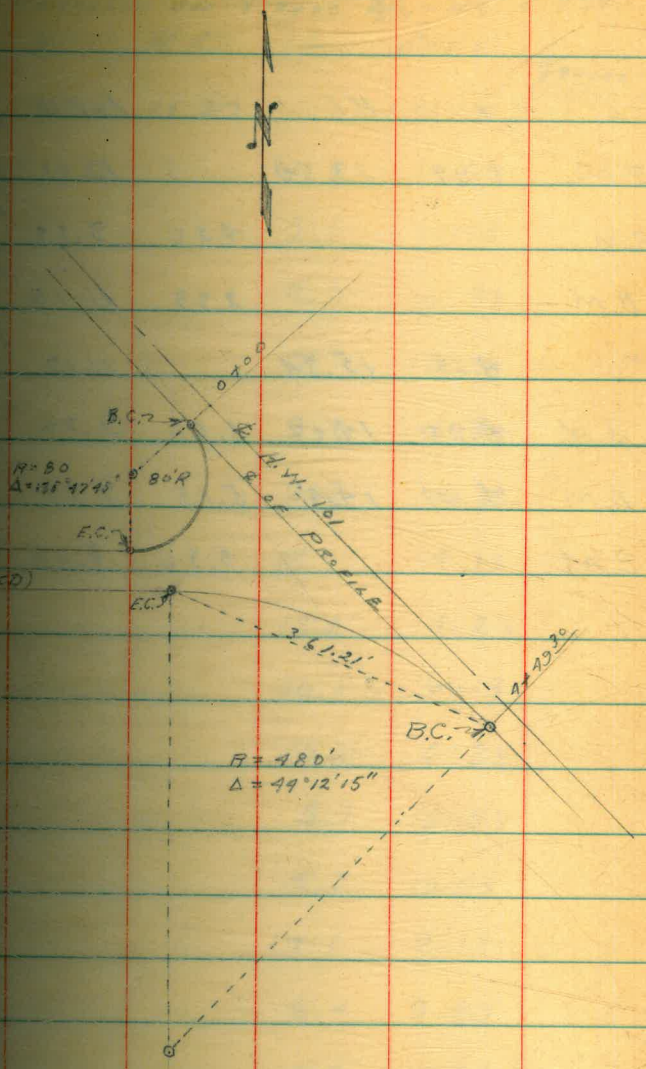
A. SHERRY
H. BROWN

4-4-50

(3A)

PROFILE ALONG WEST EDGE OF PAVING
H.W. 101 (BETWEEN B.C. & B.C.)
0+00 = B.C. 80'R CURVE (SEE NEXT PAGE)

	STA	+	H.I.	−	ELEV
	B.M.	5.70	17.79		12.09
N.	0+00			2.66	15.13
N.	+50			2.77	15.02
N.	1+00			2.90	14.89
N.	+50			3.02	14.77
S.	2+00			3.21	14.58
S.	+50			3.38	14.41
S.	3+00			3.49	14.30
S.	+50			3.65	14.14
S.	4+00			3.74	14.05
S.	4+49.30			3.86	13.93



LEVELS FOR X-SECTIONS - ROSE CREEK -

STA	+	H.I.	−	ELEV	
T.B.M.	0.97	13.58		12.61	STA-107+00 1.8658'Rt
T.B.M			4.26	9.32	NAIL 20D TOP OLD PILE @ WATER ROSE CREEK
T.B.M			2.39	11.19	TOP HUB-184+00 ON W-112+00 Rt.
"	4.15	15.34		11.19	(184+00-N 112+00-W)
T.B.M.	4.90	14.62	5.62	9.72	(180+00 N 112+00 W)
T.B.M	4.67	14.14	5.15	9.47	(172+00 112+00)
T.B.M			5.36	8.78	(172+00 112+00)

4-4-50

FX (35)

STA - 184+00 - N

0+00 = STA-184+00 ON 112+00 B/L - SEC. E. & W.

STA	+	H.I.	−	ELEV	
T.B.M	5.04	16.23		11.19	(184+00-N 112+00-W)
0+00			5.2	11.03	
0+61			5.1	11.13	
1+10			5.3	10.93	
1+54			5.9	10.33	
1+66			9.7	6.53	
1+87			9.9	6.33	
1+90			12.1	4.13	
2+02			12.0	4.23	
2+06			10.1	6.13	
2+51			10.0	6.23	
2+58			5.7	10.53	
2+86			5.7	10.53	
3+00			7.1	9.13	
3+20			6.4	9.83	
3+27			5.3	10.93	
3+43			5.1	11.13	
3+51			9.0	7.23	

Sta	PK +	Hi	−	Elev
3 + 97		16.23	10.0	5.23
4 + 25			8.7	7.53
4 + 65			7.4	8.83
5 + 10			7.5	8.73

Sta 183 + 00 N 4-4-50 PX (36)

Sta	+	Hi	−	Elev	184 + 00 N } 112 + 00 W
TBM	4.51	15.70		11.19	
5 + 06			7.6	8.1	
4 + 70			7.6	8.1	
4 + 32			7.8	7.9	
3 + 90			9.0	6.7	
3 + 57			8.7	7.0	
3 + 45			4.3	11.4	
3 + 15			4.8	10.9	
2 + 86			5.2	10.5	
2 + 80			8.7	7.0	
2 + 73			11.0	4.7	
2 + 67			11.0	4.7	
2 + 66			9.6	6.1	
2 + 30			9.3	6.4	
2 + 26			12.0	3.7	
2 + 11			11.4	4.3	
2 + 06			10.2	5.5	
1 + 94			9.5	6.2	
1 + 82			5.7	10.0	

Sta	PX +	Hi	−	Elev
1+42		15.70	5.9	9.8
0+80			5.3	10.4
0+43			5.1	10.6
0+00			5.0	10.9

Sta 182+00 N 1-9-50 (37)

PX 184+00 N, 112+00 W

Hub Sta 180+00

Sta	+	Hi	+	Elev
TBM	4.15	15.34		11.19
TBM			5.62	9.72
0+00			5.2	10.1
0+57			5.0	10.3
1+04			4.8	10.5
1+56			5.0	10.3
2+17			5.5	9.8
2+18			7.6	7.7
2+21			10.3	5.0
2+40			12.2	3.2
2+50			9.4	5.9
3+06			9.9	5.4
3+15			5.2	10.1
3+62			4.7	10.6
3+68			9.1	6.2
3+90			8.8	6.5
4+30			7.1	8.2
4+50			6.2	9.1
4+62			7.1	8.2
5+50			5.6	9.7

PX

Sta. 181+00

Sta	+	H.I.	−	Elev	
T.B.M.	4.94	14.66		9.72	Hub Sta. 180+00
5+73			4.6	10.1	
5+55			8.2	6.5	
5+02			8.2	6.5	
4+45			7.5	7.2	
4+02			7.8	6.9	
3+80			8.0	6.7	
3+71			4.3	10.4	
3+30			4.1	10.6	
3+22			8.8	5.9	
2+90			9.2	5.5	
2+85			11.2	3.5	
2+73			11.3	3.4	
2+69			8.9	5.8	
2+40			9.1	5.6	
2+30			5.0	9.7	
1+85			4.5	10.2	
1+32			4.0	10.7	
0+81			4.3	10.4	
0+00			4.9	9.8	

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PX

(38)

Sta 180+00

Sta	+	Hi	−	Elev	
TBM	5.08	14.80		9.72	Hub Sta 180+00
0+00			5.1	9.7	
0+72			4.6	10.2	
1+40			4.5	10.3	
1+95			4.2	10.6	
2+16			4.3	10.5	
2+46			6.1	8.7	
2+53			9.4	5.4	
3+04			9.6	5.2	
3+16			11.0	3.8	
3+35			9.3	5.5	
3+40			11.4	3.4	
3+46			7.7	7.1	
3+50			5.2	9.6	
3+65			5.8	9.0	
3+70			4.3	10.5	
4+30			4.7	10.1	
4+85			4.5	10.3	
5+40			4.8	10.0	

