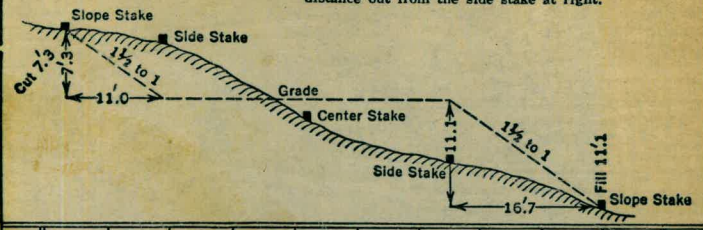
MISSION BAY

54

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.

176 - 3.47
172 - 8.78
168 - 7.91
104 - 7.37 → (N-172 + 95.85)
105 - 7.82
179 To 173 E → 800'

Book #54

INDEX

STA-166+00 4-6-50

0+00 = PT. 400' EAST OF 112+00

PX

STA	+	H.I.	−	ELEV	
					{168+00 N {112+00 W
T.B.M.	2.82	10.73		7.91	
W-400'			4.1	6.6	
W-3+65			3.3	7.4	
W-3+18			4.1	6.6	
W-2+75			4.3	6.4	
W-2+25			5.1	5.6	
W-1+52			5.6	5.1	
W-1+55			5.6	5.1	
W-1+03			5.4	5.3	
W-0+45			4.4	6.3	
W-0+28			4.1	6.6	
W-0+12			4.0	6.7	
0+00			4.9	5.8	
E-0+45			5.2	5.5	
E-0+91			5.0	5.7	
E-1+40 (over 0+40)			5.0	5.7	
E-1+78			5.4	5.3	
E-1+90			6.2	4.5	
E-1+93			7.2	3.5	
E-1+96			6.2	4.5	

166+00

STA PX	+	H.I.	−	ELEV	
E-2+50		10.73	5.8	4.9	
E-2+96			5.3	5.4	
E-3+38			4.7	6.0	
E-3+76			4.4	6.3	
E-4+11			1.1	9.6	
T.P.		10.73	3.46	7.27	T.P. 6"x6" 25' N/Section Line @ Creek

165+00

PT 300' E of 112+00 B/L PX

STA	+	H.I.	−	ELEV	
T.B.M.	2.45	9.72		7.27	4"x4" 25' N Section Line @ Creek N166
E-5+35			-0.1	9.8	
E-5+20			+0.2	9.5	
E-5+00			3.0	6.7	
E-4+25			4.1	5.6	
E-4+20			4.9	4.8	
E-3+71			4.8	4.9	
E-3+60			5.5	4.2	
E-3+00			6.4	3.3	
E-2+98			5.4	4.3	
E-2+31			4.4	5.3	
E-2+50			4.1	5.6	
E-2+00			4.2	5.5	
E-1+58			4.2	5.5	
E-1+17			4.3	5.4	
E-0+97			4.4	5.3	
E-0+35			4.4	5.3	
0+00			4.6	5.1	

PX STA - 165+00

STA	+	H.I.	−	ELEV	
W-0+38		9.72	4.5	5.2	
W-0+90			4.7	5.0	
W-1+40			4.6	5.1	
W-1+80			3.5	6.2	
W-2+40			3.6	6.1	
W-3+00	=112+00 B/L		3.8	5.9	
T.P.			4.10	5.62	T.P. H.L. {164+00 N / 112+00 W}

STA - 164+00 - N 4-6-50 (2)

⊼ @ N. 16,400 - Y/0,600 PX

STA	+	H.I.	−	ELEV
T.B.M.		10.26 (3)		
W-6+00			4.7	5.6
W 5+52			6.1	4.2
W-5+10			6.0	4.3
W 4+60			5.4	4.9
W 4+35			5.4	4.9
W 4+32			7.0	3.3
W 4+20			5.5	4.8
W-3+75			5.4	4.9
W 3+73			5.3	5.0
W-3+30			5.4	4.9
W-2+88			5.4	4.9
W-2+50			5.4	4.9
W-2+05			5.3	5.0
W 1+63			5.2	5.1
W 1+24			5.2	5.1
W 0+72			5.0	5.3
W 0+19			5.5	4.8
0+00			5.1	5.2

PX

Sta 164+00

0+00 = 10,600 W B/L

Sta	+	HI	−	Elev	
T.B.M.	2.99	10.26		7.27	4+4 25' N of L Line
E 0+07			4.9	5.4	
E 0+14			5.6	4.7	
E 0+16			6.8	3.5	
E 0+21			7.2	3.1	
E 0+28			6.0	4.3	
E 0+71			5.6	4.7	
E 1+50			5.1	5.2	
E 1+83			4.8	5.5	
E 2+15			4.5	5.8	
E 2+37			0.7	9.6	
E 2+53			0.6	9.7	
T.P			3.94	6.32	20' E Sta 162+00 N 106+00 W

Sta 168+00

0+00 = 10,600 W B/L

PX (3)

Sta	+	Hi	−	Elev	
T.P	4.41	10.73		6.32	20' E Sta 162+00 N 106+00 W
E 2+52			1.3	9.4	
E 2+30			5.3	5.4	
E 1+76			5.9	4.8	
E 1+32			6.1	4.6	
E 0+73			6.3	4.4	
E 0+41			6.3	4.4	
E 0+17			7.5	3.2	
E 0+33			7.2	3.5	
E 0+31			6.3	4.4	
E 0+24			5.4	5.3	
0+00			5.1	5.6	
W 0+50			5.4	5.3	
W 1+03			5.6	5.1	
W 1+45			5.8	4.9	
W 1+77			6.0	4.7	
W 2+20			6.1	4.6	
W 2+40			6.0	4.7	
W 3+00			6.0	4.7	

PX

Sta 162+00

0+00 = 10,600-W B/L

St	Sta	+	H.I.	−	Elev	
T	T.B.M.	3.74	10.06		6.32	2x4 20' E. of Sta 162+00
E	0+00			4.9	5.2	
E	W 0+32			4.8	5.3	
E	W 0+84			5.1	5.0	
E	W 1+30			4.8	5.3	
E	W 1+77			5.1	5.0	
E	W 2+25			5.3	4.8	
E	W 2+70			5.3	4.8	
E	W 3+10			5.4	4.7	
E	E 0+35			4.9	5.1	
E	E 0+43			5.7	4.3	
E	E 0+60			6.0	4.1	
E	E 0+61			7.0	3.1	
E	E 0+66			6.7	3.4	
E	E 0+68			5.7	4.4	
E	E 1+28			5.6	4.5	
E	E 1+75			5.4	4.7	
E	E 2+00			5.7	4.4	
E	E 2+20			4.9	5.2	
E	E 2+47			4.6	5.5	
E	E 2+76			0.4	9.7	

Sta 161+00

0+00 = 10,600-W - B/L

PX

STA	+	H.I.	−	ELEV	
T.P	3.69	10.01		6.32	2"x4" 20' E-162+00 N
E 3+02			-0.2	10.2	
E 2+90			0.2	9.8	
E 2+65			4.5	5.5	
E 2+04			5.6	4.4	
E 1+75			5.5	4.5	
E 1+08			5.8	4.2	
E 0+90			5.8	4.2	
E 0+76			7.0	3.0	
E 0+71			6.7	3.3	
E 0+70			5.7	4.3	
E 0+42			5.7	4.3	
E 0+38			5.1	4.9	
E 0+00			5.0	5.0	
E 0+30			5.1	4.9	
E 0+79			5.6	4.4	
E 1+22			5.4	4.6	
E 1+66			5.1	4.9	

PX

Sta	+ H.I.	−	Elev.
	Sta 161+00 Cont'd		
E 2+20	10.01	5.2	4.8
E 2+65		5.2	4.8
E 3+05		5.2	4.8

PX

STA - 160+00N

0+00 = W-106+00 B/L

STA	+	H.I.	−	ELEV
T.P.	3.60	9.92		6.32
W 0+54			4.8	5.1
W 1+00			5.3	4.6
W 1+31			5.6	4.3
W 1+35			6.3	3.6
W 1+42			6.2	3.7
W 1+43			5.5	4.4
W 1+81			5.4	4.5
W 2+36			5.7	4.2
W 2+75			5.5	4.4
W 3+25			5.5	4.4
T.P.			4.90	5.02
T.B.M.			5.85	4.07

4-13-50 (5)

PX

160+00 N

0+00 = W-106+00 B/L

STA	+	H.I.	−	ELEV
T.P.	3.60	9.92		6.32
4+33			0.09	10.01
3+67			0.09	9.83
3+13			0.46	9.46
3+00			1.4	8.5
2+98			2.4	7.5
2+85			4.3	5.6
2+55			5.1	4.8
2+35			4.6	5.3
2+22			5.2	4.7
2+65			5.7	4.2
1+08			5.9	4.0
0+65			5.8	4.1
0+62			7.0	2.9
0+56			6.6	3.3
0+51			5.2	4.7
0+26			5.0	4.9
0+00			4.6	5.3

Location Of Man Holes East Of H.W.-101-Proj 3.6

14.71		30.76
31.90		29.50
39.90		60.26
86.51		34.20
85.53		94.46
172.04	1+75	95.00 ✓
98.93	35	35.00 ✓
270.97	2+10 0.00	2.04 46
	32.96	32.96
	2+42.96	2+37 4 2
		5.00
		2

"Horse" ① 102° 45'

"State" Angle Right ② 205° 31'

(M. Hole - #41 Trunk Sewer #2) Av. 102° 45' 30"

"Horse" ① 67° 23'

P.I. (N-169+83.70 W-73+86.84) Angle Right ② 134° 45' 30"

(M. Hole #40 Trunk Sewer #2) Av. 67° 22' 45"

Barragan
Sherry
Brown

4-7-50

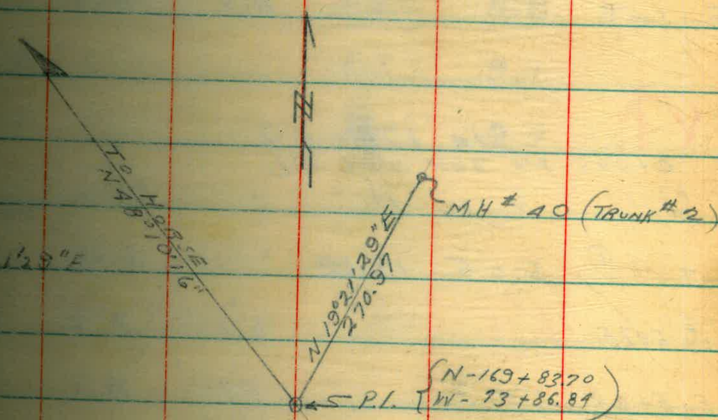
(6)

.11045

	91
82	45
2 /165°	31'
205	31

1+75
35
2+10

19°21'29"E



67° 22' 45
To "Horse" N48°01'16"W
19°21'29"

4-7-58

PT

STA - 173+00N (EXTENSION EAST)

0+00 = Pt. 400' E of T3L.

