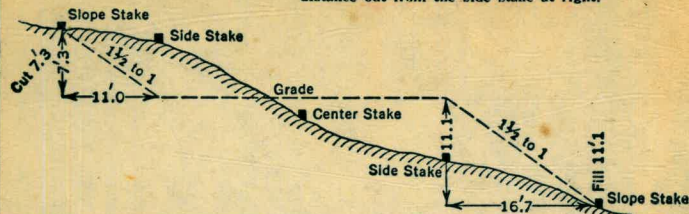


MISSION BAY

58

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.



B OK 58

131 + 77.68

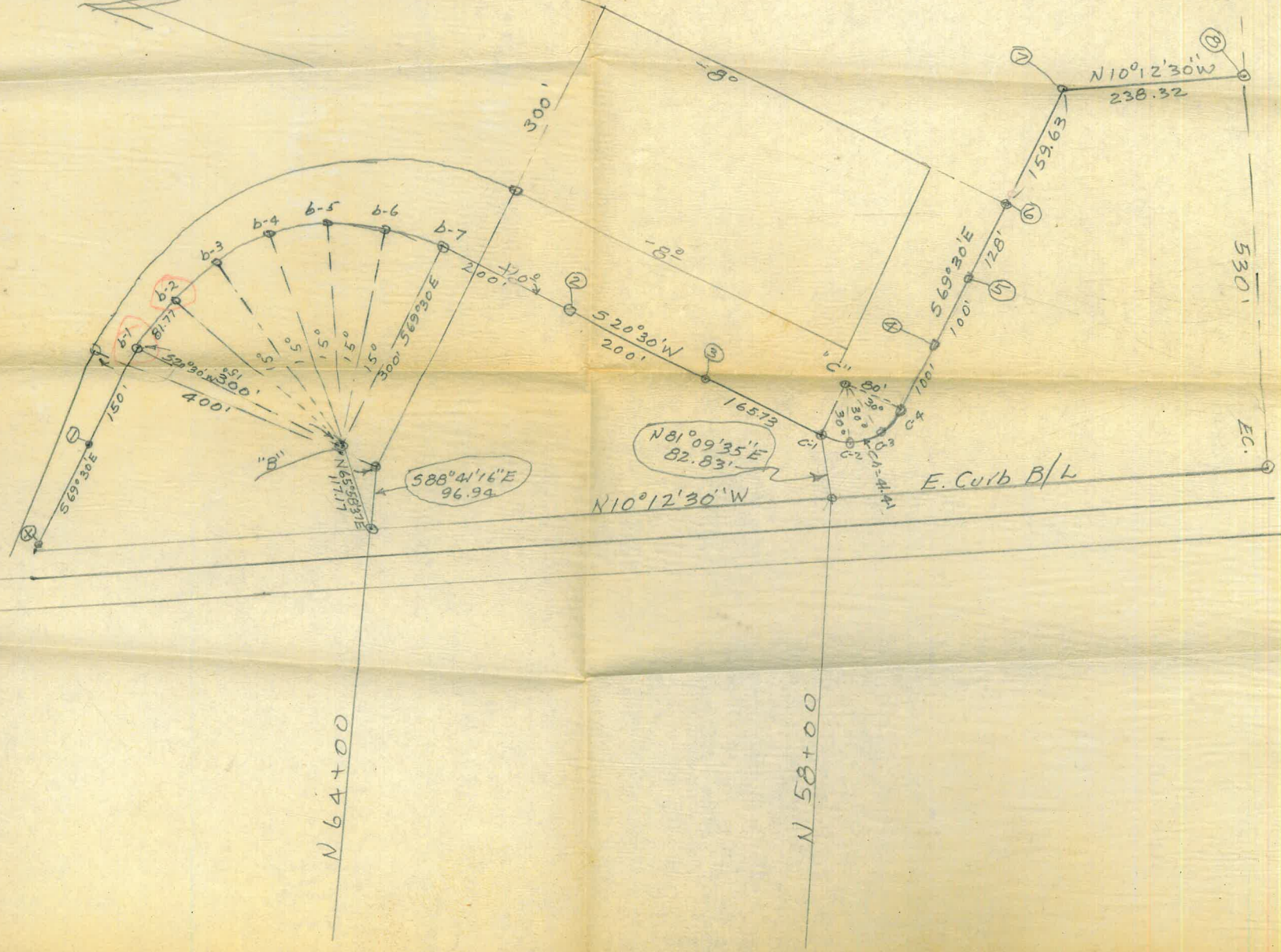
22.32

Cut or Fill	Distance out from Side or Shoulder Stake									Cut or Fill	
	0	.1	.2	.3	.4	.5	.6	.7	.8		.9
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	33.8	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