PK

Sta 179 + 00

Sta	+	Hi	−	Elev.	
TBM	4.83	14.55		9.72	Hub 180+00
5+35			4.6	9.0	
4+80			5.0	9.6	
4+40			4.5	10.1	
4+35			6.1	8.5	
4+20			6.3	8.3	
4+00			4.8	9.8	
3+70			4.4	10.2	
3+63			9.9	4.7	
3+50			9.9	4.7	
3+42			9.1	5.5	
3+15			8.4	6.2	
3+07			10.0	4.6	
2+84			10.5	4.1	
2+65			6.0	8.6	
2+18			1.8	9.8	
1+54			1.6	10.0	
0+83			1.5	10.1	
0+00			5.1	9.5	

4-4-50

(39)

PK

Sta 178 + 00

Sta	+	Hi	−	Elev	
5+ TBM	4.90	14.62		9.72	Hub 180+00
SET TBM			5.15	9.47	Hub 176+00 N
SET TBM	4.67	14.14		9.47	Hub 176+00N
SET TBM			5.36	8.78	Hub 172+00N
TBM	5.12	14.59		9.47	Hub 176+00 N
0+00			5.1	9.49	
0+75			4.8	9.79	
1+40			4.6	9.99	
1+85			6.5	8.09	
2+39			6.7	7.89	
2+90			7.1	7.49	
3+25			9.1	5.49	
3+31			11.0	3.59	
3+85			10.7	3.89	
3+87			8.4	6.19	
3+98			4.6	9.99	
4+65			5.0	9.59	
5+00			5.2	9.39	
5+30			6.7	7.89	
5+95			7.7	6.89	

Sta 177+00 N

0+00 = 112+00 N B/L = SECTION E & W

Sta.	+	H.I.	−	Elev
TBM	5.02	14.59		9.47 (N 176+00 W 112+00 HUB)
6+04			5.6	8.9
5+15			5.1	9.4
4+58			4.6	9.9
4+20			4.2	10.3
4+10			8.5	6.0
4+05			11.1	3.4
3+85			11.1	3.4
3+52			9.3	5.2
3+03			7.0	7.5
2+90			6.3	8.2
2+60			7.5	7.0
2+11			5.5	9.0
1+65			6.4	8.1
1+32			4.2	10.3
0+73			7.7	6.8
0+00			5.0	9.5

STA - 176+00 N 4-45 (50)

0+00 = 112+00 B/L SEC. E & W

STA	+	H.I.	−	ELEV
TBM	5.02	14.59		9.47 (176+00 N 112+00 W HUB)
0+00			5.0	9.5
0+47			4.7	9.8
0+94			5.0	9.5
1+31			5.2	9.3
1+39			6.4	8.1
1+96			6.3	8.2
2+50			7.0	7.5
3+00			7.3	7.2
3+35			6.7	7.8
3+65			8.5	6.0
3+78			10.0	4.5
4+12			10.8	3.7
4+40			7.4	7.1
4+51			4.8	9.7
5+26			4.5	10.0
5+95			5.4	9.1
6+60			5.6	8.9

STA - 175+00N

0+00 = 112+00W B/L = Sec. L. SW

STA	+	H.I.	-	ELEV
T.B.M	5.00	14.47 +3.5		9.47
0+00			5.1	9.4 ~~8.4~~
E-0+51			5.5	9.0 ~~8.0~~
E-1+00			5.1	9.4 ~~8.4~~
E 1+46			6.0	8.5 ~~7.5~~
E-1+90			6.1	8.4 ~~7.4~~
E 2+25			6.6	7.9 ~~6.9~~
E 2+40			7.7	6.8 ~~5.8~~
E 2+60			5.8	8.7 ~~7.7~~
E 3+00			5.3	9.2 ~~8.2~~
E 3+50			5.9	8.6 ~~7.6~~
E 3+77			7.6	6.9 ~~5.9~~
E 3+80			9.6	4.9 ~~3.9~~
E 4+10			10.2	4.3 ~~3.3~~
E 4+66			9.0	5.5 ~~4.5~~
E 4+82			5.8	8.7 ~~7.7~~
E 5+55			5.6	8.9 ~~7.9~~
E 6+30			5.3	9.2 ~~8.2~~

STA - 174+00

PX

(51)

STA	+	H.I.	-	ELEV
T.B.M	4.54	14.01		9.47
0+00			4.9	9.1
E 0+51			4.8	9.2
E 1+00			4.6	9.4
E 1+53			4.7	9.3
E 1+80			4.7	9.3
E 2+10			7.3	6.7
E 2+28			6.9	8.1
E 2+40			5.7	8.3
E 2+87			5.2	8.8
E 3+45			5.6	8.4
E 3+96			6.2	7.8
E 4+03			9.0	5.0
E 4+11			10.3	3.7
E 4+30			9.8	4.2
E 4+68			8.4	5.6
4+91			9.6	4.4
5+00			7.8	6.2
5+11			7.2	6.8
5+22			4.7	9.3
E 6+10			5.5	8.5
7+80			6.1	7.9

PX

STA - 173+00 - N

0+00 = 112+00 W

STA	+	H.I.	−	ELEV
T.B.M	5.32	14.10		8.78
0+00			5.2	8.9
E 0+50			5.1	9.0
E 1+04			5.2	8.9
E 1+60			5.5	8.6
E 1+79			7.1	7.0
E 1+91			7.3	6.8
E 2+17			5.0	9.1
E 2+67			5.4	8.7
E 3+21			6.1	8.0
E 3+58			5.0	9.1
E 4+23			6.1	8.0
E 4+32			9.1	5.0
E 4+60			10.1	4.0
E 5+20			9.6	4.5
E 5+23			7.6	6.5
E ~~6+40~~ 5+45			7.8	6.3
E 5+55			5.4	8.7
E 6+40			6.1	8.0
7+00			6.1	8.0

STA 172+00 N

0+00 = 112+00 W

SEE PAGE 61

PX

(52)

STA	+	H.I.	−	ELEV
T.B.M	5.05	13.83		8.78
0+00			5.2	8.6
0+51			5.1	8.7
1+10			4.3	9.5
1+22			5.6	8.2
1+36			6.0	7.8
1+48			7.2	6.6
2+01			4.7	9.1
2+58			5.0	8.8
3+03			5.3	8.5
3+69			5.4	8.4
4+32			5.5	8.3
4+45			8.7	5.1
4+72			9.6	4.2
5+25			9.8	4.0
6+35			7.6	6.2
5+58			7.0	6.8
5+65			5.6	8.2
6+16			6.1	7.7
6+70			6.4	7.4
6+92			3.7	10.1

172+00 N
112+00 W

PX

STA 171+00 N
0+00 = 112+00 W

STA	+	H.I.	−	ELEV	
T.B.M	5.00	13.78		8.78	172+00 N 112+00 W
0+00			5.1	8.7	
E 0+52			4.9	8.9	
E 0+82			4.4	9.4	
E 0+87			5.4	8.4	
E 1+44			5.6	8.2	
E 1+96			6.0	7.8	
E 2+50			5.7	8.1	
E 3+00			5.6	8.2	
E 3+60			6.0	7.8	
E 4+06			5.6	8.2	
E 4+35			6.1	7.7	
E 4+46			7.9	5.9	
E 4+83			8.8	5.0	
E 5+54			9.1	4.7	
E 5+57			7.4	6.4	
E 5+83			6.4	7.4	
E 6+30			7.4	6.4	
E 6+80			6.9	6.9	
E 7+15			3.8	10.0	

STA 170+00 N 4+85-50 (53)
0+00 = PT 400' EAST OF 112+00 W B/L

PX

STA	+	H.I.	−	ELEV	
T.B.M	4.20	13.18		8.98	172+00 N 112+00 W HUB
SET T.B.M			5.57	7.91 ~~8.91~~	168+00 N 112+00 W HUB
0+00 = T.B.M	4.51	12.42		7.91 ~~8.91~~	168+00 N 112+00 W
W 400'			4.0	8.4	
W 3+15			3.9	8.5	
W 2+65			4.3	8.1	
W 2+35			4.1	8.3	
W 1+80			4.2	8.2	
W 1+30			4.9	7.5	
W 0+79			4.2	8.2	
W 0+20			4.5	7.9	
0+00			5.1	7.3	
E 0+30			5.9	7.0	
E 0+65			5.2	7.2	
E 0+70			6.9	5.5	
E 1+23			7.3	5.1	
E 1+91			7.1	5.3	
E 2+00			5.4	7.0	
E 2+51			6.1	6.3	
E 2+96			5.6	6.8	
E 3+32			2.1	10.3	