STA	+	H.I.	-	ELEV	
T.B.M.	5.31	14.12		8.78	(172+00N / 112+00W)
T.P. ①	4.82	13.60	5.34	8.78	T.P. ①
E 4+35			6.3	7.3	
E 3+80			6.4	7.2	
E 3+23			6.0	7.6	
E 2+68			5.7	7.9	
E 2+13			5.3	8.3	
E 1+58			4.9	8.7	

PT

Sta 174+00

0+00 = Pt. 300' E of T3L

Sta	+	H.I.	-	Elev	
T.P. ①	5.05	13.83		8.78	T.P. ①
E 5+75			5.1	8.7	
E 5+25			5.7	8.1	
E 4+73			5.7	8.1	
E 4+20			5.9	7.9	
E 3+70			6.2	7.6	
E 3+10			5.4	8.4	

Sta. 175+00

PX

0+00 = Pt. 300' E of T3L

Sta	+	H.I.	-	Elev	
T.B.M.	5.64	14.42		8.78	T.P. #①
E 630'			6.2	8.2	
E 5+?3			6.0	8.4	
E 4+60			6.2	8.2	
E 4+30			6.8	7.6	
E 4+18			5.7	8.7	
E 3+65			5.6	8.8	
E 3+22			5.3	9.1	
E 2+75			5.5	8.9	

Sta. 176+00

PX

0+00 = Pt. 300' E of T3L

Sta	+	H.I.	-	Elev	
T.P. ①	3.23	12.01 ~~11.51~~		8.78	T.P. ①
E 5+53			3.2	8.8	
E 5+00			2.8	9.2	
E 4+60			3.8	8.2	

PX

Sta 176+00

TB. NN.

Sta	+	H.I.	−	Elev
E 4+05		12.01 ~~11.51~~	3.4	8.6
E 3+60			3.2	8.8
E 3+05			3.0	9.0
E 2+55			2.5	9.5

PX

Sta 177+00

0+00 = TP. 300' E of TB.

Sta	+	H.I.	−	Elev
T.P. ①	4.05	12.83		8.78
E 5+55			4.1	8.7
E 5+00			3.9	8.9
E 4+50			3.7	9.1
E 4+00			3.6	9.2
E 3+45			3.9	8.9
E 2+90			4.0	8.8
E 2+40			3.6	9.2
E 1+85			3.3	9.5

STA - 178+00

PX

0+00 = STA - 178+00 ON 112+00 B/L

TP on TB.L

Sta 18,000 Hub

STA	+	H.I.	−	ELEV
TBM	4.96	14.68		9.72 {180+00 N, 112+00 W}
E 8+10			6.9 ~~7.0~~	7.8
E 7+60			6.8	7.9
E 7+30			7.2	7.5
E 6+45			7.5	7.2
E 6+05			7.4	7.3
E 5+45			7.2	7.5
E 5+15			5.3	8.4

Sta. 179+00

T.P. B.L. 0+00 = 112+00 W - B/L

PX

Sta	+	H.I.	−	Elev
TBM	5.01	14.73		9.72 {Sta 18,000 Hub, 112+00 W}
E 7+72			6.0	8.7
E 7+25			6.6	8.1
E 6+90			5.0	9.7
E 6+35			4.7	10.0
E 5+85			4.7	10.0
E 5+70			4.7	10.0
E 4+75			5.2	9.5

(4+50-47)

PX

Sta. 159+00

0+00 = W-106+00 B/L

Sta.	+	HI	−	Elev.
T.B.M.		9.92	5.02	4.90
T.B.M.			5.85	4.07
T.P.	6.16	10.23		4.07
E 4+25			1.0	9.2
E 3+70			0.9	9.3
E 3+43			1.4	8.8
E 3+30			0.2	10.0
E 3+25			0.2	10.0
E 3+20			1.3	8.9
E 3+19			2.3	7.9
E 3+00			5.0	5.2
E 2+60			5.5	4.7
E 2+30			5.6	4.6
E 2+20			6.2	4.0
E-1+26			6.2	4.0
E-1+10			6.6	3.6
E 1+06			7.1	2.8

4-13-50

(9)

PX

159+00

STA	+	HI	−	ELEV.
E-1+03		10.23	2.4	2.8
E 0+99			6.0	4.2
E 0+47			5.5	4.7
E 0+00			5.3	4.9
E-0+04			5.3	4.9
E-0+23			5.5	4.7
E-0+39			5.7	4.5
E-1+81			5.9	4.3
E-2+35			6.7	3.5
E-2+40			7.0	3.2
E-2+60			6.3	3.9
E-3+10			6.2	4.0

PX

158+00 N

0+00 = 106+00 W - B/L

STA	+	H.I.	−	ELEV	
T.B.M	6.01	10.08		4.07	9"x5" 150 ... of STA-158+00
E 4+75			1.4	8.7	
E 4+20			1.1	9.0	
E 3+75			1.5	8.6	
E 3+45			-0.1	10.2	
E 3+38			1.1	9.0	
E 3+34			2.3	7.8	
E 3+12			4.7	5.4	
E 2+80			5.2	4.9	
E 2+48			6.1	4.0	
E 2+40			~~7.6~~ 7.0	3.1	
E 2+28			6.3	3.8	
E-1+72			6.2	3.9	
E-1+68			7.4	2.7	
E 1+64			7.7	2.4	
E 1+62			6.3	3.8	
E 1+60			5.8	4.3	
E-1+38			5.5	4.6	
E 0+94			5.5	4.6	

158+00 N PX (10)

STA	+	H.I.	−	ELEV
E-0+60		10.08	5.4	4.7
0+00			5.3	4.8
W-0+46			5.2	4.9
W-0+91			5.5	4.6
W-1+32			5.6	4.5
W-1+83			5.7	4.4
W 2+25			5.8	4.3
W-2+75			5.2	4.9
W 2+89			6.9	3.2
W-3+21			6.8	3.3

PX

STA 157+00 N

0+00 = 106+00 W - B/L

STA	+	H.I.	−	ELEV	
		4			4"x5" 150'[illegible] of 158+00N
T.B.M	5.28	9.35		4.07	
E-4+65			2.95 -2.32 0.63	8.72	
E-4+25			2.60 -2.12 0.48	8.87	
E-4+02			2.75 -2.01 0.74	8.61	
E-3+66			1.40 -1.83 -0.43	9.8	
E-3+55			0.6	8.8	
E-3+53			1.6	7.8	
E-3+31			3.7	5.7	
E-2+80			4.9	4.5	
E-2+67			6.3	3.1	
E-2+38			5.6	3.8	
E-2+35			6.9	2.5	
E-2+28			6.7	2.7	
E-2+26			5.9	3.5	
E-2+00			5.7	3.7	
E-1+66			5.2	4.2	
E-1+21			4.8	4.6	
E-0+63			4.9	4.5	

-3.45 T.P. 4-13-50 (11)

PX

157+00 N

STA	+	H.I.	−	ELEV	
		4			
0+00		9.35	5.0	4.4	
W-0+02			5.6	3.8	
W-0+11			5.7	3.7	
W-0+25			5.8	3.6	
W-0+68			5.8	3.6	
W-1+12			5.9	3.5	
W-1+65			5.1	4.3	
W-2+11			5.2	4.2	
W-2+57			5.4	4.0	
W-2+61			6.0	3.4	
W-3+13			6.0	3.4	
T.P.			-3.45	5.90	2"x4" 20' E- (155+00N 106+00W)

Px

STA - 156+00N

0+00 = 106+00 B/L

STA	+	H.I.	−	ELEV
T.P.	4.41	9.31		4.90
E 5+05			3.20 2.02 0.68	8.63
E 4+60			2.74 2.30 0.44	8.87
E 4+23			2.65 2.11 0.54	8.77
E 4+00			1.72 −2.00 −0.28	9.6
E 3+86			0.8	8.5
E 3+84			1.5	7.8
E 3+58			4.0	5.3
E 3+14			4.8	4.5
E 2+80			5.7	3.6
E 2+76			6.6	2.7
E 2+70			6.8	2.5
E 2+70			6.1	3.2
E 2+55			5.8	3.5
E 2+53			7.1	2.2
E 2+45			6.9	2.4
E 2+44			6.0	3.3
E 2+07			5.9	3.4
E 1+83			4.8	4.5

(2"x2" 20' [illegible] 158+00N 106+00W)

156+00N PX

Sta	+	H.I.	−	Elev
E 1+30		~~10.31~~ 9.31	4.8	4.5
E 0+78			4.9	4.4
0+00			5.2	4.1
W 0+42			4.8	4.5
W 0+73			5.2	4.1
W 0+81			6.2	3.1
W 0+90			5.3	4.0
W 1+45			5.1	4.2
W 2+10			5.3	4.0
W 2+55			5.6	3.7

P.X

STA. 155+00 N

0+00 = 106+00 W - B/L

STA	+	H.I.	−	ELEV	
TP	3.28	9.18 (2)		5.90	2"x4" 20' B... 156+40 N 106+00 W
E 0+37			4.8	4.4	
E 0+85			4.8	4.4	
E 1+45			4.8	4.4	
E 2+33			4.8	4.4	
E 2+38			6.3	2.9	
E 2+45			6.1	3.1	
E 2+50			7.4	1.8	
E 2+55			7.0	2.2	
E 2+57			6.2	3.0	
E 2+80			5.5	3.7	
E 3+52			5.2	4.0	
E 4+10			3.9	5.3	
E 4+40			1.6	7.6	
E 4+42			0.5	8.7	
E 4+51			1.90 2.25 −0.35	9.5	
E 4+76			2.73 −2.25 0.48	8.70	
E 5+40			2.95 −2.70 0.25	8.9	
E 5+85			3.25 2.92 0.33	8.8	

4-13-50

STA 155+00 N P.X

STA	+	H.I.	−	ELEV
0+00		9.18 (2)	4.9	4.3
W 0+40			5.0	4.2
E-0+44			6.0	3.2
E-0+60			6.1	3.1
E-0+64			5.1	4.1
E-1+08			5.0	4.2
E-1+28			5.1	4.1
E 1+32			5.9	3.3
E-1+39			6.1	3.1
E-1+43			5.2	4.0
E-1+47			5.9	3.3
E 1+53			5.9	3.3
E-1+59			5.2	4.0
E-2+10			5.2	4.0
E-2+24			6.0	3.2
W-2+80			6.1	3.1

PX

STA 154+00 N

0+00 = STA 105+00 W (100' EAST OF 106+00 B/L)

	+	H.I.	−	ELEV
T.P	3.52	9.42		5.90
E 5+50			2.90 − 2.75 = 0.15	9.27
E 4+83			2.67 − 2.41 = 0.26	9.16
E 4+15			0.2	9.2
E 4+11			1.8	7.6
E 3+70			5.0	4.4
E 3+04			5.6	3.8
E 2+56			6.1	3.3
E 2+16			6.4	3.0
E 2+05			6.4	3.0
E 1+85			6.8 ~~6.8~~	2.6
E-1+80			6.3	3.1
E-1+72			5.2	4.2
E-1+22			4.9	4.5
E-0+66			5.0	4.4
0+00			5.2	4.2
W-0+97			5.1	4.3

2" x 4" 20' E 155+00 N 106+00 W

A-13-50

(14)

PX

154+00

0+00 = STA 105+00 W (100' EAST OF 106+00 W)

	+	H.I.	−	ELEV
W-0+87		9.42	5.2	4.2
W-1+00			5.4	4.0
W-1+50			5.4	4.0
W-1+72			5.6	3.8
W-2+00			5.9	3.5
W-2+02			6.4 ~~6.9~~	3.0
W-2+10			6.5	2.9
W-2+12			5.6	3.8
W-2+80			5.7	3.7