MICROFILMED

JAN 7 1965

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



INDEX

Page		Date
	Baseline Layout Proj. #16	Aug. 8-50
3	East Curb	8-10-50
13-21	X Sections of Area East of Midway Drive Sta 38+00 to 44+00	
22-26	Soundings Proj. #16	8-14-50
26	73+00 - 75+00 N.	
26-38	Soundings Proj. #16	8-15-50
	76+00 - 78+00	
39- 41 47	X-Sections Proj. #16	8-22-23-50
	E Curb B/L.	41-58 8-28-50

BASELINE LAYOUT EAST
CURB MIDWAY PROJ N° 16

BASELINE PROJ N^o 16 CONTD.

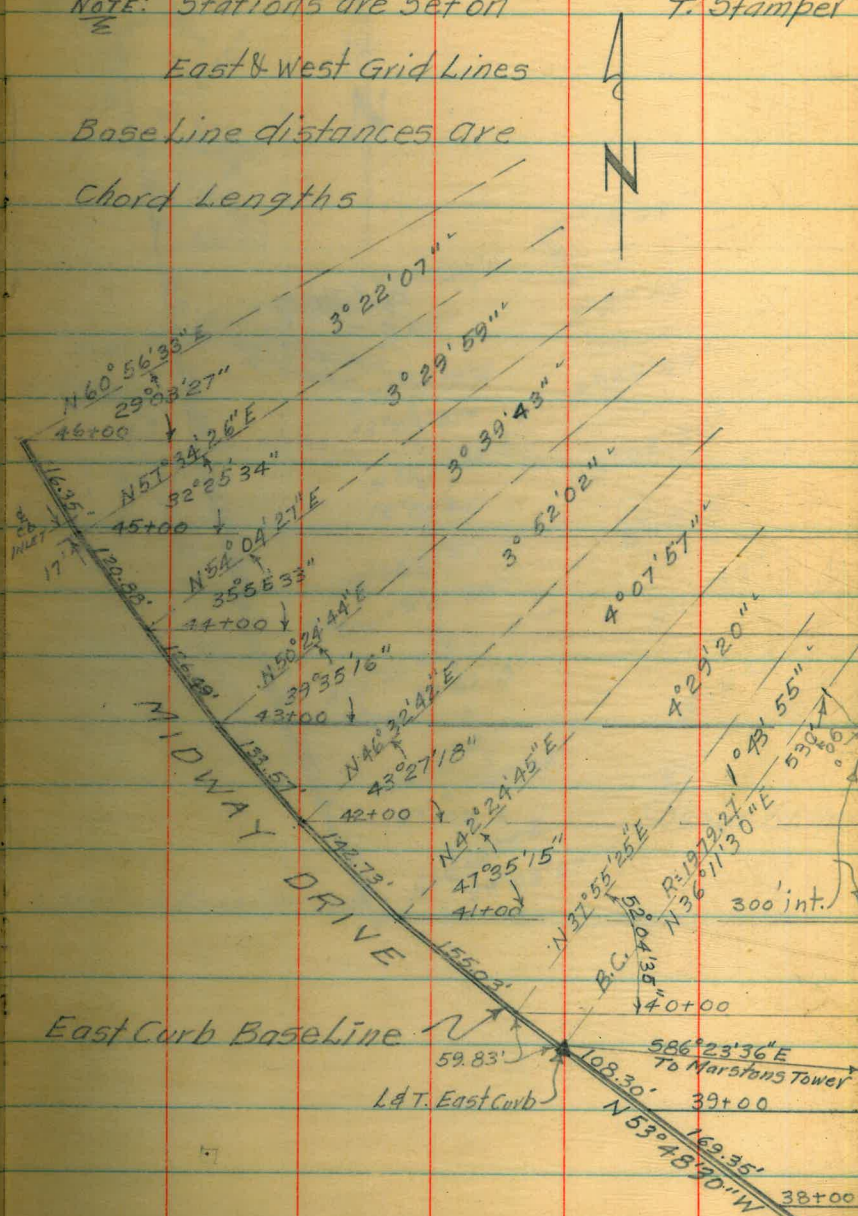
Aug 8, 1950

(2)