PX

169+00

0+00 = 108+00 W

STA	+	H.I.	−	ELEV	
T.B.M	4.42	12.33		7.91	{168+00 / 112+00
W-4+00			4.2	8.1	
W-3+50			4.0	8.3	
W-2+95			4.3	8.0	
W-2+50			4.6	7.7	
W-1+98			4.5	7.8	
W-1+48			4.8	7.5	
W-1+02			5.9	6.4	
W-0+62			5.4	6.9	
W-0+60			7.2	5.1	
W-0+51			8.2	4.1	
W-0+49			7.1	5.2	
W-0+40			5.4	6.9	
0+00			4.9	7.4	
E-0+28			5.1	7.2	
E-0+67			6.2	6.1	
E-1+00			6.2	6.1	
E-1+01			5.5	6.8	
E-1+06			7.3	5.0	

169+00 N 4-5-50 (54) PX

STA	+	H.I.	−	ELEV
		H.I. 12.33		
E-1+57			7.3	5.0
E-2+18			7.0	5.3
E-2+22			5.6	6.7
E-2+91			6.1	6.2
E-3+17			5.9	6.4
E-3+46			2.5	9.8

Tr at Sta 127+00

AZIM.	Dist	Rod	Elev
4.92			

PX

1688+00 N

0+00 = 1088+00 W

STA	+	H.I.	−	ELEV
		11.38		7.91 (1688+00 N 1127+00 W)
T.B.M.	3.47	~~12.38~~		~~8.91~~
W-4+00			3.5	7.9 ~~8.9~~
W-3+47			3.6	7.8 ~~8.8~~
W-2+93			3.9	7.5 ~~8.5~~
W-2+51			5.1	6.3 ~~7.3~~
W-2+35			3.6	7.8 ~~8.8~~
W-2+02			3.6	7.8 ~~8.8~~
W-1+54			3.3	8.1 ~~9.1~~
W-1+25			4.3	7.1 ~~8.1~~
W-1+22			5.6	5.8 ~~6.8~~
W-1+20			5.8	5.6 ~~6.6~~
W-1+16			4.7	6.7 ~~7.7~~
W-0+96			4.6	6.8 ~~7.8~~
W-0+90			4.4	7.0 ~~8.0~~
W-0+67			5.5	5.9 ~~6.9~~
W-0+63			4.5	6.9 ~~7.9~~
W-0+47			4.6	6.8 ~~7.8~~
W-0+12			5.9	5.5 ~~6.5~~
W-0+36			5.3	~~7.1~~ 6.1
0+00			5.1	~~7.3~~ 6.3

1688+00 N

0+00 = 1088+00 W

PX

4-5-50

(55)

Sta.	+	H.I.	−	Elev	
		~~12.38~~			
0+57		11.38	5.1	6.3 ~~7.3~~	
1+09			5.1	6.3 ~~7.3~~	
1+10			4.5	6.9 ~~7.9~~	
1+17			5.6	5.8 ~~6.8~~	
1+32			5.9	5.5 ~~6.5~~	
1+37			7.4	4.0 ~~5.0~~	
1+42			7.7	3.7 ~~4.7~~	
1+46			6.1	5.3 ~~6.3~~	
1+90			5.8	5.6 ~~6.6~~	
2+26			6.3	5.1 ~~6.1~~	
2+30			7.0	4.4 ~~5.4~~	
2+37			7.2	4.2 ~~5.2~~	
2+40			6.2	5.2 ~~6.2~~	
2+60			4.9	6.5 ~~7.5~~	
2+98			5.8	5.6 ~~6.6~~	
3+32			5.8	5.6 ~~6.6~~	
3+66			1.7	9.7 ~~10.7~~	
TP		11.38 ~~7.91~~	3.07	~~4.84~~ ~~3.84~~	4"x4" 20' E/of 1054+00 W Section Line ℄ 300' E/of
				8.31	(1088+00 W 1688+00 N)
			EL=	8.35	
				.04	

PX

~~166+00~~
167+00

0+00 = 108+00W -

STA	+	H.I.	-	ELEV
		10.89 ~~9.89~~		7.91
W/ 1+00 ~~0+00~~	2.98		3.5	7.4 ~~6.4~~
W 3+48			3.4	7.5 ~~6.5~~
W - 2+95			3.7	7.2 ~~6.2~~
W - 2+47			3.4	7.5 ~~6.5~~
W - 2+30			2.8	8.1 ~~7.1~~
W - 1+86			3.6	7.3 ~~6.3~~
W - 1+82			4.8	6.1 ~~5.1~~
W - 1+68			5.3	5.6 ~~4.6~~
W - 1+66			4.3	6.6 ~~5.6~~
W - 1+16			5.1	5.8 ~~4.8~~
W - 0+63			5.0	5.9 ~~4.9~~
0+00			5.0	5.9 ~~4.9~~
E - 0+86			4.8	6.1 ~~5.1~~
E - 1+67			4.8	6.1 ~~5.1~~
E - 1+64			3.9	7.0 ~~6.0~~
E - 1+75			6.6	4.3 ~~3.3~~
E - 1+79			7.4	3.5 ~~2.5~~

~~166+00~~
167+00

0+00 = 108+00 W

HI ~~9.89~~ 10.89

1+81			6.2	4.7 ~~3.7~~	12.45
2+15			5.8	5.1 ~~4.1~~	
2+50			5.9	5.0 ~~4.0~~	
2+60			6.8	4.7 ~~3.7~~	
2+66			5.5	5.4 ~~4.4~~	
2+78			4.9	6.0 ~~5.0~~	
3+14			5.5	5.4 ~~4.4~~	
3+60			4.9	6.0 ~~5.0~~	
3+81			1.0	9.9 ~~8.9~~	
T.B.M.	1.60	12.51		7.91	1"x1" PVS
T.P.	3.62	11.95	4.68	7.83	
			4.14	7.37 ~~7.31~~	104+00 DE-ANZA B/L
			3.73	7.82 ~~7.72~~	105+00 DE-ANZA B/L

~~4-7.37~~
~~3-8.15~~

(56)

PX

PX

Sta 185+00 N

0+00 = 112+00 W - (B/L)

4-14-50

STA	+	H.I.	−	ELEV	
T.B.M	5.87	17.06		11.19	(184+00 N 112+00 W Top [illegible] 112+00 W)
0+00			5.1	11.9	
E 0+45			5.2	11.8	
E 0+85			5.2	11.8	
E 0+90			6.7	10.3	
E 1+12			7.9	9.1	
E 1+25			6.8	10.2	
E 1+40			11.4	5.6	
E 1+62			10.3	6.7	
E 1+64			12.2	4.8	
E 1+70			12.2	4.8	
E 1+72			11.1	5.9	
E 1+84			11.2	5.8	
E 1+87			13.4	3.6	
E 2+14			+3.0 15.4 ~~12.4~~	1.6	
E 2+16			10.8	6.2	
E 2+29			8.9	8.1	
E 2+33			5.7	11.3	

STA-185+00-N

(20' 5.90 E (156+00 N 106+00 W))

PX

Sta	+	H.I.	−	Elev
2+38		17.06	5.3	11.7
2+42			6.1	10.9
2+96			5.7	11.3
3+12			5.9	11.1
3+81			5.9	11.1
3+57			9.3	7.7
4+61			8.8	8.2
5+40			8.2	8.8
WEST (IF NEEDED) W 0+50			5.7	12.3
1+00			5.3	12.7
1+50			5.0	13.0