PX

STA N 91+00

0+00 = N-152+00 B/L SECTION N/E/S

STA	+	H.I.	−	ELEV	
T. B. M	3.66	13.12		9.46	2"x2" @ STA #9-
T. P			2.56	10.56	2"x2" 15' RT STA 91+00 #3
T. P.			4.30	8.82	
"	5.26	14.08		8.82	
N-1+85			5.4	8.7	
N-1+40			5.3	8.8	
N. 0+94			5.0	9.1	
N. 0+44			4.5	9.6	
0+00			4.7	9.4	
S 0+11			5.3	8.8	
S 0+12			6.0	8.1	
S. 0+73			11.1	3.0	
T. P			4.07	10.01	2x2 Hub Sta 93+00

St 92+00

El. 10.20 0+00 = N-152+00 B/L SEC. SOUTH

Sta	+	HI	−	Elev	
T.B.M.	4.23	14.24		10.01	2x2 Hub Sta 91+00
S. 1+00			11.3	2.9	
S 0+43			6.6	7.6	
S 0+42			5.8	8.4	
S 0+25			4.6	9.6	
S 0+00			4.8	9.4	
N 0+58			5.0	9.2	
N 0+00			5.3	8.9	

Sta 93+00

PX

Sta	+	HI	−	Elev	
T.B.M.	4.33	14.34		10.01	2x2 Hub Sta 93+00
N 1+58			6.0	8.3	
N 1+00			5.6	8.7	
N 0+43			5.3	9.0	
0+00			4.8	9.5	
S 0+49			4.5	9.8	
S. 0+62			5.4	8.9	
S 0+66			6.3	8.0	
S 1+30			11.5	2.8	

PX

9-18-50

PX

Sta 94+00

0+00 = Sta	N-152+00 B/L +	HI	SEC. SOUTH −	Elev	
T.B.M	4.62	14.63		10.01	2 x 2 Hub Sta 93+00
S 1+50			11.8	2.8	
S 0+92			7.2	7.4	
S 0+84			6.6	8.0	
S 0+68			4.6	10.0	
S 0+00			4.8	9.8	
N 0+34			5.2	9.4	
N 0+60			6.0	8.6	
N 1+10			6.2	8.4	

Sta 95+00

0+00 = Sta	N-152+00 B/L +	HI	SEC −	South Elev	
T.B.M	5.00	15.01		10.01	2x2-Hub Sta 93+00
N 1+66			6.2	8.8	
N 1+22			6.0	9.0	
N 0+75			5.6	9.4	
N 0+00			5.1	9.9	
S 0+86			4.7	10.3	
S 0+50			6.1	8.9	
S 0+02			6.8	8.2	
S 1+15			11.9	3.1	
T.P			5.10	9.91	1x1 Hub Sta 98+00

4-18-30

PX (16)

PX

Sta. 96+00

4-8-50

0+00 = N-152+00 P/L

Sta	+	H'	-	Elev	
T.B.M.	5.12	15.03		9.91	
S-1+34			12.0	3.0	
S-0+71			7.0	8.0	
S. 0+66			5.6	9.4	
S. 0+56			4.8	10.2	
0+00			5.0	10.0	
N. 0+54			5.2	9.8	
N. 1+02			6.0	9.0	
N.					

STAMPER
BARRAGAN
SHERRY

6-26-50

SET TIDE STAFF FOR SOUNDINGS OF ROSE CREEK (DELTA)

STA	+	H.I.	−	ELEV
T.B.M	1.85	7.75		5.90
			4.15	3.60
			3.85	3.95

2"x2" 100'E/OF STA {155+00N / 106+00W}

5.90
1.85
7.75

WATER LEVEL @ 4:05 P.M.

EL WATER @ 4:20 P.M.

4.85
1.00
3.85

1.95 ON TIDE STAFF SET TO +3.95 WATER ELEV

(TIDE READINGS)

(ADD 2.00' TO ALL SOUNDINGS OFF OF TIDE STAFF)

SOUNDINGS OF ROSE CREEK (DELTA)

99+00 PX

0+00 = 152+00N B/L : SOUND SOUTH

DIST	SOUND		DIST	SOUND	
0+00	2.4	+2.8	1+80	2.8	+2.4
(5:30 P.M.)					
(5.2) +10	2.4	+2.8		2.7	+2.5
+20	2.3	+2.9	2+00	2.7	+3.[illegible]
+30	2.3	+2.9		2.7	+2.[illegible]
40	2.2	+3.0		2.6	+2.6
0+50	2.5	+2.7		2.5	+2.7
	2.4	+2.8		2.7	+2.5
	2.4	+2.8	+50	3.8	+1.[illegible]
	2.4	+2.8		4.4	+0.[illegible]
	2.3	+2.9		2.9	+2.[illegible]
1+00	2.6	+2.6		2.5	+2.[illegible]
	2.7	+2.5		2.5	+2.7
	2.5	+2.7	3+00	2.5	+2.[illegible]
	2.4	+2.8		2.8	+2.[illegible]
	2.4	+2.8		3.5	+1.[illegible]
+50	2.5	+2.7		3.1	+2.[illegible]
	2.5	+2.7		3.4	+1.[illegible]
1+70	3.0	+2.2	3+50	4.4	+0.[illegible]

99+00 6-27-50 (19)

DIST.	SOUND	
3+60	7.2	-2.0
	11.0	-5.8
	12.0	-6.8
	12.0	-6.8
4+00	12.1	-6.9
(5.2)	12.5	-7.3
	12.7	-7.5
	12.8	-7.6
	13.0	-7.8
50	13.0	-7.8
	13.0	-7.8
	13.1	-7.9
	13.0	-7.8
	13.0	-7.8
+00	13.0	-7.8

PX

PX 100+00 W

0+00 = 152+00 N B/L : SOUND SOUTH

DIST	SOUND		DIST	SOUND	
(5:45) 0+00	2.3	3.1	1+80	2.8	2.6
	2.4	3.0		2.7	2.7
(5.4)	2.4	3.0	2+00	2.7	2.7
	2.6	2.8		4.5	0.9
	2.6	2.8		4.0	1.4
50	2.5	2.9		3.0	2.4
	2.5	2.9		2.7	3.0
	2.5	2.9	50	2.2	3.2
	2.5	2.9		2.4	3.6
	2.5	2.9		2.3	3.1
1+00	2.4	3.0		2.5	2.9
	2.4	3.0		2.7	2.7
	2.4	3.0	3+00	2.7	2.7
	2.4	3.0		2.7	2.7
	2.4	3.0		2.8	2.6
50	2.7	2.7		2.8	2.6
	2.7	2.7		3.3	2.1
1+70	2.6	2.8	3+50	3.3	2.1

100+00 N

DIST	SOUND	
3+60	3.1	2.0
	3.5	1.9
	4.3	1.1
	2.0	-1.6
3+00	11.0	-5.6
	12.3	-6.9
	13.0	-7.6
	12.8	-7.4
	13.0	-7.6
50	13.0	-7.6
	13.1	-7.7
	13.2	-7.8
	13.2	-7.8
(5:50)	13.1	-8.0
5+00	13.1	-8.0

DIST SOUND

PX

PX 10+00

0+00 = 152+00N B/L : SOUND SOUTH

DIST	SOUND		DIST	SOUND	
0+00	2.1	3.5	1+80	4.2	1.4
	2.1	3.5		4.2	1.4
(5.6) (5:53)	3.0	2.6	2+00	2.0	3.6
	2.3	3.3		2.0	4.1
	2.3	3.3		2.0	3.3
50	2.4	3.2		2.1	3.2
	2.4	3.2		2.1	3.5
	2.4	3.2	50	2.2	3.4
	2.4	3.2		2.2	3.4
	2.4	3.2		2.3	3.3
1+00	2.4	3.2		2.3	3.2
	2.4	3.2		2.8	2.8
	2.4	3.2	3+00	3.1	2.5
	2.4	3.2		3.0	2.4
	2.3	3.3		3.0	2.4
50	2.3	3.3		3.0	2.5
	2.5	3.1		3.0	2.7
1+70	3.2	3.4	3+50	3.0	2.7

PX 10+00N

DIST	SOUND		DIST	SOUND
2+60	3.1	2.5		
(5.6)	3.2	2.4		
	3.3	2.3		
	3.3	2.3		
+00	4.0	1.6		
	5.1	0.5		
	7.6	-2.0		
	11.8	-6.2		
	13.0	-7.4		
50	13.2	-7.6		
	13.1	-7.5		
	13.1	-7.5		
	13.2	-7.6		
	13.1	-7.5		
+00	13.2	-7.6		
3:00 P.M.				
+50				

PX 102+00 W

0+00 = 152+00 E/L ; SOUND SOUTH

DIST	SOUND		DIST	SOUND	
0+00	2.5	3.3	1+80	2.8	3.0
:	2.8	3.0		2.8	3.0
(5.8) (6:05) P.M.	2.8	3.0	2+00	3.0	2.8
	2.9	2.9		2.8	3.0
~~50~~	2.9	2.9		2.9	3.1
50	3.8	2.0		2.9	2.9
	4.0	1.8		3.0	2.8
	4.0	1.8	50	2.9	2.8
	4.0	1.8		3.0	2.9
	4.0	1.8		3.0	2.9
1+00	4.0	1.8		3.0	2.9
	2.9	2.9		3.1	2.8
	2.8	3.0	3+00	3.1	2.8
	2.7	3.1		3.2	2.8
	2.5	3.3		3.2	2.8
50	3.0	2.8		3.3	2.8
	2.7	3.1		3.3	2.8
1+70	2.9	2.9	3+50	3.1	2.8

6-27-50 (22)

PX 102+00 W

DIST	SOUND		DIST	SOUND	
3+00	3.2	2.6	5+50	14.1	-8.3
(5.8)	3.2	2.6	(6:10) P.M.		
	3.3	2.5			
	3.5	2.3			
1+50	3.8	2.0			
	3.8	2.0			
	3.9	1.9			
	4.0	1.8			
	5.2	0.6			
50	3.7	-3.9			
	12.8	-7.0			
	13.3	-7.5			
	13.2	-7.4			
	13.4	-7.6			
4+00	13.2	-7.4			
	13.2	-7.4			
	13.3	-7.5			
	13.8	-8.0			
4+70	14.2	-8.6			

Rx 103+00W

0+00 = 152+00N B/L : SOUND SOUTH

DIST	SOUND		DIST	SOUND	
0+00	2.6	3.3	1+80	3.1	2.6
	2.6	3.3		3.1	2.8
(5.9)	2.8	3.1	2+00	3.0	2.4
(6:15)	2.7	3.2		3.1	2.5
	2.6	3.3		3.0	2.9
50	2.7	3.2		3.0	2.7
	2.7	3.2		3.0	2.5
	2.8	3.1	50	3.1	2.8
	2.9	3.0		3.2	2.8
	3.0	2.9		3.3	2.8
1+00	3.0	2.9		3.3	2.8
	3.0	2.9		3.2	2.8
	2.9	3.0	3+00	3.3	2.8
	3.0	2.9		3.3	2.8
	3.0	2.9		3.4	2.8
50	3.0	2.9		3.4	2.8
	3.0	2.9		3.5	2.8
1+70	3.0	2.9	3+50	3.7	2.8

6-27-50 (23)