STA	DEF L	CHORD
B.C. 39+63.95	RT	0
40+00	0° 51' 58"	59.83
41+00	3° 06' 38"	155.03
42+00	5° 10' 36"	142.73
43+00	7° 06' 37"	133.57
44+00	8° 56' 28"	126.49
45+00	10° 41' 28"	120.88
46+00	12° 22' 32"	116.35
47+00	14° 00' 22"	112.66
48+00	15° 35' 36"	109.64
49+00	17° 08' 41"	107.17
50+00	18° 40' 00"	105.14
51+00	20° 09' 55"	103.52
52+00	21° 38' 43"	102.24
E.C. 52+10.53	21° 48' 00"	10.70

NOTE: Stations are set on
East & West Grid Lines
Base Line distances are
Chord Lengths

T. Stampler



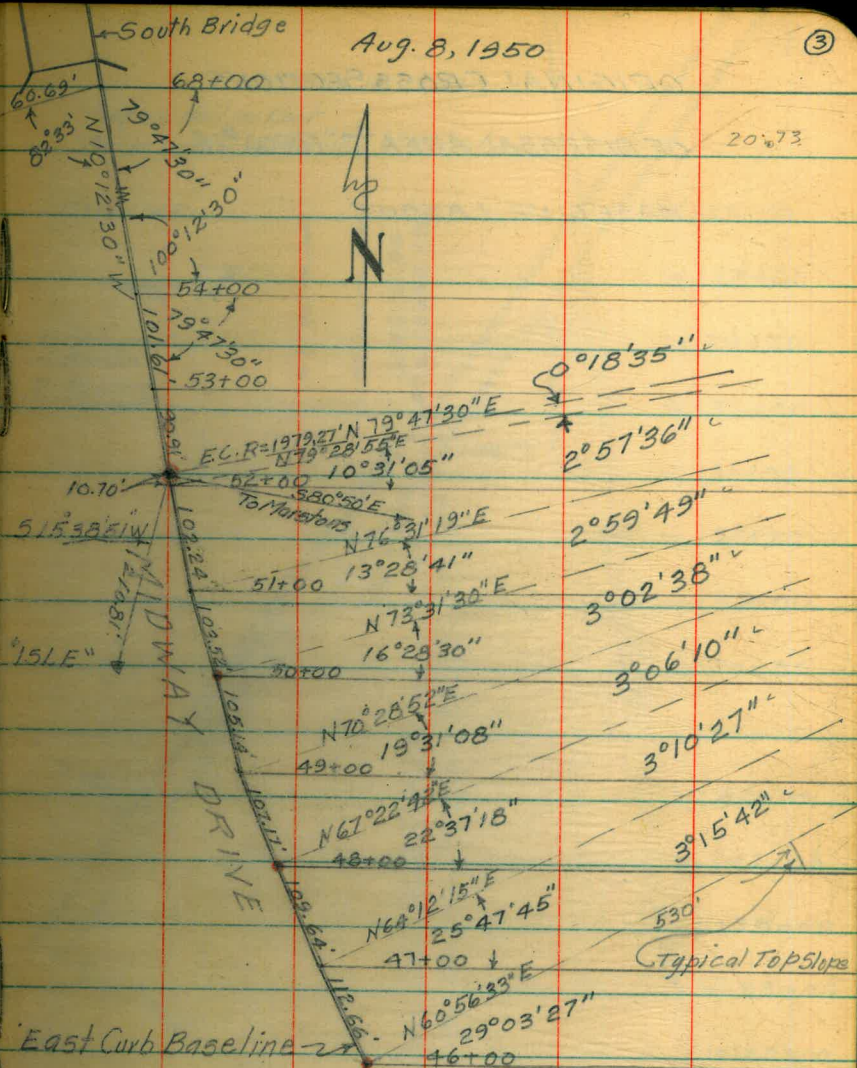
BASELINE PROJ N° 16 CONTD.

Aug. 8, 1950

Elev. N.H.