PX

Sta 186+00 N

0+00 = 112+00 W - B/L

4-14-50

Sta	+	H.I.	−	Elev
TBM	6.81	18.00		11.19
W1+94			4.3	13.7
W1+44			4.6	13.4
W0+80			5.1	12.9
0+00			5.2	12.8
E 0+45			6.0	12.0
E 0+82			6.2	11.8
E 0+95			10.3	7.7
E 1+28			10.8	7.2
E 1+57			11.8	6.2
E 1+59			13.6	4.4
E 1+62			13.5	4.5
E 1+63			12.7	5.3
E 1+90			11.5	6.5
E 2+04			12.7	5.3
E 2+07			10.0	8.0
E 2+26			5.0	13.0
E 2+40			7.6	10.4
E 2+80			7.0	11.0

186+00 N

4-14-50

PX

(58)

Sta	+	H.I.	−	Elev
E 3+57		18.00	5.7	11.3
E 3+80			5.6	11.4
E 4+14			3.7	14.3
E 4+65			4.2	13.8
E 5+10			6.3	11.7
E 5+38			7.2	10.8
E 5+46			6.2	11.8
			7.4	10.5
			11.53	16.53
			7.37	7.82
			7.26	3.81

Sta 187+00 N

0+00 = 112+00 W B/L

Sta	+	H.I.	−	Elev
T.B.M	7.42	18.61		11.19
W. 1+50			4.6	14.0
W. 1+04			4.8	13.8
W 0+54			5.1	13.5
0+00			5.2	13.4
E 0+27			5.8	12.8
E 0+34			5.7	12.9
E 0+36			7.9	10.7
E 0+48			10.9	7.7
E. 0+78			11.2	7.4
E 1+22			11.4	7.2
E 1+31			13.0	5.6
E 1+42			12.7	5.9
E 1+45			11.8	6.8
E 1+65			12.6	6.0
E 1+70			8.8	9.8
E 1+76			8.2	10.4
E 1+78			6.0	12.6

4-17-50 (59)

Sta 187+00

Sta	+	H.I.	−	Elev
187	+	18.61	5.0	
2+40			5.7	12.9
2+95			6.6	12.0
3+50			6.1	12.5
4+00			6.0	12.6
4+60			6.3	12.3

PX NOTE - SECTION THRU. OLD R.R. EMBANKMENT.

Sta 185+46-N

0+00 = 112+00 W - B/L

Sta	+	H.I.	-	Elev.
T.B. A.	6.33	17.52		11.19
W 1+20			4.4	13.1
W 1+25			4.5	13.0
W 0+72			4.6	12.9
0+00			5.1	12.4
E 0+48			5.4	12.1
E 0+83			6.7	10.8
E 1+16			9.7	7.8
E 1+66			11.1	6.4
E 1+96			10.7	6.8
E 2+04			11.4	6.1
E 2+05			12.3	5.2
E 2+13			12.7	5.8
E 2+20			8.6	8.9
E 2+24			7.0	10.5
E 2+36			6.4	11.1
E 2+40			5.2	12.3
E 2+43			1.8	15.7 ~~11.7~~

Hub 112+00 W 184+00

Sta 185+46 4-14-50 (60)

PX

Sta	+	H.I.	-	Elev.
2+20		17.52	1.5	16.0
2+00			5.3	12.2
1+58			6.4	11.1
1+15			6.9	10.6

PX

N- 172+00 (EXT. - EAST)

0+00 = 104+00W - B/L

STA	+	H.I.	-	ELEV
T.B.M	6.40	14.76		8.36
E- 0+50			6.2	8.6
0+00			6.1	8.7
W- 0+50			6.8	8.0
W- ~~1+00~~ 0+72			6.8	8.0
W- 0+91			5.9	8.9
W- 0+97			4.6	10.2

STA - 171+00 -N (EXTENSION EAST)

0+00 = W-104+00 B/L

STA	+	H.I.	-	ELEV
W- 0+78		14.76	4.8	10.0
W- 0+67			6.0	8.8
W- 0+50			6.1	8.7
0+00			6.4	8.4
E- 0+50			5.9	8.9

PX

STA - 170+00 -N (EXT - EAST)

0+00 = W-104+00 B/L

STA	+	H.I.	-	ELEV
E- 1+00		14.76	6.1	8.7
E- 0+50			6.0	8.8
0+00			6.1	8.7
W- 1+25			6.3	8.5
W- 2+50			5.8	9.0
W- 3+60			4.6	10.2
W- 4+50			5.4	9.4

STA - 169+00 -N (EXT. - EAST)

0+00 = W-104+00 B/L

PX

STA	+	H.I.	-	ELEV
W- 0+91		14.76	4.7	10.1
W- 2+25			5.8	9.0
W- 3+50			6.2	8.6
W- 4+50			6.3	8.5
W- 5+50			~~6.3~~ 6.1	8.7
W- 6+00			6.3	8.5

PX

N- 168+00 (SEE PAGE 54) EXT. EAST

0+00 = W-104+00 B/L

STA	+	H.I.	-	ELEV
E-1+50		14.8/6	6.5	8.3
E-1+00			6.2	8.6
E-0+50			6.0	8.8
0+00			5.9	8.9
W-0+12			6.0	8.8
W-0+22			4.7	10.1

PX

STA- N-167+00 (EXT. EAST)

0+00 = W-104+00 B/L

STA	+	H.I.	-	ELEV
0+00		14.8/6	4.7	10.1
E-0+17			5.7	9.1
E-0+65			6.1	8.7
E-1+20			6.3	8.5
E-1+50			6.1	8.7

4-18-50

(62)

N-166+00 (SEE PAGE 55) EXT. EAST

PX

+00 = W-104+00 B/L

STA	+	H.I.	-	ELE
0+00		14.8/6	6.3	8.5
E-0+10.5			5.2	9.6
E-0+32			5.3	9.5
E-0+47			5.9	8.9
E-1+00			6.1	8.7
E-1+50			6.0	8.8

(PAGE 55)

STA- 165+00 N- (EXT. EAST)

+00 = W-104+00 B/L

PX

STA	+	H.I.	-8.3	ELEV
0+00		14.8/6	8.3	6.5
E-0+18			8.1	6.7
E-0+37			5.3	9.5
E-0+92			4.7	10.1
E-1+50			5.5	9.3
E-0+66			6.0	8.8
E-1+00			5.8	9.0
1+50			5.6	9.2
2+00			5.8	9.0

PX

STA - 164+00 - N (EXT. EAST)

0+00 = 104+00-W B/L.

STA	+	H.I.	−	ELEV
E-0+20		14.8/76	9.1	5.7
E-0+41			5.3	9.5
E-0+50			5.2	9.6
E-0+61			5.2	9.6
E-1+00			5.4	9.4
E-1+50			5.3	9.5
E-2+00			3.2	9.6

PX

STA - 163+00-N (EXT. EAST)

0+00 = W-104+00 B/L

STA	+	H.I.	−	ELEV
E-0+36		14.8/76	8.9	5.9
E-0+50			6.8	8.0
E-0+62			5.1	9.7
E-0+74			4.9	9.9
E-1+00			5.6	9.2
E-1+50			5.1	9.7
E-2+00			3.0	9.8

4-18-50 (63)

STA - 162+00-N (EXT. EAST)

0+00 = W-104+00 B/L.

PX

STA	+	H.I.	−	ELEV	
		14.8/76	10.0	4.8	6.41
0+79			5.3	9.5	3.79 / 10.20
1+00			7.8	10.0	3.98 / 6.72 / 9.91
1+50			4.9	9.9	11.63
2+00			5.0	9.8	
EE			4.55	10.21	

SHEET LEVELS BACK TO GROUND ST.

T.P	3.73	9.63		5.90	2"x2"x20" E/ (155+00N 106+00W)
TP	3.79	10.20	3.22	6.41	20' E/ STA 164+00N 106+00W
T.P			3.87	6.33	2"x4"x20" E. (162+00N 106+00W)
T.P	4.91	11.63	3.48	6.72	T.P TEMP.
T.P			3.84	7.79	105+00 (OLD) DE-ANGLE B/L
T.P			4.26	7.37	(OLD) 104+00 DE-ANGLE B/L

WILL CHECK 98 & 97 FOR H.I.