Rx 103+00W

DIST	SOUND		DIST	SOUND	
0+00	3.7	2.2	5+50	~~15.6~~ 14.6	-8.7
(5.9)	3.5	2.4		14.7	-8.8
	3.7	2.2		14.8	-8.9
	3.9	2.0		14.8	-8.9
1+00	4.0	1.9		14.7	-8.8
	4.0	1.9	6+00	14.7	-8.8
	4.0	1.9	(6:20) PM		
	4.0	1.9			
	4.0	1.9			
50	4.4	1.5			
	7.6	1.3			
	5.1	1.8			
	8.5	-2.6			
	13.6	-6.7			
2+00	13.8	-7.9			
	14.5	-8.6			
	14.5	-8.6			
	14.6	-8.7			
2+70	~~15.6~~ 14.6	-8.7			

PX 104+00 W

0+00 = 152+00 N B/L : SOUND SOUTH

DIST	SOUND		DIST	SOUND	
0+00	2.7	3.4	1+80	3.5	2.6
	2.6	3.5		3.5	2.6
(6.1) (6:25 P.M.)	2.8	3.3	2+00	3.5	2.6
	2.5	3.6		3.5	2.6
	2.8	3.3		3.7	2.5
50	2.9	3.2		3.7	2.4
	2.9	3.2		3.7	2.4
	3.0	3.1	50	3.7	2.4
	3.0	3.1		3.7	2.3
	3.1	3.0		3.8	2.3
1+00	3.1	3.0		3.8	2.3
	3.2	2.9		3.9	2.3
	3.2	2.9	3+00	3.9	2.3
	3.3	2.8		4.0	2.2
	3.5	2.6		4.0	2.2
50	3.5	2.6		4.0	2.2
	3.5	2.6		4.1	2.2
1+70	3.5	2.6	3+50	4.1	2.2

6-27-50 (24)

PX 104+00 W

DIST	SOUND		DIST	SOUND	
4+60	4.1	2.0	5+50	14.8	-8.7
	4.2	1.9		14.8	-8.7
	4.2	1.9	(6.1)	14.8	-8.7
	4.3	1.8		14.5	-8.4
4+80	4.4	1.7		14.5	-8.4
	4.4	1.7	6+00	14.6	-8.5
	4.5	1.6	(6:35) PM		
	4.4	1.7			
	4.4	1.7			
50	4.7	1.4			
	4.8	1.3			
	4.8	1.3			
	4.9	1.2			
5+00	5.2	0.9			
5+10	7.3	-1.1			
	12.6	-6.5			
	14.0	-7.9			
	14.5	-8.4			
5+40 5+50	14.5	-8.4			

PX 105+00 W

0+00 = 152+00 N B/L : SOUND SOUTH

DIST	SOUND		DIST	SOUND	
0+00	3.0	3.4	1+80	4.0	2.4
	3.0	3.4		3.9	2.1
(6.4) (6:38)	2.8	3.6	2+00	4.0	2.1
	3.1	3.3		4.0	2.4
	3.3	3.1		4.0	2.4
50	3.3	3.1		4.1	2.3
	3.2	3.4		4.1	2.3
	3.2	3.4	50	4.1	2.3
	3.3	3.3		4.1	2.3
	3.4	3.0		4.1	2.3
1+00	3.4	3.0		4.1	2.3
	3.5	2.9		4.2	2.2
	3.5	2.9	3+00	4.2	2.2
	3.6	2.8		4.2	2.2
	3.7	2.7		4.3	2.1
50	3.7	2.7		4.5	1.9
	3.8	2.6		4.5	1.9
1+90	3.9	2.5	3+50	4.5	1.9

PX 105+00 W

6-27-50 (25)

DIST	SOUND		DIST	SOUND	
3+60	4.5	1.9	5+50	14.5	-8.1
	4.6	1.8	(6.4)	14.8	-8.4
	4.7	1.7		15.0	-8.6
	4.7	1.7		15.0	-8.6
4+00	4.9	1.6		14.9	-8.5
	4.8	1.6	6+00	15.0	-8.6
	4.8	1.6		14.8	-8.4
	4.7	1.7		14.8	-8.4
	4.8	1.6		15.0 (14.0)	-8.6
50	5.0	1.4		15.0	-8.6
	5.0	1.4	50	15.0	-8.6
	5.0	1.4	(6:48 P.M		
	5.1	1.3			
	5.3	1.1			
4+00	5.3	1.1			
	5.3	1.1			
	6.2	0.2			
	9.1	-2.7			
5+40	12.7	-6.3			

PX 106+00 W

0+00 = 152+00 N B/L : Sound South

Dist	Sound		Dist	Sound	
0+00	3.0	3.5	1+80	4.0	2.5
	3.0	3.5		4.1	2.4
(6.5) (6:52) P.M.	3.0	3.5	2+00	4.1	2.4
	3.0	3.5		4.1	2.4
	3.0	3.5		4.2	2.5
50	3.0	3.5		4.2	2.3
	3.1	3.1	~~50~~	4.3	2.2
	3.5	3.0	50	4.7	1.8
	3.6	2.9		4.5	2.0
	3.6	2.9		4.5	2.0
1+00	3.6	2.9		4.5	2.0
	3.7	2.8		~~4.5~~	2.0
	3.8	2.7	3+00	4.6	1.9
	4.0	2.5		4.8	1.7
	4.0	2.5		4.8	1.7
50	4.0	2.6		5.1	1.4
	4.0	2.5		5.0	1.5
1+70	4.0	2.5	3+50	5.0	1.5

PX 106+00 W

Dist	Sound		Dist	Sound	
3+60	5.0	1.5	5+50	7.0	-0.5
	5.0	1.5		10.0	-3.5
	5.2	1.3		13.5	-7.0
	5.1	1.4		14.7	-8.2
4+00	5.2	1.2		15.1	-8.6
	5.3	1.2	6+00	15.2	-8.7
	5.3	1.2		15.2	-8.7
	5.3	1.2		15.2	-8.7
	5.5	1.0		15.2	-8.7
50	5.5	1.0		15.3	-8.8
	5.5	1.0	50	15.3	-8.8
	5.7	0.8	(7:02) P.M.		
	5.6	0.9			
	5.6	0.9			
5+00	5.7	0.8			
	5.7	0.8			
	6.0	0.5			
	6.0	0.5			
5+40	6.2	0.3			

PX

107+00W

0+00=15+00N B/L : SOUND SOUTH

DIST	SOUND		DIST	SOUND	
0+00	3.4	3.3	1+80	4.1	2.6
	3.4	3.3		4.1	2.6
(6.7) (9:05 P.M.	3.4	3.3	2+00	4.2	2.5
	3.4	3.3		~~4.3~~ 4.2	2.5
	3.5	3.2		4.3	2.4
50	3.5	3.2		4.4	2.3
	3.6	3.1		4.5	2.2
	3.8	2.9	50	4.5	2.2
	3.8	2.9		4.5	2.2
	3.9	2.8		4.5	2.2
1+00	4.0	2.7		4.7	2.0
	4.1	2.6		5.0	1.7
	4.1	2.6	3+00	5.0	1.7
	4.1	2.6		5.1	1.6
	4.1	2.6		5.2	1.5
50	4.1	2.6		5.3	1.4
	4.1	2.6		5.3	1.4
1+70	4.1	2.6	3+50	5.5	1.2

PX

107+00W

DIST	SOUND		DIST	SOUND	
3+60	5.5	1.2	5+50	6.3	0.4
	5.5	1.2		6.5	0.2
	5.5	1.2	(6.7)	6.5	0.2
	5.7	1.0		8.0	-1.3
4+00	5.7	1.0		13.4	-6.7
	5.7	1.0	6+00	15.0	-8.3
	5.7	1.0		15.3	-8.6
	5.8	0.9		15.5	-8.8
	5.8	0.9		15.5	-8.8
50	5.8	0.9		15.4	-8.7
	6.0	0.7	50	15.3	-8.6
	6.0	0.7		15.3	-8.6
	6.0	0.7		15.1	-8.4
	6.0	0.7		15.0	-8.3
5+00	6.0	0.7		15.0	-8.3
	6.1	0.6	7+00	15.0	-8.3
	6.1	0.6	(7:18) P.M.		
	6.2	0.5			
5+40	6.2	0.5			

PX

108+00 W

0+00 = 152+00 N B/L : SOUND SOUTH

DIST	SOUND		DIST	SOUND	
0+00	3.5	3.4	1+80	4.5	2.4
	3.6	3.3		4.5	2.4
(7:24) P.M.	3.6	3.3	2+00	4.7	2.2
	3.9	3.0		4.7	2.2
(6.9)	3.4	3.5		4.5	2.4
50	3.4	3.5		4.7	2.2
	3.5	3.4		4.6	2.3
	3.7	3.2	50	5.2	1.7
	4.0	2.9		5.1	1.8
	4.0	2.9		5.1	1.8
1+00	4.2	2.7		5.0	1.9
	4.2	2.7		5.0	1.9
	4.4	2.5	3+00	5.1	1.8
	4.4	2.5		5.2	1.7
	4.5	2.4		5.7	1.2
50	4.5	2.4		5.6	1.3
	4.5	2.4		5.6	1.3
1+70	4.5	2.4	3+50	5.8	1.1

6-27-50

PX

108+00 W

DIST	SOUND		DIST	SOUND	
3+60	5.9	1.0	5+50	6.8	0.1
	6.0	0.9	(6.9)	6.8	0.1
	6.1	0.8		6.8	0.1
	6.2	0.7		7.0	-0.1
4+00	6.2	0.7		7.1	-0.2
	6.2	0.7	6+00	7.4	-0.8
	6.2	0.7		8.7	-1.8
	6.3	0.6		12.5	-5.6
	6.3	0.6		14.0	-7.1
50	6.5	0.4		15.0	-8.1
	6.5	0.4	50	15.0	-8.1
	6.5	0.4		15.0	-8.1
	6.5	0.4		15.0	-8.1
	6.5	0.4		15.0	-8.1
5+00	6.5	0.4		15.0	-8.1
	6.6	0.3	7+00	15.0	-8.1
	6.8	0.1	(7:32) P.M.		
	6.8	0.1			
5+40	6.8	0.1			

PX 109+00 W

0+00 = 152+00 B/L : SOUND SOUTH

DIST	SOUND		DIST	SOUND	
0+00	4.0	3.1	1+80	4.8	2.3
(2.1) (7:37 P.M.)	4.1	3.0		4.8	2.3
	4.2	2.9	2+00	5.0	2.1
	4.2	2.9		5.0	2.1
	4.2	2.9		5.0	2.1
50	4.4	2.7		5.0	2.1
	4.3	2.8		5.0	2.1
	4.4	2.7	50	5.0	2.1
	4.4	2.7		5.2	1.9
	4.5	2.6		5.4	1.7
1+00	4.5	2.6		5.5	1.6
	4.5	2.6		5.4	1.7
	4.5	2.6	3+00	5.6	1.5
	4.5	2.6		5.6	1.5
	4.5	2.6		5.8	1.3
50	4.6	2.5		6.1	1.0
	4.5	2.6		6.0	1.1
1+70	4.8	2.3	3+50	6.2	0.9

PX 109+00 W

DIST	SOUND		DIST	SOUND	
3+60	6.0	1.1	5+50	7.0	0.1
(7.1)	6.0	1.1		7.0	0.1
	6.3	0.8		7.0	0.1
	6.4	0.7		7.0	0.1
4+00	6.4	0.7		7.0	0.1
	6.6	0.5	6+00	7.0	0.1
	6.6	0.5		7.0	0.1
	6.6	0.5		7.1	0.0
	6.6	0.5		7.5	-0.4
50	6.8	0.3		12.0	-4.9
	6.8	0.3	50	16.5	-9.4
	6.9	0.2		16.1	-9.3
	6.9	0.2		16.1	-9.0
	6.9	0.2		15.8	-8.7
5+00	6.9	0.2		15.7	-8.6
	6.9	0.2	7+00	15.8	-8.7
	7.0	0.1		15.6	-8.5
	7.0	0.1	P.M. (7:48)	15.6	-8.5
5+10	7.0	0.1	7+30	15.6	-8.5