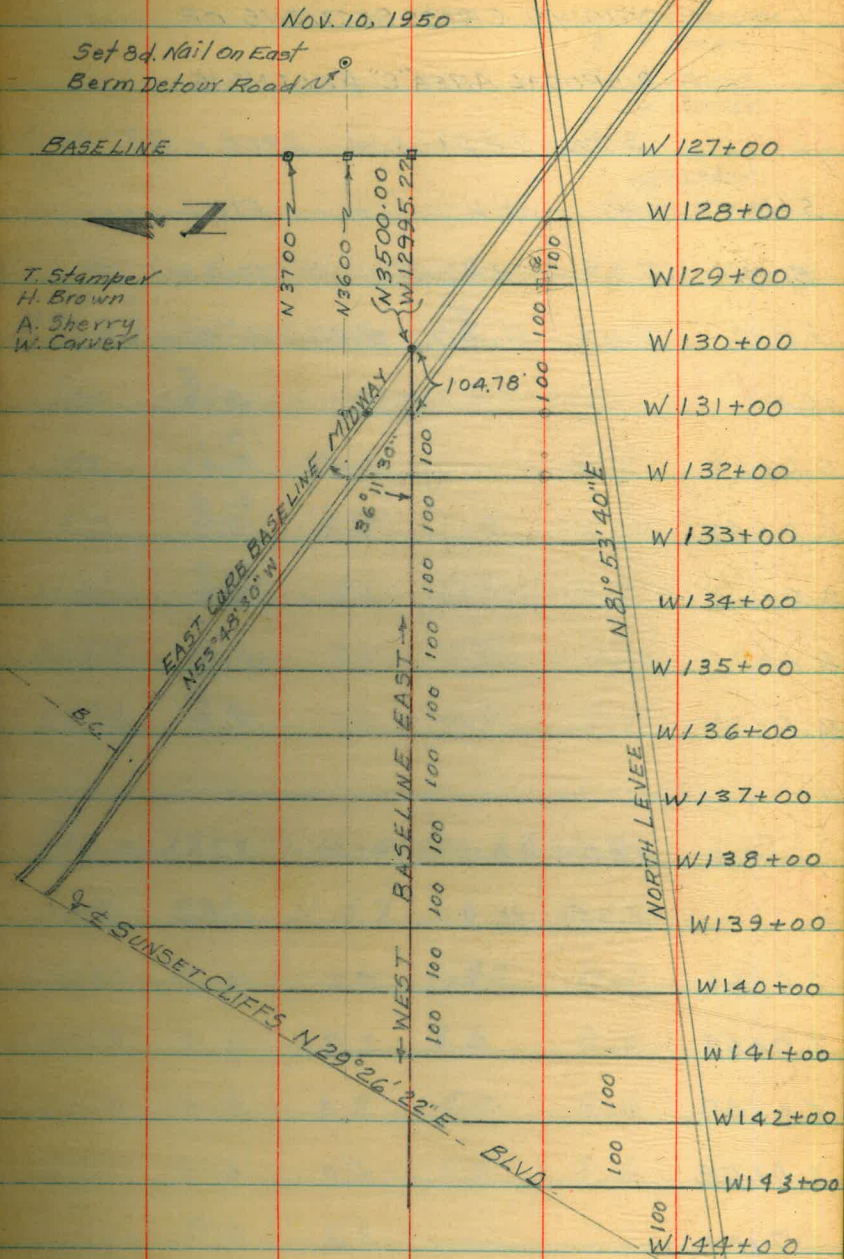
LAT. \square

20.73



ORIGINAL CROSS SECTIONS
OF DISPOSAL AREA "C" PROJ #16

BASELINE LAYOUT



ORIGINAL CROSS SECTIONS OF
DISPOSAL AREA "C" PROJ. NO. 16

PX Sta 129+00 W 0+00 = 33+00 N

Sta	+ H.I.	- Elev.
B.M.	1.69 12.43	10.74
T.B.M.	5.03 11. ⁵ 89	5.87 6.56
-0+00		5.1 6. ⁵ 8
S. 0+63		1.5 10.1
S. 0+47		5.2 6.4
S. 0+19		5.2 5.9
N. 0+30		0.9 6.4
N. 0+22		5.1 7
		5.8 10.2
		5.8 5

Sta 130+00 W 0+00 = 33+00 N

PX

	5.35 11.91	6.56	Hub.
S. 0+66		0.2 11.7	
S. 0+63		2.2 9.7	
S. 0+49		3.4 8.5	
S. 0+28		5.0 6.9	
0+00		5.2 6.7	

Nov. 10, 1950

(5)
T. Stamper
H. Brown
A. Sherry
W. Carver

Weather
Fair - Warm

Conc. Nail S.W. Cor. 12" H₂O Main Valve Vault E. Side Midway

at North End of Detour Rd.

Sta 130+00 W 0+00 = 33+00 N

PX

Sta	+ H.I.	- Elev.
N. 1+10	11.91 1.3	10.6
N. 1+01		5.9 6.0
N. 0+65		5.2 6.7
N. 0+34		4.9 7.0

Sta 131+00 W 0+00 = 33+00 N

	5.01 11.57	6.56
S. 0+43		.40 11.2
S. 0+18		3.6 8.0
S. 0+16		5.0 6.6
0+00		5.0 6.6

11-10-50

⑥

Sta 131+00 W 33+00 N Cont.