STA - 98+00 W/

0+00 =	152+00 N	: SEC - N/S		
STA	+	H.I.	-	ELEV
T.B.M.	5.22			
T.P.		9.29	+4.39	4.90
T.P.			+3.39	5.90
T.P.	7.69	14.36	2.62	6.67
"	4.37	13.78	4.95	9.41
S-0+96			10.9	2.9
S-0+54			10.2	3.6
S-0+04			6.3	7.5
0+00	4.37		4.5	9.3
N 0+05			4.2	9.6
N 0+47			4.3	9.5
N 1+00			4.7	9.1

PX

Sta 97+00

PX

(64)

Sta	+	HI	-	Elev	
		14.16			1x1 Hub N-152+00 Sta 98+00
73.11	4.75	~~14.76~~		9.41	
1+32		IA	11.6	2.6	
0+96			10.5	3.7	
0+50			7.5	6.7	
0+46			6.9	7.3	
0+45			6.6	7.6	
0+39			4.6	9.6	
0+00			4.8	9.4	
0+51			5.1	9.1	
1+03			5.5	8.7	

STA 153+00 - N

0+00 = 104+00 W & 153+00 - N SEC - E/S/W

STA	+	H.I.	-	ELEV
T.P.	3.52	9.42		5.90
W-2+00			6.0	3.4
W-1+55			5.3	4.1
W-1+15			5.3	4.1
W-0+65			5.1	4.3
0+00			5.2	4.2
E-0+52			5.2	4.2
E-1+20			5.4	4.0
E 1+35			6.4	3.0
E 1+42			7.4	2.0
E-1+43			8.2	1.2
E 2+00			8.2	1.2
E 2+01			7.0	2.4
E-2+56			6.0	3.4
E-3+20			5.5	3.9
E-3+62			4.7	4.7
E-4+13			2.5	6.9
E-4+23			0.0	9.4
E-4+93			0.3	9.1
			0.6	8.8

July 11, 1950

T. Stamper
C. Barragan
A. Sherry
H. Brown
B. Carver

CROSS SECTIONS OF SCHOOL PROPERTY W'LY. FROM ROSE-CREEK DeANZA PROJ N° 3.3

PX

Sta	+	H.I.	-	Elev.
B.M.	7.36	16.68		9.32
PX	Sta 185+00 N.			
0+00 = W 112+00				
0			5.0	11.7
E 70			5.0	11.7
E 95			5.9	10.8
E 103			8.0	8.7
E 141			6.3	10.4
E 150			9.5	7.2
E 170			10.0	6.7
E 187			11.9	4.8
E 211			11.9	4.8
E 196			13.4	3.3
E 216			10.0	6.7
E 230			10.5	6.2
E 238			8.6	8.1
E 243			5.4	11.3
E 296			5.5	11.2
E 338			4.9	11.8

See Pg. 35

Fe Pile 20d Nail @ W. End ROSE CREEK

Sta 185+00 W

Sta	+	H.I.	-	Elev
		16.68		
53			4.5	12.2
103			4.2	12.5
155			4.0	12.7
205			3.6	13.1
TP			6.10	10.58

2"x2" Hub N 183+00 W 112+00

PX

0+00 = N12+00 W
Sta 184+00 N

Sta	+	H.I.	−	Elev	
TBM	5.37	15.95		10.58	N183+00 W112+00
0			5.0	10.9	
W50			4.7	11.2	
W100			4.5	11.4	
W150			4.5	11.4	
W200			4.2	11.7	

Sta 183+00 N 0+00 = 112+00 W

Sta					
	5.13	15.71		10.58	N183+00 W112+00
W283			3 2.7	2 13.0	
W228			3.9	11.8	
W180			4.2	11.5	
W130			4.6	11.1	
W80			5.1	10.6	
0			5.2	10.6	

July 11, 1950

Sta 182+00 − 0+00 = W112+00

Sta	+	H.I	−	Elev	
TBM	4.20	14.78		10.58	2 X 2 HUB N183+00 W112+00
0			5.3	9.5	
40			4.6	10.2	
100			4.4	10.4	
150			4.1	10.7	
200			3.8	11.0	

Sta 181+00 − 0+00 = W112+00

Sta	+	H.I	−	Elev	
TBM	4.47	15.05		10.58	N183+00 W112+00
205			4.6	10.4	
155			4.7	10.3	
110			4.8	10.2	
60			5.7	9.3	
0			5.0	10.0	2 X 2 N179+00 W112+00
TP.			5.53	9.52	

PX Sta 180+00 N 0+00 = W112+00

Sta	+	H.I	−	Elev	
TBM	5.17	14.69		9.52	N 179+00 W112+00
0			5.1	9.6	
W 50			4.7	10.0	
W 100			5.1	9.6	
W 145			5.8	8.9	
W 160			4.2	10.5	
W 200			4.4	10.3	
W 248			4.4	10.3	
W 296			3.8	10.9	
W 353			3.3	11.4	
W 361			5.4	9.3	
W 368			3.3	11.4	
W 410			4.0	10.7	
W 412			5.3	9.4	
W 417			4.4	10.3	
W 466			4.0	10.7	
W 522			4.0	10.7	

July 11, 1950

Sta 179+00 N 0+00 = W112+00

Sta	+	H.I	−	Elev	
TBM.	5.01	14.53		9.52	N 179+00 W112+00
530			4.1	10.4	
439			4.2	10.3	
432			4.0	10.5	
362			4.2	10.3	
326			3.7	10.8	
320			4.9	9.6	
308			4.2	10.3	
262			4.6	9.9	
210			5.1	9.4	
160			5.3	9.2	
110			5.5	9.0	
55			5.7	8.8	
50			4.5	10.0	
0			5.0	9.5	

PX Sta 178+00 N 0+00 = W 112+00

Sta	+	H.I.	−	Elev.	
					2"x2" N179+00 W112+00
T.B.M.	4.88	14.40		9.52	
0			5.0	9.4	
W 50			5.1	9.3	
W 100			5.9	8.5	
W 150			5.8	8.6	
W 200			5.1	9.3	
W 240			4.7	9.7	
W 250			5.8	8.6	
W 262			4.2	10.2	
W 310			5.0	9.4	
W 360			4.9	9.5	
W 410			5.5	8.9	
W 458			4.4	10.0	
W 508			4.6	9.8	

July 11, 1950

Sta 177+00 N 0+00 = W 112+00

Sta	+	H.I	−	Elev	
					2"x2" N179+00 W112+00
TBM.	5.07	14.59		9.52	
532			5.1	9.5	
480			5.6	9.0	
430			5.3	9.3	
380			5.3	9.3	
330			5.4	9.2	
280			5.8	8.8	
230			5.6	9.0	
180			5.6	9.0	
130			5.8	8.8	
83			5.8	8.8	
33			5.1	9.5	
C			5.0	9.6	2"x2" Hub N175+00
TP.			5.15	9.44	W112+00

PX Sta 176+00N 0+00=W112+00

Sta	+	H.I	-	Elev.	
					N176+00 W112+00
T.B.M.	5.04	14.48		9.44	
0			5.1	9.4	
W 50			5.4	9.1	
W 100			5.9	8.6	
W 150			6.3	8.2	
W 200			6.1	8.4	
W 253			6.1	8.4	
W 305			6.1	8.4	
W 350			6.0	8.5	
W 400			5.9	8.6	
W 450			5.5	9.0	
W 500			5.1	9.4	
W					

July 14, 1950

Sta 175+00N 0+00=W112+00

Sta	+	H.I	-	Elev.	
					N175+00 W112+00
TBM.	4.84	14.28		9.44	
505			4.3	10.0	
485			4.4	9.9	
440			5.8	8.5	
345			5.0	9.3	
390			5.2	9.1	
340			5.6	8.7	
285			5.7	8.6	
240			5.7	8.6	
190			6.0	8.3	
140			6.0	8.3	
90			5.4	8.9	
45			5.1	9.2	
0			5.0	9.3	