PX 110+00 W

0+00 = 152+00 N B/L : SOUND SOUTH

DIST	SOUND		DIST	SOUND	
0+00	4.4	2.9	1+80	5.2	2.1
(7.3)	4.4	2.9		5.1	2.2
	4.5	2.8	2+00	5.1	2.2
P.M. (7:53)	4.4	2.9		5.2	2.1
	4.5	2.8		5.4	1.9
50	4.6	2.7		5.3	2.0
	4.6	2.7		5.4	1.9
	4.7	2.6	50	5.4	1.9
	4.8	2.5		5.3	2.0
	4.8	2.5		5.8	1.5
1+00	4.9	2.4		5.8	1.5
	4.9	2.4		6.1	1.3
	5.0	2.3	3+00	6.1	1.3
	5.0	2.3		6.2	1.3
	5.0	2.3		6.3	1.3
50	5.0	2.3		6.4	0.9
	5.0	2.3		6.4	0.9
1+70	5.2	2.1	3+50	6.4	0.7

PX 110+00 W

DIST	SOUND		DIST	SOUND	
3+60	6.6	0.7	5+50	7.1	0.2
(7.3)	6.5	0.8		7.1	
	6.7	0.6		7.1	
	7.0	0.3		7.1	
4+00	7.0	0.3		7.1	
	7.0	0.3	6+00	7.1	
	7.0	0.3		7.1	
	7.0	0.3		7.1	0.2
	7.0	0.3		7.5	-0.2
50	7.0			7.5	-0.2
	7.0		50	8.2	-0.9
	7.0			9.2	-1.9
	7.0			12.5	(7.7) -5.2
	7.0			14.1	(5.0) -6.8
5+00	7.0			15.1	(8.0) -7.8
	7.0		2+00	15.1	-7.8
	7.0		10	15.0	(2.3) -7.7
			20	15.0	-7.7
	7.0		(8:00) 30	15.0	-7.7
			40	15.0	-7.7
5+10	7.0	0.3	7+50	15.0	-7.7

PX

PROFILE WEST STA 152+00 N.

0+00 = 98+00 West

Sta	+	H.I	−	Elev
LEVEL WATER	9.27	13.67		4.40
W 0.0			4.1	9.6
W 0+06			6.3	7.4
0+32			7.6 ~~9.6~~	6.1
0+62			8.6	5.1
0+72			9.3	4.4

STRAPER
BARRAGAN
SHERRAY
BROWN
CARVER

9-5-50

(31)

H_2O level @ 2:00 P.M.

-8.6
-8.3

PX

STA - 111+00 W

0+00 = 161+00 N B/L : SOUND SOUTH

DIST	SOUND		DIST	SOUND	
0+00	2.1	2.2	1+80	2.5	2.1
+10	2.1	"		2.5	2.1
(4.6)	2.1	"	2+00	2.6	2.0
2:20 P.M	2.1	"	~~2+00~~	2.6	2.0
	2.1	"		2.8	1.8
50	2.1	"		2.8	1.8
	2.5	2.1		3.0	1.6
	2.1	2.2	50	3.0	1.6
	2.5	2.1		3.1	1.5
	2.5	2.1		3.3	1.3
1+00	2.6	2.0		3.2	1.4
	2.1	2.2		3.2	1.4
	2.1	2.2	3+00	3.3	1.3
	2.1	2.2		3.9	0.7
	2.1	2.2		4.0	0.6
50	2.1	2.2		4.0	0.6
	2.5	2.1		3.8	0.8
		2.1	3+50	3.8	0.8

PX

STA - 111+00 W

STAMPER
BARRACAN
SHEETY

7-5-50
FAIR WIND

(32)

DIST	SOUND		DIST	SOUND	
3+60	3.8	0.8	5+50	4.1	0.2
	3.8	0.8		4.1	0.2
(4.6)	4.1	0.5		4.5	0.1
	4.3	0.3		4.1	0.2
4+60	4.1	0.2		4.4	0.2
	4.1	0.2	6+00	4.5	0.1
	4.2	-0.1		4.7	-0.1
	4.6	0.0		4.7	
	4.6	0.0		4.7	
50	4.1	0.2		4.7	
	4.3	0.3	50	4.7	-0.1
	4.3			5.2	-0.6
	4.3			11.0	-6.4
	4.3			14.3	-9.7
5+00	4.3			14.0	-9.4
	4.3	0.3	7+00	13.2	-8.6
	4.4	0.2		13.0	-8.4
	4.1	0.2	(2:27 P.M)	13.1	-8.5
4+40	4.4	0.2	7+30	13.1 13.2	-8.5 -8.6
			8+00	13.1	-8.5

112+00 W

0+00 = 152+00 N B/L : Sound South

Dist	Sound		Dist	Sound	
0+00	3.0	1.8	1+80	3.4	1.5
	3.0	1.8		3.3	1.5
(4.8)	3.1	1.7	2+00	3.3	1.5
	3.1	1.7		3.4	1.5
	3.0	1.8		3.5	1.3
50	3.0	1.8		3.6	1.2
	3.0	1.8		3.8	1.0
	3.0	1.8	50	4.7	0.3
	3.0	1.8		7.4	-2.3
	3.0	1.8		10.1	-5.0
1+00	3.5	1.3		10.4	-5.2
	3.4	1.4		10.7	-5.5
	3.3	1.5	3+00	11.0	-5.8
	3.1	1.7		10.8	-6.0
	3.1	1.7		10.8	-6.0
50	3.1	1.7		10.7	-5.9
	3.1	1.7		10.9	-6.1
1+70	3.5	1.3	3+50	10.7	-5.9

112+00 W

Dist	Sound		Dist	Sound	
3+60	10.7	-5.9	5+50	10.3	-5.5
(4.8)	10.7	-5.9		10.3	-5.5
	10.7	-5.9		10.3	-5.5
	10.5	-5.7		10.3	-5.5
3+00	10.7	-5.9		10.2	-5.4
	10.7	-5.9	6+00	10.2	-5.4
	10.5	-5.7		10.2	-5.4
	10.8	-6.0		10.3	-5.5
	10.8	-6.0		11.0	-6.2
50	10.9	-5.9		10.8	-6.0
	10.7	-5.9	50	11.0	-6.2
	10.5	-5.7		11.1	-6.3
	10.5	-5.7		11.9	-7.1
	10.4	-5.6		12.8	-8.0
4+00	10.3	-5.5		13.0	-8.2
	10.3	-5.5	7+00	13.0	-8.2
	10.4	-5.6		13.0	-8.2
	10.4	-5.6		13.1	-8.3
				13.1	-8.3
4+40	10.1	-5.6	7+40	12.5	-7.9

7-5

PY

112+00 W

DIST	SOUND		DIST	SOUND NORTH	
7+50	12.3	-7.5	0+00	3.0	2.0
9.8	12.3	-7.5	5.0	3.1	1.9
	12.4	-7.6		3.1	1.9
	12.4	-7.6		3.1	1.9
	12.5	-7.7		3.0	2.0
(2:45 P.M.)					
8+00	12.5	-7.7	50	3.0	2.0
SOUND NORTH					
2+00	2.8	2.2		3.0	2.0
+10	2.7	2.3		2.9	2.1
5.0	2.7	2.3		3.0	2.0
	2.6	2.4		3.0	2.0
	2.6	2.4	1+00	3.0	2.0
50	2.6	2.4		3.0	2.0
	2.6	2.4		3.0	2.0
	2.6	2.4		2.9	2.1
	2.5	2.6		2.9	2.1
	2.5		50	3.0	2.0
3+00	2.5			2.9	2.1
	2.5			2.9	2.1
(3:37 P.M.)				2.9	2.1
3+20	2.5	2.5	1+90	2.8	2.2

7-5-50 (34)

113+00 W

=152+00 N	3/4	SOUND	SOUTH	
DIST	SOUND		DIST	SOUND
	3.2	1.7	1+80	4.0	0.9
	3.2	1.7		4.0	0.9
4.9	3.2	1.7	2+00	4.1	0.8
	3.2	1.7		4.0	0.9
	3.2	1.7		4.0	0.9
50	3.5	1.4		4.1	0.8
	3.5	1.4		5.0	-0.1
	3.5	1.4	50	8.1	-3.2
	3.6	1.3		10.5	-5.6
	3.6	1.3		10.8	-5.9
+00	3.6	1.3		10.5	-5.6
	3.8	1.1		10.5	-5.6
	3.8	1.1	3+00	10.5	-5.6
	3.8	1.1		10.5	-5.6
	3.8	1.1		10.5	-5.6
50	3.9	1.0		10.5	-5.6
	4.0	0.9		10.4	-5.5
+00	4.0	0.9	3+50	10.4	-5.5

PX 113+00 W

DIST	SOUND		DIST	SOUND	
3+60	10.4	-5.5	5+50	10.4	-5.5
(4.9)	10.4	-5.5		10.4	-5.5
	10.4	-5.5		10.8	-5.9
	10.5	-5.6		10.5	-5.6
4+00	10.4	-5.5		10.4	-5.5
	10.3	-5.4	6+00	10.4	-5.5
	10.3	-5.4		10.6	-5.7
	10.4	-5.5		10.8	-5.9
	10.4	-5.5		11.0	-6.1
50	10.4	-5.5		10.8	-5.9
	10.4	-5.5	50	10.8	-5.9
	10.6	-5.7		10.8	-5.9
	10.7	-5.8		11.0	-6.1
	10.7	-5.8		11.0	-6.1
5+00	10.6	-5.7		11.0	-6.1
	10.5	-5.6	7+00	11.1	-6.2
	10.4	-5.5		11.3	-6.4
	10.4	-5.5		11.3	-6.4
5+40	10.4	-5.5	7+30	11.8	-6.9

PX 113+00 W

DIST	SOUND		DIST	SOUND
7+40	12.0	-7.1		
50	12.2	-7.3		
	13.0	-8.1		
	13.0	-8.1		
	12.9	-8.0		
	12.8	-7.9		
8+00	13.0	-8.1		
	13.0	-8.1		
	13.0	-8.1		
	13.0	-8.1		
	13.0	-8.1		
50	13.0	-8.1		
	12.8	-7.9		
9+00 RX	13.7	-7.8		
9+40				

114+00 W

0+00 = 152+00 N B/L ; SOUND SOUTH

DIST	SOUND		DIST	SOUND	
0+00	3.4	1.6	1+80	4.0	1.6
	3.4	1.6		4.0	1.6
(5.0)	3.4	1.6	2+00	4.1	0.5
(3:05 AM)	3.5	1.5		4.1	0.4
	3.8	1.2		4.2	0.6
50	3.8	1.2		4.2	0.6
	3.8	1.2		4.3	0.7
	3.8	1.2	50	4.4	0.6
	3.8	1.2		4.4	0.6
	3.8	1.2		4.5	0.5
1+00	3.8	1.2		4.5	0.6
	4.2	0.8		4.5	0.5
	4.0	1.0	3+00	4.5	0.5
	4.0	1.0		5.0	0.0
	3.9	1.1		6.5	-1.5
50	3.9	1.1		8.8 ~~9.8~~	-3.8
	4.0	1.0		10.1	-5.1
1+70	4.0	1.0	3+50	10.4	-5.4