PX Sta 174+00 N0+00 = W112+00

Sta	+	H.I	-	Elev	
TBM.	4.93	14.37		9.44	N173+00 W112+00
0			5.2	9.2	
W50			5.2	9.2	
W70			6.2	8.2	
W85			5.2	9.2	
W133			5.7	8.7	
W190			6.3	8.1	
W240			6.2	8.2	
W293			6.2	8.2	
W340			6.1	8.3	
W390			5.9	8.5	
W440			5.7	8.7	
W490			5.6	8.8	
W540			5.5	8.9	

Sta 173+00 N 0+00 = W112+00

PX

Sta	+	H.I	-	Elev.	
					N173+00
TBM.	4.46	13.90		9.44	W112+00
872			4.2	9.7	Force Cov
820			5.4	8.5	
765			5.2	8.7	
715			5.3	8.6	
660			5.2	8.7	
615			5.6	8.3	
560			5.7	8.2	
510			5.5	8.4	
455			5.7	8.2	
405			5.8	8.1	
355			5.8	8.1	
300			5.8	8.1	
250			5.8	8.1	
200			5.7	8.2	
145			5.6	8.3	
93			5.1	8.8	
45			5.1	8.8	
0			4.9	9.0	N171+00
TP			5.06	8.84	W112+00

PX Sta 172+00 N 0+00 = W 112+00

Sta	+	H.I	−	Elev.	2×2 H.I. N 171+00
TBM.	4.45	13.29		8.84	W 112+00
0			5.0	8.3	
W 50			5.0	8.3	
W 100			4.7	8.6	
W 153			5.4	7.9	
W 208			5.0	8.3	
W 255			5.2	8.1	
W 305			5.6	7.7	
W 363			5.4	7.9	
W 415			5.3	8.0	
W 465			5.5	7.8	
W 520			5.5	7.8	
W 565			5.6	7.7	
W 620			5.7	7.6	
W 670			5.2	8.1	
W 715			5.4	7.9	
W 770			4.9	8.4	
W 820			5.0	8.3	
W 865			4.8	8.5	

July 14, 1950 (71)

Sta 171+00 N 0+00 = W 112+00

Sta	+	H.I	−	Elev.	2×2 N 171+00
TBM.	5.02	13.86		8.84	W 112+00
870			5.7	8.2	
815			5.7	8.2	
765			6.0	7.9	
710			6.1	7.8	
660			6.1	7.8	
605			6.0	7.9	
555			6.1	7.8	
505			6.2	7.7	
450			6.1	7.8	
400			6.2	7.7	
340			6.2	7.7	
293			5.6	8.3	
240			6.1	7.8	
185			6.0	7.9	
135			5.6	8.3	
85			5.5	8.4	
W 35			5.3	8.6	
0			5.0	8.9	

PX Sta N 170+00 - 0+00 = W 112+00

Sta	+	H.I	−	Elev.	2"x2" N 171+00 W 112+00
T.B.M.	4.42	13.26		8.84	
0			5.2	8.1	
W 50			4.9	8.4	
W 105			5.2	8.1	
W 170			5.3	8.0	
W 240			5.5	7.8	
W 310			5.8	7.5	
W 365			5.6	7.7	
W 420			5.9	7.4	
W 470			5.8	7.5	
W 520			5.7	7.6	
W 575			5.7	7.6	
W 625			5.8	7.5	
W 675			6.0	7.3	
W 725			5.9	7.4	
W 780			5.9	7.4	
W 835			5.7	7.6	
W 885			5.6	7.7	

PY July 11, 1950 (72)

Sta 169+00N - 0+00 = W 112+00

Sta	+	H.I	−	Elev	N 171+00 W 112+00
T.B.M.	4.28	13.12		8.84	
885			5.8	7.3	
830			6.0	7.1	
785			6.1	7.0	
730			6.2	6.9	
680			6.0	7.1	
620			6.0	7.1	
575			6.0	7.1	
520			5.8	7.3	
470			5.9	7.2	
420			5.5	7.6	
370			5.7	7.4	
320			5.4	7.7	
270			5.7	7.4	
220			5.6	7.5	
170			5.2	7.9	
120			5.4	7.7	
70			5.0	8.1	
0			5.0	8.1	

July 17 1950

CLOSURE LEVELS

Sta	+	H.I	−	Elev	2X2 Hub
					N 17+00
T.B.M.	4.65	13.49		8.84	W 112+80
					See Pg 63
105+00			5.73	7.76	7.79

7-18-50

STA - 185+00 N Ext

STA	+	H.I.	−	ELEV	
	7.40	16.72		9.32	NAIL TOP PN W/E1DE PILE CREEK
W 1+91			3.7	13.0	
W 2+46			3.3	13.4	
W 3+00			3.1	13.6	
W 3+60			3.1	13.6	
W 4+15			3.1	13.6	
W 4+75			2.9	13.8	
W 5+35			2.8	13.9	
W 5+95			2.8	13.9	
W 6+60			2.7	14.0	
W 7+25			2.5	14.2	

Sta 184+00 Ext

Sta	+	HI	−	Elev	
0+00 =					
BM	5.58	16.16		10.58	Hub 183+00N
7+38			2.3	13.9	
6+80			2.4	13.8	
6+30			2.8	13.4	
5+75			2.3	13.9	
5+15			2.7	13.5	
4+60			2.7	13.5	
4+00			3.0	12.2	
3+35			3.3	12.9	
2+75			3.7	12.5	
2+25			4.2	11.0	
1+60			4.3	10.9	

7-18-50

PX Sta 183+00 Ext.

Sta.	+	HI	−	Elev	
					Hub
TBM	5.20	15.78		10.58	Sta 183+00
W 2+10			4.1	11.7	
W 2+60			3.8	12.0	
W 3+10			3.4	12.4	
W 3+60			3.3	12.5	
W 4+15			3.3	12.5	
W 4+75			2.8	13.0	
W 5+30			2.6	13.2	
W 5+80			2.8	13.0	
W 6+00			3.0	12.8	
W 6+05			4.2	11.6	

7-18-50 (75)

PX Sta 182+00 Ext

Sta	+	HI	−	Elev	
					Hub
BM	4.09	14.67		10.58	183+00
5+70			1.9	12.8	
5+45			1.8	12.9	
5+12			3.0	11.7	
5+38			2.0	12.7	
4+80			2.5	12.2	
4+30			2.6	12.1	
4+10			3.4	11.3	
3+85			2.7	12.0	
3+20			2.5	12.2	
2+70			2.9	11.8 / 11.6	
2+20			~~2.5~~ 3.5	~~12~~ 11 2	

PX Sta 181+00 7-18-50 Ext

Sta	+	HI	−	Elev	
TBM	4.66	15.24		10.58	Hub 183+00
W 2+10			4.7	10.5	
W 2+60			4.3	10.9	
W 3+10			4.0	11.2	
W 3+60			3.7	11.5	
W 3+85			4.3	10.9	
W 4+00			4.3	10.9	
W 4+65			3.6	11.6	
W 4+69			4.6	10.6	
W 4+72			3.9	11.3	
W 5+25			3.3	11.9	
W 5+80			3.6	11.6	

PX Sta 180+00 Ext

Sta	−	HI	−	Elev	
TBM	5.37	14.89		9.52	Hub Sta 179+00
W 6+50			3.3	11.56	
W 6+85			3.5	11.4	
W 7+45			3.8	11.1	
W 8+00			4.3	10.6	
W 8+50			4.2	10.7	
W 9+15			4.6	10.3	

Sta 179+00

Sta	+	HI	−	Elev	
TBM	5.18	14.60		9.52	Hub 179+00
W 5+00			4.5	10.1	
5+60			4.0	10.6	
6+25			3.5	11.1	

PX Sta 178+00 Ext 7-18-50

Sta	+	H.I.	−	Elev	Hub
T.B.M.	4.99	14.51		9.52	Sta 179+
W 5+30			4.7	9.8	
W 5+70			3.9	10.6	

PX Sta 177+00 Ext

Sta	+	H I	−	Elev	Hub
T.B.M.	5.16	14.68		9.52	179+0
W 5+70			4.1	10.6	
W. 6+33			4.0	10.7	

PX Sta 176+00 Ext

Sta	+	H I	−	Elev	HUB.
T.B.M	4.94	14.38		9.44	175+00
W 5+85			4.4	10.0	
W. 6+45			4.1	10.3	
W 7+35			3.4	11.0	
W. 7+47			4.5	9.9	
W 7+70			2.9	11.5	
W. 8+30			3.1	11.3	

PX Sta. 175+00 Ext 7-18-50 (77)

Sta	+	H I	−	Elev	Hub.
T.B.M.	4.84	14.36		9.52	176+00
6+27			4.7	9.7	
6+85			4.2	10.2	
7+60			3.4	11.0	

PX Sta. 174+00 Ext

Sta.	+	H I	−	Elev	Hub
	4.98	14.50		9.52	175+00
6+80			5.6	8.9	
7+50			4.3	10.2	

Sta 168+00

Sta	+	H I	−	Elev	Hub
T.B.M.	3.77	12.61		8.84	171+00
0+00			5.1	7.5	
0+48			5.1	7.5	
0+95			5.0	7.6	
1+50			5.0	7.6	

Sta 168+00 Cont.