114+00 W

DIST	SOUND		DIST	SOUND	
2+60	10.7	-5.7	5+50	11.0	-6.0
	10.9	-5.9		11.0	-6.0
(5.0)	10.8	-5.8		11.0	-6.0
	10.7	-5.7		11.0	-6.0
2+90	10.7	-5.7		11.0	-6.0
	10.5	-5.5	6+00	11.0	-6.0
	12.0	-5.0		11.0	-6.0
	10.8	-5.8		11.0	-6.0
	11.5	-6.5		10.9	-5.9
50	11.2	-6.2		11.0	-6.0
	11.0	-6.0	50	11.0	-6.0
	12.8	-5.8		11.0	-6.0
	10.6	-5.6		11.0	-6.0
	10.7	-5.7		11.0	-6.0
3+00	11.0	-6.0		11.0	-6.0
	11.0	-6.0	7+00	11.0	-6.0
	11.0	-6.0		9.8	-4.8
	11.0	-6.0		6.0	-1.0
3+40	11.0	-6.0	7+40	6.0 6.0	-1.0 -1.0

PX

114+00 W

3-5-50

DIST	SOUND		DIST SOUND	SOUND NORTH	(SAME on)
7+50	5.9	-0.9	0+00	3.5	1.5
(5.0)	5.8	-0.8	+50	3.5	1.5
	6.2	-1.2		3.5	1.5
	7.4	-2.4		3.4	1.6
	12.4	-7.4		3.4	1.6
8+00	12.4	-7.4	50	3.3	1.7
	13.3	-8.3		3.3	1.7
	13.3	-8.3		3.2	1.8
	13.1	-8.1		3.2	1.8
	13.0	-8.0		3.2	1.8
50	12.9	-7.9	1+00	3.2	1.8
	13.1	-8.1		3.1	1.9
	13.1	-8.1		3.1	1.9
	13.0	-8.0		3.1	1.9
	13.0	-8.0		3.1	1.9
9+00	13.2	-8.2	50	3.1	1.9
(3:15) P.M.				3.0	2.0
				3.0	2.0
				3.0	2.0
			1+90	3.0	2.0
			2+00		

PX

114+00 W

3-5-50

(37)

DIST	SOUND		DIST	SOUND
2+00	3.0	2.0		
	2.9	2.1		
(5.0)	2.9	2.1		
	2.9	2.1		
50	2.9	2.1		
50	2.8	2.2		
	2.8	2.2		
	2.8	2.2		
	2.7	2.3		
	2.7	2.3		
+00	2.7	2.3		

PX 7-6-50

98+00 W

0+00 - 152+00 N B/L			Sound South		
Dist	Sound		Dist	Sound	
0+00			2	2.1	2.2
0+50	0.0	4.3		2.2	2.1
	0.6	3.7		3.0	1.3
(4.3) 2 PM	1.2	3.1		3.2	1.1
	1.0	3.3	+50	3.3	1.0
	1.1	3.2		3.6	0.7
1+00	1.6	2.7		2.0	2.1
	1.8	2.5		2.2	2.1
	1.5	2.8		2.3	2.0
	1.8	2.5	3+00	2.1	2.2
	1.8	2.5		2.6	1.9
1+50	2.0	2.3		3.2	1.1
	2.1	2.2		4.6	-0.3
	2.0	2.3		8.0	-3.7
	2.0	2.3	+50	10.3	-6.0
	2.0	2.3		10.5	-6.2
2+00	2.0	2.3		10.7	-6.4

PX 7-6-50

Dist	Sound		Dist	Sound	
	10.9	-6.6		11.9	-7.6
	11.0	-6.7		6.0	-1.7
5+00	11.0	-6.7		5.2	-0.9
	11.1	-6.8	6+00	5.0	-0.7
(4.3)	11.3	-7.0		5.0	-0.7
	11.5	-7.2			
	11.9	-7.6			
5+50	11.9	-7.6			
	11.8	-7.5			
	11.7	-7.4			
	11.9	-7.6			
	11.7	-7.4			
	11.6	-7.3			
	11.7	-7.4			
	11.8	-7.5			
	11.9	-7.6			
	11.9	-7.6			
5+50	11.9	-7.6			
	12.0	-7.7			

Rx

7-6-50

97+00 W

0+00 =	152+00 N		B/L	Sound	South
Dist	Sound		Dist	Sound	
0+00			50	2.8	1.6
0+85	0.0	4.4		2.6	1.6
1+00	1.0	3.4		3.2	1.2
	1.3	3.1		4.5	-0.1
	1.7	2.7		4.0	+0.4
	1.8	2.6	3+00	3.6	0.8
	2.0	2.4		5.9	-1.5
(4.4 +50)	2.1	2.3		8.3	-3.9
2:20 PM	2.5	1.9		9.0	-4.6
	2.5	1.9		9.8	-5.4
	2.5	1.9	+50	10.2	-5.8
	2.4	2.0		11.0	-6.6
2+00	2.5	1.9		11.0	-6.6
	2.5	1.9		11.1	-6.7
	2.7	1.7		11.1	-6.7
	2.8	1.6	4+00	11.6	-7.2
	2.8	1.6		11.3	-6.9

Rx 7-6-50

Dist	Sound	
	11.6	-7.2
	11.5	-7.1
	11.7	-7.3
+50	11.8	-7.4

PX

7-6-50

96+00 W

0+00 = 152+00 N B/L

Dist	Sound		Dist	Sound	South
0+00				3.0	1.5
1+03	0.0	4.5		3.7	0.8
+10	0.5	4.0		4.2	0.3
(4.5)	1.4	3.1		8.8	-4.3
2:30 PM	1.7	2.8	3+00	10.5	-6.0
	2.0	2.5		11.0	-6.5
50	2.0	2.5		11.2	-6.7
	2.6	1.9		11.5	-7.0
	2.9	1.6		11.3	-6.8
	2.9	1.6	50	11.8	-7.3
	2.7	1.8		11.9	-7.4
2+00	3.2	1.3		11.9	-7.4
	2.9	1.6		11.8	-7.3
	2.9	1.6		11.9	-7.4
	2.9	1.6	4+00	12.0	-7.5
	2.8	1.7		11.9	-7.4
50	2.8	1.7		12.0	-7.5

PX

7-6-50

95+00 W

(40)

00+00 152+00N B/L

Dist	Sound		Dist	Sound	South
0+20				11.2	-6.5
1+12	0.0	4.7		11.3	-6.6
+30	0.6	4.1	3+00	10.9	-6.2
	1.7	3.0		11.9	-7.2
+50	2.0	2.7		12.0	-7.3
	2.2	2.5		12.0	-7.3
(4.1)	2.6	2.1		12.0	-7.3
2:55 PM	2.8	1.9	50	12.0	-7.3
	3.2	1.5		12.0	-7.3
3+00	3.2	1.5		12.0	-7.3
	3.0	1.7		12.0	-7.3
	3.1	1.6		12.0	-7.3
	3.1	1.6		12.0	-7.3
	3.3	1.4			
50	4.1	1.6			
	7.3	-2.6			
	10.5	-5.8			

PX

7-6-50
94+00 W

0+00 = 150+00 N B/L

Dist	Sound		Dist	Sound	
0+00				12.0	-7.2
1+13	0.0	4.8		11.9	-7.1
+20	0.4	4.4		12.0	-7.2
4.8	1.0	3.8	3+00	12.0	-7.2
2:55PM	1.6	3.2		11.9	-7.1
+50	2.2	2.6		12.0	-7.2
	2.8	2.0		12.1	-7.3
	3.0	1.8		12.0	-7.2
	3.4	1.4	3+50	12.1	-7.3
	3.8	1.0			
2+00	4.6	0.2			
	5.8	-1.0			
	6.8	-2.0			
	8.0	-3.2			
	11.9	-7.1			
50	12.0	-7.2			
	12.0	-7.2			

PX

7-6-50
93+00 W

0+00 = 152+00 N B/L Sound South

Dist	Sound		Dist	Sound	
0+00				13.0	-8.0
0+98	0.0	5.0		13.0	-8.0
1+10	1.0	4.0		12.9	-7.9
5.0	1.8	3.2		12.9	-7.9
3:10 PM	2.2	2.8	3+00	12.9	-7.9
	3.1	1.9		12.9	-7.9
+50	4.1	0.9		12.8	-7.8
	5.4	-0.4		12.9	-7.9
	6.9	-1.9		12.8	-7.8
	8.0	-3.0	50	12.5	-7.5
	8.8	-3.8		12.6	-7.6
3+00	9.1	-4.1		12.7	-7.7
	10.1	-5.1		12.8	-7.8
	11.0	-6.0		12.8	-7.8
	11.9	-6.9	4+00	12.7	-7.7
	12.2	-7.2		12.8	-7.8
50	12.5	-7.5		12.8	-7.8

PX

Dist	Sound		Dist	Sound
	12.7	-7.7		
	11.3	-6.3		
+50	11.0	-6.0		
	5.9	-0.4		
(5.0)	5.5	-0.5		
	5.2	-0.2		
	5.3	-0.3		
5+00	5.5	-0.5		
	5.4	-0.4		
	5.5	-0.5		
	5.6	-0.6		
	5.6	-0.6		
50	5.5	-0.5		
	5.5	-0.5		
	5.5	-0.5		

PX 92+00 W

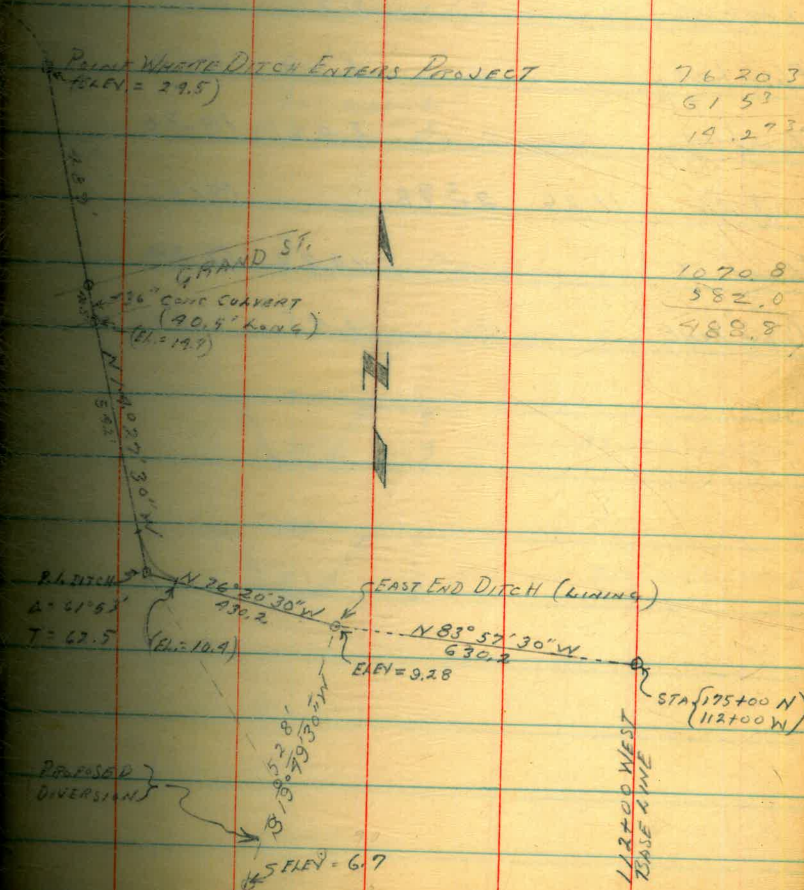
0+00 = 152+00 N B/L Sound South

Dist	Sound		Dist	Sound	
0+00				12.8	-7.7
0+65	0.0	5.1		13.0	-7.9
0+70	0.2	4.9		13.0	-7.9
+80	0.6	4.5	+50	13.0	-7.9
	1.7	3.4		13.0	-7.9
1+00	2.3	2.8		13.0	-7.9
(5.1)	3.0	2.1		13.0	-7.9
3.25 PM	4.1	1.0		13.0	-7.9
	5.2	-0.1	3+00	13.0	-7.9
	6.4	-1.3			
150	~~3.8~~ 7.8	-2.7			
	8.5	-3.4			
	9.0	-3.9			
	10.3	-5.2			
	11.4	-6.3			
2+00	15.5	-7.4			
	13.0	-7.9			

C. BARRAGAN
A. SHERRY
H. BROWN
W. CARVER
7-19-50

LOCATION OF CONC. LINED DRAIN DITCH AT BAYVIEW TERRACE.