Sta	+	HI	−	Elev
		12.61		
W 2+00			4.8	7.8
W 2+52			4.9	7.7
W 3+04			5.0	7.6
W 3+55			5.3	7.3
W 4+08			5.4	7.2
W 4+60			5.6	7.0
W 5+15			5.6	7.0
W 5+65			5.4	7.2
W 6+27			5.6	7.0
W. 6+83			5.6	7.0
W. 7+35			5.7	6.9
W. 7+90			5.7	6.9
W. 8+48			5.7	6.9
W 8+90			5.6	7.0
W 9+45			5.4	7.2
W 10+10			5.3	7.3
TP.			5.54	7.07

Hub. 167+00

Sta. 167+00

Sta	+	HI	−	Elev	
				7.07	Hub. 167+00
T.B.M.	5.05	12.12			
10+75			5.1	7.0	
9+75			5.2	6.9	
9+15			5.0	7.1	
8+75			5.3	6.8	
8+15			5.4	6.7	
7+65			5.4	6.7	
7+00			5.2	6.9	
6+50			5.4	6.7	
5+90			5.0	7.1	
5+35			5.2	6.9	
4+80			4.9	7.2	
4+20			5.0	7.1	
3+60			4.9	7.2	
3+00			5.0	7.1	
N 2+45			5.0	7.1	
1+85			4.9	7.2	
1+25			5.0	7.1	
0+75			5.1	7.0	
0+60			5.0	7.1	

Sta 166+00

Sta	+	HI	−	Elev	
	4.93	12.00		7.07	Hub 167+00
0+00			5.2	6.8	
W 0+05			5.5	6.5	
W 0+50			5.1	5.9	
W 1+00			5.5	6.5	
W 1+50			5.8	6.2	
W 2+00			5.1	6.9	
W 2+50			5.1	6.9	
W 3+10			5.2	6.8	
W 3+70			5.1	6.9	
W 4+20			5.0	7.0	
W 4+70			5.2	6.8	
W 5+25			5.1	6.9	
W 5+90			4.8	7.2	
W 6+45			5.2	6.8	
W 7+00			5.1	6.9	
W 7+55			5.2	6.8	
W 8+05			5.4	6.6	
W 8+50			5.4	6.6	
W 9+00			5.4	6.6	
W 9+60			5.4	6.6	
W 10+00			5.3	6.7	

Sta 165+00

Sta	+	HI	−	Elev	
TBM	3.70	10.77		7.07	Hub 167+00
W 10+15			4.3	6.5	
W 9+75			4.3	6.5	
W 9+20			4.3	6.5	
W 8+75			4.3	6.5	
W 8+30			4.0	6.8	
W 7+80			3.8	7.0	
W 7+20			3.9	6.9	
W 6+80			4.0	6.8	
W 6+15			3.9	6.9	
W 5+75			3.8	7.0	
W 5+30			3.9	6.8	
W 4+75			4.2	6.6	
W 4+30			4.3	6.5	
W 4+00			4.3	6.5	
W 3+50			4.7	6.1	
W 3+00			4.6	6.2	
W 2+60			4.7	6.1	
W 2+20			4.6	6.2	
W 1+75			4.4	6.4	
W 1+30			4.9	5.9	
W 0+36			4.8	6.0	
0+00			5.20	6.7	

BARRAGAN
SHERRY
BROWN
CARVER

7-18-50

Location of Drainage Ditch on Bay Park Terrace.

⊼ at Sta 175+00 N 112+00 W

SEE Book No 54 PAGE 43

①

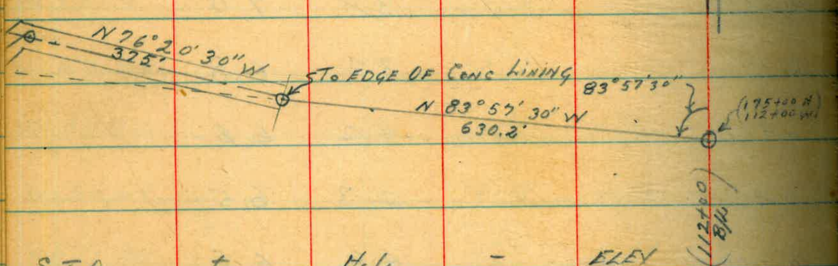
① 83° 57' 30"

② 167° 55' 00"

7° 37 D Rt.

83° 57' 30
7° 37 00
76° 20' 30"

DRAIN IS 11.5' WIDE AT TOP & CONC LINED



STA	+	H.I.	-	ELEV	
T.B.M.	5.50	14.94		9.44	(175+00 N 112+00 W) HUB
F.L.			5.65	9.29	EAST END
F.L.			4.55	10.39	375' WEST AT BEND

De Anza

7-21-5

80

PX

Sta 115+00

0+00 = Sta 115+00 - 168+00 W. B/L

Sta	+	HI	-	Elev	Hub
TBM	4.98	12.57		7.59	115+00
N 2+00			4.9	7.5	
N 1+55			4.7	7.9	
N 0+95			4.8	7.8	
N 0+50			50	7.6	
0+00			50	7.6	
S 0+50			5.2	7.4	
S 1+00			5.4	7.2	
S 1+50			5.3	7.3	
S 2+10			5.6	7.0	
S 2+60			6.2	6.4	
S 3+15			6.3	6.3	
S 3+65			6.5	6.1	
S 4+20			6.6	6.0	
S 4+65			6.8	5.8	
S 5+20			6.7	5.9	
S 5+70			7.0	4.6	
S 6+00			7.1	4.5	

7-21-60

PX Sta 114+00

0+00 = Sta 114+00 - 168+00 W B/L

Sta	+	HI	-	Elev	Hub
T.B.M.	5.08	12.67		7.59	Sta 115+00
S 5+50			7.3	5.4	
S 4+90			7.0	5.7	
S 4+35			6.7	6.0	
S 3+85			6.7	6.0	
S 3+35			6.7	6.0	
S 2+80			6.0	6.7	
S 2+30			5.8	6.9	
S 1+75			5.7	7.0	
S 1+25			5.5	7.2	
S 0+75			5.4	7.3	
0+00			5.1	7.6	
N 0+65			4.9	7.8	
N 1+10			4.9	7.8	
N 1+60			4.9	7.8	
N 2+10			4.9	7.8	

PX Sta 113+00

0+00 = Sta 113+00 - 168+00W B/L

Sta	+	HI	-	Elev	Hub
T.B.M.	5.14	12.63		7.59	Sta 115+00
N 2+40			4.4	8.2	
N 1+90			4.6	8.0	
N 1+40			4.5	8.1	
N 0+75			4.8	7.8	
N 0+35			4.8	7.8	
0+00			5.1	7.5	
0+50			5.3	7.3	
S 1+05			5.6	7.0	
S 1+50			6.0	6.6	
S 2+10			6.1	6.5	
S 2+60			6.6	6.0	
S 3+10			6.8	5.8	
S 3+65			6.6	6.0	
S 4+15			6.6	6.0	
S 4+80			7.3	5.3	

PV

7-21-50

Sta 112+00

0+00 = Sta	112+00 = 168+00 W +	HI	−	T/L Elev	Hub
T.B.M.	5.35	12.42		7.07	167+00
S. 3+85			7.1	5.3	
S. 3+70			6.6	5.8	
S. 3+15			6.7	5.7	
S. 2+70			6.5	5.9	
S. 2+00			5.4	7.0	
S 1+45			5.4	7.0	
S 1+00			5.5	6.9	
S. 0+30			5.0	7.4	
0+00			4.9	7.5	
N 0+60			4.6	7.8	
N. 1+00			4.4	8.0	
N. 1+50			4.1	8.3	
N. 2+60			4.4	8.0	
T. P.			4.84	7.58	Hub 115+00

7-26-50

(82)

Sta 128+00

0+00 = Sta	128+00 N +	168+00 W HI	−	Elev	Sta Hub 126+00
T.B.M.	4.59	12.35		7.76	
0+00			5.1	7.2	
N 0+43			5.0	7.3	
N 0+95			3.2	9.1	(SEE NEXT PAGE FOR REST OF SECTION)
N 0+32	Azim. 313°15'	Location	5.4	6.9	S.W. Cor Fence
N 0+78	48°10'		4.6	7.7	S.E. Cor. Fence
N 1+58	338°05'		5.3	7.0	N.W. Cor Fence

F.B.I.

Sta 129+00

0+00 = Sta	129+00 W +	168+00 N HI	−	Elev	128+05 Hub
T.B.M.	4.46	11.90		7.44	
0+00			5.1	6.8	
N 0+06			5.7	6.2	
N 0+56			6.00	5.9	
N 1+12			5.7	6.2	
N 1+66			5.2	6.7	

Sta 125+00 Cont.

Sta	+	H.I. 11.90	−	Elev
N. 2+22			5.1	6.8
N 2+70			5.1	6.8
N 2+83			4.5	7.4
N 2+85			3.7	8.2
N. 2+93			3.7	8.2
N. 3+13			+ 1.1	13.0
(310)				
N		17.60		
N3+17 (7)	317		4.3	13.3
N3+25 (12)	322		5.2	12.4
N 3+54 (41)	354		5.3	12.3
N 4+07 (9.7)	407		6.6	11.0
N. 4+43 (143)	453		5.1	12.5
N 5+04 (194)	504		2.7	14.9
N 5+10 (206)	510		2.4	15.2

Sta 128+00 Cont. of Section N. & S.

0+00 = PT. {N-171+00 / W-128+00}

Sta	+	H.I.	−	Elev	
TBM.	471	12.47		7.76	126+00 Mag.
T.P.	5.83	17.60	0.70	11.77	10' N of Sta
S. 0+76			1.5	16.1	"
S. 0+30			2.0	15.6	
0+00			5.0	12.6	
N. 0+40			9.0	7.6	
N. 0+95			9.4	7.2	
N. 1+45			8.9	8.7	
N. 1+95			6.4	11.2	
N. 2+46			4.9	12.7	

Location of 12, 10, & 9' Contours Near F.B.I. Bldg. N at {127+00 W / 168+00 N}

Azim.	Dist.	Rod	Elev	
T.B.M.	492	12.68	7.76	Sta H.I. 126+00
333° 0'	152	0.68	12.0	Contour
327° 40'	139	2.68	10.0	"
325° 15'	100	3.68	9.0	"

30
~~29~~ + 58

30
~~29~~ + 46

30
~~29~~ + 10

29
~~28~~ + 84

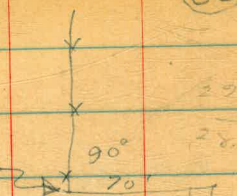
29
~~28~~ + 72

29
~~28~~ + 63

29
~~28~~ + 44

29
~~28~~ + 37

29
~~28~~ + 27



2"x4" 20'E/ {158+00N / 106+00W} EL = 4.90

2"x2" 20'E/ {155+00N / 106+00W} EL = 5.90

2"x2" On Levee {152+00N / 98+00W} EL = 9.41

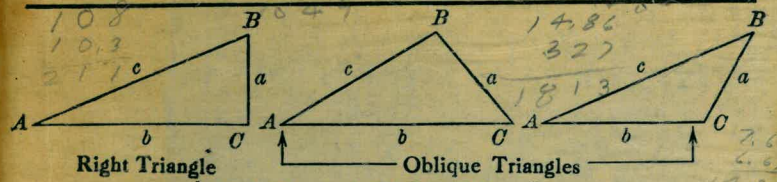
75° 36' 30"

184-185 W 200

180-174 W 500

173-169 W 900

TRIGONOMETRIC FORMULÆ



Solution of Right Triangles

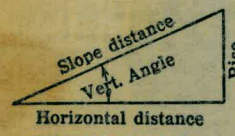
For Angle A. $\sin = \frac{a}{c}$, $\cos = \frac{b}{c}$, $\tan = \frac{a}{b}$, $\cot = \frac{b}{a}$, $\sec = \frac{c}{b}$, $\operatorname{cosec} = \frac{c}{a}$

Given	Required	
a, b	A, B, c	$\tan A = \frac{a}{b} = \cot B, c = \sqrt{a^2 + b^2} = a\sqrt{1 + \frac{b^2}{a^2}}$
a, c	A, B, b	$\sin A = \frac{a}{c} = \cos B, b = \sqrt{(c+a)(c-a)} = c\sqrt{1 - \frac{a^2}{c^2}}$
A, a	B, b, c	$B = 90° - A, b = a \cot A, c = \frac{a}{\sin A}$
A, b	B, a, c	$B = 90° - A, a = b \tan A, c = \frac{b}{\cos A}$
A, c	B, a, b	$B = 90° - A, a = c \sin A, b = c \cos A,$

Solution of Oblique Triangles

Given	Required	
A, B, a	b, c, C	$b = \frac{a \sin B}{\sin A}, C = 180° - (A + B), c = \frac{a \sin C}{\sin A}$
A, a, b	B, c, C	$\sin B = \frac{b \sin A}{a}, C = 180° - (A + B), c = \frac{a \sin C}{\sin A}$
a, b, C	A, B, c	$A + B = 180° - C, \tan \frac{1}{2}(A - B) = \frac{(a-b)\tan \frac{1}{2}(A+B)}{a+b}, c = \frac{a \sin C}{\sin A}$
a, b, c	A, B, C	$s = \frac{a+b+c}{2}, \sin \frac{1}{2}A = \sqrt{\frac{(s-b)(s-c)}{bc}}, \sin \frac{1}{2}B = \sqrt{\frac{(s-a)(s-c)}{ac}}, C = 180° - (A+B)$
a, b, c	Area	$s = \frac{a+b+c}{2}$, area $= \sqrt{s(s-a)(s-b)(s-c)}$
A, b, c	Area	area $= \frac{bc \sin A}{2}$
A, B, C, a	Area	area $= \frac{a^2 \sin B \sin C}{2 \sin A}$

REDUCTION TO HORIZONTAL



Horizontal distance = Slope distance multiplied by the cosine of the vertical angle. Thus: slope distance = 319.4 ft. Vert. angle = 5° 10′. From Table, Page IX. cos 5° 10′ = .9959. Horizontal distance = 319.4 × .9959 = 318.09 ft.

Horizontal distance also = Slope distance minus slope distance times (1 − cosine of vertical angle) With the same figures as in the preceding example, the following result is obtained. Cosine 5° 10′ = .9959. 1 − .9959 = .0041. 319.4 × .0041 = 1.31. 319.4 − 1.31 = 318.09 ft.

When the rise is known, the horizontal distance is approximately:—the slope distance less the square of the rise divided by twice the slope distance. Thus: rise = 14 ft., slope distance = 302.6 ft. Horizontal distance = $302.6 - \frac{14 \times 14}{2 \times 302.6} = 302.6 - 0.32 = 302.28$ ft.