STA	OBJECT	ANGLE	BEARING
	DUE NORTH	① 83° 57' 30"	
(175+00 N, 112+00 W)	ANGLE LT.	② 167° 55' 00"	N 83° 57' 30" W
	EAST END OF DITCH = 0+00	AV. 83° 57' 30"	
	(175+00 N, 112+00 W)		
0+00	DEF. RT.	① 7° 37' 00"	N 76° 20' 30" W
	(4+30.2) P.I. OF DITCH		
	0+00		
(4+30.2) P.I. OF DITCH	DEF. RT. ℄ OF DITCH GOING NORTH	① 61° 53'	N 14° 27' 30" W
	P.I. OF DITCH		
0+00	ANGLE LT.	① 83° 50'	S 19° 49' 30" W
	℄ OF PROPOSED RE-LOCATION OF OUTLET 4.09	10.80	ELEV
T.P.		7.7 6.7	ELEV AT S/END OF PROPOSED RELOCATION



76 20 30
61 53
14 27 30

1070.8
582.0
488.8

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7-19-50

FLOW LINE GRADES OF DRAIN DITCH

BAYVIEW TERRACE

STA	+	H.I.	−	ELEV
B.M	3.96	13.40		9.44
T.P.	5.90	16.70	2.60	10.80
FLOW LINE			7.42	9.28
FLOW LINE			6.33	10.37
FLOW LINE			6.09	10.61
T.P. FLOW LINE			2.00	14.70
T.P.	11.26	25.96		14.70
FLOW LINE			10.72	15.24
FLOW LINE			1.45	24.51

STA = 175+00 NORTH & 112+00 WEST (TOP HUB)

EXTREME N/E EDGE OF CONC FLUME

CENTER OF DITCH ON CONC. AT OUTLET

ANCHOR. B.C. OF CURVE (BOTTOM CENTER)

" E.C. " " (" ")

(40.5' WIDE) 36"

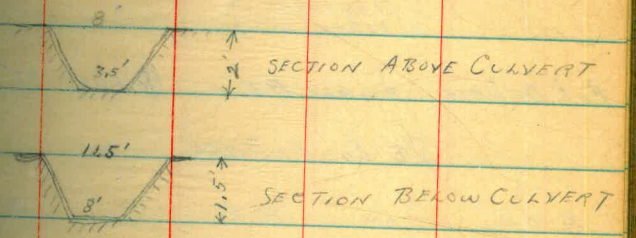
SHEAD OF CULVERT ON DITCH 54.2' P.I.

36"

HEAD OF CULVERT ON DITCH

1070.3 FROM P.I.

POINT WHERE DITCH ENTERS PROJECT FROM NORTH



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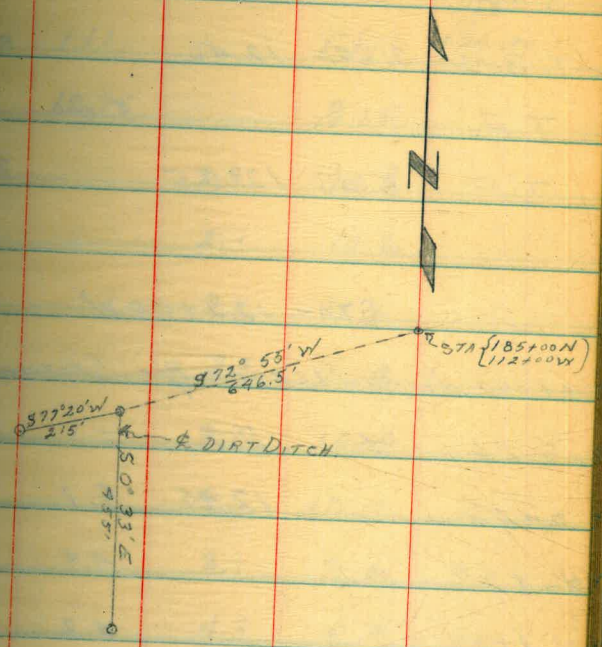
(45)

LOCATION OF DIRT DRAIN DITCH AT BAYVIEW TERRACE

STA	OBJECT	ANGLE
	DUE SOUTH	
STA (112+00W / 185+00N)	ANGLE RT.	@ 72° 55'
	P.I. OF DIRT DITCH	
	(112+00W / 185+00N)	
P.I. OF DITCH	DEF RT.	@ 4° 25'
	WEST END DITCH	
	(185+00N / 112+00W)	
P.I. OF DITCH	ANGLE RT.	@ 106° 32'
	S/E END OF DITCH	

STA	+ H.I.	−	ELEV
T.B.M	6.85	17.43	10.58
BOTTOM DITCH		5.0	
" "		5.3	
" "		7.7	



STA 185+00N 112+00W (TOP HUB)

(DIRT DITCH NOT TOO DISTINCT IN PLACES. IN PLACE OVER GROWN WITH GRASS & WEEDS, APPROX WIDTH 3' APPROX. DEPTH 1')

PX

X-SECTIONS OF BAYVIEW TERRACE (WEST END)

STA	+	H.I.	−	ELEV	
					HUB STA (171+00 N / 112+00 W
T.B.M.	3.62	12.46		8.84	1x2 (Hub)
T.P.			5.06	7.40	30' N/of 112
T.P.	5.05	12.45		7.40	

STA- 122+00 W

0+00 = NORTH 168+00 B/L; SECTION N/S/S

STA	+	H.I.	−	ELEV
0+00		12.45	5.1	7.3
N +50			4.4	8.0
N 1+00			4.3	8.1
N 1+55			4.2	8.2
N 2+10			4.6	7.8
N 2+55			4.3	8.1
N 3+10			5.0	7.4
N 3+10			4.2	8.2
N 3+70			3.5	8.9
N 4+20			3.3	9.1
N 4+70			2.6	9.8
N 5+20			2.2	10.2
N 5+70			2.1	10.3
TP			4.30	8.15

PX

C. BARRAGAN 7-19-50
A. SHERMY
W. CARVER

Sta 123+00

Sta	+	HI	−	Elev	
	4.60	12.75		8.15	Hub 17 124+00
N 7+30			1.9	10.8	
N 6+80			2.1	10.6	
N 6+40			2.1	10.6	
N 5+80			3.3	9.4	
N 5+40			2.7	10.0	
N 4+90			2.6	10.1	
N 4+35			3.1	9.6	
N 3+90			4.3	8.4	
N 3+30			4.1	8.6	
N 2+80			4.2	8.5	
N 2+20			4.1	8.6	
N 1+70			4.7	8.0	
N 1+10			4.9	7.8	
0+50			5.8	6.9	
0+60			5.1	7.6	
1+60			5.1	7.6	
0+00			5.5	7.2	

PX Sta 124+00

Sta	+	HI	−	Elev	
T.B.M.	5.04	13.19		8.15	Hub 124+00
S 1+90			5.4	7.8	
S. 0+93			5.9	7.3	
0+00			5.2	7.0	
N 0+50			5.0	8.2	
N. 1+00			4.8	8.4	
N. 1+50			4.8	8.4	
N. 2+05			4.9	8.3	
N 2+55			5.0	8.2	
300' 0° 39' N/W			4.00	9.19	
N. 3+60			4.6	8.6	
N. 3+80			3.8	9.4	
T.B.M.		12.93		8.15	
Ext. 7-25-50 N 4.30		12.93	3.5	9.5	

PX 7-19-50 Sta 125+00 (47)

Sta	+	HI	−	Elev	
TBM	4.97	13.12		8.15	Hub 124+00
[illegible]			2.7	11.4	
N. 4+00			2.9	10.2	
[illegible]			4.8	8.3	
[illegible]			5.0	8.1	
[illegible]			5.0	8.1	
[illegible]			5.0	8.1	
[illegible]			5.0	8.1	
[illegible]			5.2	7.9	
[illegible]			5.1	8.0	
[illegible]			5.2	7.9	
[illegible]			4.9	8.2	
[illegible]			5.9	7.2	

PX

Sta 126+00

Sta	+	H.I.	−	Elev	Hub
TBM	4.55	12.60		8.15	124+00
S 2+00			4.7	7.9	
S 1+00			4.5	8.1	
0+00			5.1	7.5	
N 0+50			4.8	7.8	
N 1+05			4.7	7.9	
N 1+50			4.6	8.0	
N. 2+20			4.8	7.8	
N. 2+60			4.6	8.0	
N. 3+15			4.4	8.2	
N 3+65			4.6	8.0	
N. 4+15			4.2	8.4	
N. 4+60			2.5	10.1	
N. 5+10			2.1	10.5	
N 5+50			2.2	10.4	
N. 6+00			1.7	10.9	
N. 6+60			1.6	11.0	

PX

Sta 127+00

Sta	+	H.I.	−	Elev	
TBM	4.63	12.78		8.15	Hub Sta 124+00
T.P.			5.02	7.76	1746 Sta 126+00
6+30			1.2	11.6	
[illegible]			1.4	11.4	
[illegible]			2.4	10.4	
[illegible]			3.7	9.1	
[illegible]			4.6	8.2	
M.H. [illegible]			2.40	10.38	M.H
[illegible]			4.8	8.0	
[illegible]			4.8	8.0	
[illegible]			5.8	7.0	
[illegible]			5.5	7.3	
[illegible]			5.4	7.4	
[illegible]			5.0	7.8	
[illegible]			5.1	7.7	
[illegible]			5.1	7.7	
[illegible]			5.2	7.6	
[illegible]			5.2	7.6	

PX Sta 119+00

7-21-5

0+00 = 168+00 TBL.

Sta	+	HI	−	Elev	
TB.11	4.66	12.06		7.40	TP. Hub N. of 119+00
N 2+00			4.7	7.4	
N 1+50			4.8	7.3	
N 1+05			4.8	7.3	
N 53			5.0	7.1	
TP.					
0+00			5.0	7.1	
S 50			4.8	7.3	
S 100			5.0	7.1	
S 150			5.2	6.9	
S 200			5.0	7.1	
S 2+50			4.8	7.3	
S 3+00			5.1	7.0	
S 3+55			5.2	6.9	
S. 4+05			5.4	6.7	
S. 4+60			5.7	6.4	
S. 5+15			6.1	6.0	

Sta 119+00 PX

Sta	+	HI	−	Elev
		12.06		
S 5+70			6.2	5.9
S 6+20			6.3	5.8
S 6+75			6.5	5.6
S 7+25			6.7	5.4
S 7+80			7.7	4.4
S 8+00			8.9	3.2

7-21-[illegible]

PX Sta 118+00

0+00 = Sta. 118+00 - 168+00 B.L.

Sta	+	HI	–	Elev	
TBM	4.50	11.90		7.40	Hub. 30' N/w 119+00
S 7+75			8.3	3.6	
S 7+25			6.5	5.4	
S 6+80			6.3	5.6	
S 6+25			6.2	5.7	
S 5+75			6.2	5.7	
S 5+20			6.1	5.8	
S 4+60			5.7	6.2	
S 4+15			5.6	6.3	
S 3+60			5.4	6.5	
S 3+10			4.9	7.0	
S 2+60			4.8	7.1	
S 2+10			4.5	7.4	
S 1+60			4.6	7.3	
S 1+05			4.9	7.0	
S 0+55 ← 0+00			4.8 4.7	7.1 7.1	
N 0+50			4.7	7.2	
N 1+00			4.7	7.2	
N 1+50			4.6	7.3	
N 2+05			4.3	7.6	

Sta 117+00 PX

0+00 = Sta 117+00 - 168+00 B.L.

Sta	+	HI	–	Elev	
TBM	4.66	12.06		7.40	Hub. TP 30' N/w 119+00
?2+20			4.5	7.6	
?1+65			4.4	7.7	
?1+20			4.5	7.6	
?0+70			4.8	7.3	
?0+00			5.0	7.1	
T.P.			4.47	7.59	Hub — Sta. 115+00
?+50			5.2	6.9	
?1+00			4.8	7.3	
?1+50			4.9	7.2	
?2+00			4.8	7.3	
?2+55			5.1	7.0	
?3+10			5.3	6.8	
?3+60			5.6	6.5	
?4+15			5.7	6.4	
?4+70			5.9	6.2	
?5+20			6.0	6.0	
?5+75			6.0	6.0	

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Sta 116+00 Cont

PX

Sta	+	HI	−	Elev
		12.06		
S 6+30			6.3	5.8
S. 6+75			6.6	5.5
S. 7+25			7.6	4.5
S. 7+40			8.6	3.5

Sta. 116+00

Sta	+	HI	−	Elev
TBM	4.54	12.13		7.59
S 6+95			8.5	3.6
S. 6+40			6.6	5.5
S 5+85			6.6	5.5
S 5+45			6.3	5.8
S 4+90			6.0	6.1
S. 4+45			6.1	6.0
S. 3+95			6.0	6.1
S. 3+40			5.8	6.3
S. 2+85			5.7	6.4
S. 2+30			5.6	6.5

C. BARRAGAN
A. SHERRY
W. CARVER

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(51)

Sta 116+00

PX

Sta	+	HI	−	Elev
		12.13		
1+90			5.1	7.0
1+25			4.9	7.2
0+75			4.6	7.5
0+30			4.9	7.2
0+02			4.7	7.4
[illegible]			4.7	7.4
1+55			4.6	7.5
2+10			4.5	7.6

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Sta 116+00 Ext.

Sta	+	HI	−	Elev	
BM	4.44	12.03		7.59	Hub 115+00
1+15			8.7	3.3	

C. Barragan
D. Sherry
H. Brown
W. Carver

PX

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Sta 115+00 (Ext)

0+00 = Sta 115+00 W. - 168+00 N.

Sta	+	HI	−	Elev	
TBM	5.00	12.59		7.59	Hub 115+00
5+50			8.6	4.0	
5+65			9.0	3.6	

Sta 114+00 Ext

0+00 = 114+00 W. - 168+00 N.

Sta	+	HI	−	Elev	
T.B.M	4.92	12.51		7.59	Hub 114+00
5+95			8.6	3.9	
6+40			8.6	3.9	

Sta 113+00 Ext.

0+00 = 113+00 N. 168+60 W

Sta	+	HI	−	Elev	
T.B.M.	5.51	12.58		7.07	Sta 167+00
5+30			8.2	4.4	
5+75			8.3	4.3	
6+20			8.6	4.0	

7-25-50

52

PX. Sta 112+00

0+00 = 112+00 W - 168+00 N

Sta	+	HI	−	Elev	
T.B.M.	3.54	10.61		7.07	Hub Sta 167+00
4+55			6.1	4.5	
5+40			6.2	4.4	
6+30			6.2	4.4	
7+25			7.0	3.6	
7+90			7.0	3.6	2½" ON OLD B/L N.
T.B.M.			4.97	5.64	St. 164+28

Sta 164+00

SECTION EAST & WEST

0+00 = Sta 164+00 N. 112+00 W

Sta	+	HI	−	Elev	
T.B.M.	3.38	9.02		5.64	Hub Sta 164+28 N
0+00			4.4	4.6	
0+70			4.3	4.7	
1+70			4.6	4.4	
2+20			4.3	4.7	
3+00			4.1	4.9	
3+60			4.0	5.0	

7-25-50

Sta 163+00

SECTION EAST & WEST

0+60 Sta. 163+00 N. 112+00 W.

Sta	+	H.I.	−	Elev.	
T.B.M.	2,61	8.25		5.64	Hub Stake
E 3+85			3.5	4.7	
E 3+30			3.6	4.6	
E 2+80			3.5	4.7	
E 2+20			3.6	4.6	
E 1+65			3.5	4.7	
E 1+10			3.7	4.5	
E 0+55			3.7	4.5	
0+00			4.0	4.2	

7-25-50 (53)

Proposed Diversion Drainage Ditch Bay Terrace

S. 34° 20' 30" E = ℄

℄ PL OF CONC DITCH (SEE PAGE 43)

Sta	+	H.I.	−	ELEV	
	5.55	14.83		9.28	East End of Conc. Ditch.
0+00					
0+60			5.0	9.8	
0+80			5.00	9.8	No Edge of Reed Ave.
1+30			5.10	9.7	So. Edge of Reed Ave.
1+44			5.25	9.58	Parking Lot.
2+20			5.82	9.01	So. Edge of Parking Lot
2+50			5.8	9.0	
2+98			6.0	8.8	
3+35			6.0	8.8	
3+95			6.3	8.5	
4+25			7.8	7.0	
4+75			7.9	6.9	
5+30			8.2	6.6	

⊼ @ P. I. of Conc Ditch (See Page 43) 7-25

Proposed Diversion Drainage Ditch Bay Terrace

S. 6°19'30" W

Sta	+	HI	−	Elev	
TBM.		14.83		9.28	Cor. Conc Ditch
S. 0+42			5.4	9.4	
S. 0+95			5.5	9.3	
S. 1+25			5.5	9.3	No. Edge of Acc...
S. 1+72			5.65	9.18	So. Edge of Acc...
S. 2+32			5.7	9.1	
S. 2+81			5.7	9.1	
S. 3+32			7.4	7.4	Bottom Of Existing Dirt Ditch
S. 3+56			6.5	8.3	
S. 4+15			6.5	8.3	
S. 4+45			7.8	7.0	
S. 4+90			7.7	7.1	
S. 5+45			7.5	7.3	
S. 6+00			7.9	6.9	
S. 6+40			7.9	6.9	
S. 7+00			7.9	6.9	

LOCATION OF 12, 10, & 9 FOOT CONTOURS AT

WEST CORNER OF BAYVIEW TERRACE

T @ STA-{N-171+00 / W-129+00} H.I. = 13.03 (4.88)

OBJECT	AZIM	DIST	ROD	ELEV
T.B.M.	4.88		Elev 9.15	Hub
	197° 10'	94	1.03	
	191° 50	080	3.03	
	234° 00'	54	1.03	
	233° 45'	40	3.03	
	275° 05'	103'	1.03	
	274° 45	63	3.03	
	275° 20'	133	1.03	
	286° 10'	123	3.03	
	282° 45'	184	1.03	
	294° 20'	175	3.03	
	293° 20'	230	1.03	
	311° 05'	185'	3.03	
	323° 20'	190	3.03	
	341° 00'	180	3.03	
	312° 45'	242	1.03	

BARRAGAN
SHERRY
BROWN
CARVER

7-25-50

55

H.I. = 13.03

Obj	AZIM	DIST	ROD	Elev
	358° 20'	178	3.03	10
	338° 25'	234	1.03	12
	16° 20'	190	3.03	10
	27° 45'	196	3.03	10
	358° 35'	496	1.03	12
	41° 15'	167	3.03	10
	61° 45'	163	3.03	10
	68° 30'	160	3.03	10
	69° 15'	198	3.03	10
	67° 15'	221	3.03	10
	68° 20'	276	3.03	10
	64° 25'	316	3.03	10
	67° 25'	356	3.03	10
	260° 55	38	4.03	9
	292° 05'	128	4.03	9
	318° 30'	169	4.03	9
	358° 45'	164	4.03	9
	28° 25'	176	4.03	9

LOCATION OF CONTOURS

155
196

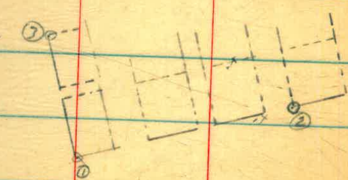
259

HI. 13.03

	Azim	Dist	Rod	Elev
	66° 20'	153	4.03	9
	72° 10'	209	4.03	9
	72° 45'	290	4.03	9
	67° 30'	298	4.03	9
	73° 10'	303	4.03	9
	72° 45'	377	4.03	9
	73° 40	436	4.03	9
S.W. Cor House ①	57° 00'	167	2.60	10.4[illegible]
S.W. Cor 4th House ②	67° 45'	396	2.57	10.4[illegible]
N.W. Cor. House ③	26° 00'	246		

7-25-50

(245x57') BLDGS.



67° 23' 134530

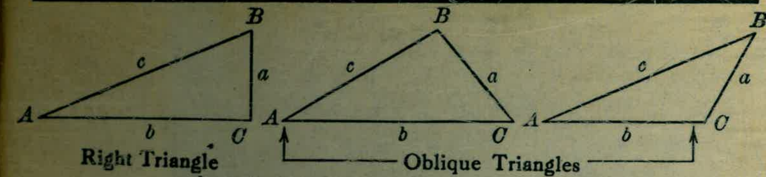
6722 45
134 45 30

N 83° 57' 30" W 175+80
630.2'
N 76° 20' 30" W
375' 178+00

300

5.55 8.15
4.88
13.03

TRIGONOMETRIC FORMULÆ



Solution of Right Triangles

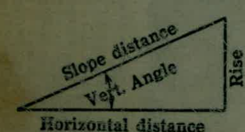
For Angle A. $\sin = \frac{a}{c}$, $\cos = \frac{b}{c}$, $\tan = \frac{a}{b}$, $\cot = \frac{b}{a}$, $\sec = \frac{c}{b}$, $\operatorname{cosec} = \frac{c}{a}$

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	$s = \frac{a+b+c}{2}$, $\sin\frac{1}{2}A = \sqrt{\frac{(s-b)(s-c)}{b\,c}}$, $\sin\frac{1}{2}B = \sqrt{\frac{(s-a)(s-c)}{a\,c}}$, $C = 180° - (A+B)$
a, b, c	Area	$s = \frac{a+b+c}{2}$, area $= \sqrt{s(s-a)(s-b)(s-c)}$
A, b, c	Area	area $= \frac{b\,c \sin A}{2}$
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.