Sta 132+00 W 0+00 = 33+00 N "Cont"

PX	+	HI	-	Elev
N. 0+21		11.57	4.6	7.0
N. 0+67		11.57	5.2	6.4
N. 1+19			5.8	5.8
N. 1+55			5.6	6.0
N. 1+82			5.4	6.2
N. 1+94			1.0	10.6

Sta	+	HI	-	Elev	PX
N. 1+62		11.0	5.2	5.8	
N. 0+90			5.2	5.8	
N. 0+37			3.8	7.2	
0+00			4.6	6.4	
S. 0+07			4.4	6.6	
S. 0+31			0.9	10.1	

11-13-50

Pt Sta 132+00 00+00 = 33+00 N

Sta 133+00 0+00 = 36+00 N

Sta	+	HI	-	Elev
	4.54	11.00		6.56
N. 2+70			1.1	9.9
N. 2+61			4.3	6.7
N. 2+40			5.0	6.0
N. 2+18			6.0	5.0
N. 2+12			7.3	3.7
N. 2+08			8.7	2.3
N. 1+99			9.8	1.2
N. 1+85			8.6	2.5
N. 1+80			7.3	3.8

Sta	+	HI	-	Elev
B.M.	0.52	11.26		10.74
N. 0+53			0.6	10.6
N. 0+43			5.0	6.3
N. 0+25			5.2	6.1
0+00			5.1	6.2
S. 0+25			5.1	6.2
S. 0+50			4.9	6.4
S. 0+68			5.0	6.3
S. 0+93			6.6	4.7
S. 1+14			7.4	3.9
S. 1+22			8.8	2.5

conc Nail
H₂O velt

PX

Sta 133+00 w (Cont)

Sta	+	H ₁	-	Elev
S 1+37		11.26	9.0	2.3
S 1+46			7.4	3.9
S-1+49			5.5	5.8
S-1+70			5.2	6.1
S-2+20			5.4	5.9
S-2+73			4.6	6.7
S-3+28			4.6	6.7
S-3+57			4.6	6.7
S-3+63			0.3	11.0
TP			5.50	5.76

2x2 Hrb
Sta { W 133+00
N 36+00

Sta 134+00 w 36+00 N

Sta	+	H ₁	-	Elev
TP	4.96	10.72		5.76
S 3+51			0.5	10.2
S 3+47			4.0	6.7
S 2+92			4.2	6.1
S 2+81			6.9	3.8
S 2+66			7.7	3.0

W 135+00
N 36+00

Sta 134+00 w (Cont)

Sta	+	H ₁	-	Elev
S 2+39		10.72	7.9	2.8
S 2+22			6.9	3.8
S 1+90			6.3	4.4
S 1+74			7.0	3.7
S 1+67			8.4	2.3
S 1+60			9.0	1.7
S 1+25			8.9	1.8
S 1+15			6.9	3.8
S 1+07			5.7	5.0
S 1+04			4.5	6.2
S 0+56			4.7	6.0

0+00

N 0+50

N 0+90

N 1+15

N 1+22

PX

Sta	H1	Elev
B.M.	5.06	10.82
S ^N 2+00	0.7	10.1
S N 1+90	4.8	6.0
S N 1+39	5.2	5.6
S N 0+71	5.1	5.7
S N 0+34	5.1	5.7
S 0+00	5.1	5.7
S 50+50	5.2	5.6
S 1+01	4.9	5.9
S 1+46	5.1	5.7
S 1+54	5.9	4.9
S 1+70	5.9	4.9
S 1+75	5.5	5.3
S 2+32	4.8	6.0
S 2+42	4.7	6.1
S 2+23	3.7	7.1
S 3+50	1.4	9.4
S 3+60	0.0	10.8

135+00
36+00

10-13-50 (B)

Sta	H1	Elev
B.M.	3.96	5.76
S-4+00	9.72	-0.8
S-3+8		0.2
S-3+46		1.8
S-2+91		3.5
S-2+45		3.9
S-2+00		3.9
S-1+50		4.0
S-1+07		4.0
S-0+62		4.3
S-0+20		4.2
0+00		4.7
N 0+44		4.1
N 0+90		4.2
N 1+41		4.3
N 1+89		4.1
N 2+37		3.3
N 2+68		2.7
N 2+71		0.3

H1 b
Sta W 135+00
N-3600

PX

10-13-40

Sta W137+00 N 36+00

10-13-50

Sta W138+00 N 36+00

PX (9)

Sta	+ HI	-	Elev
B.M.	4.32	10.08	5.76
S.N. 3+46		-0.73	10.8
S.N. 2+96		0.8	9.3
S.N. 2+41		2.3	7.8
S.N. 1+63		4.4	5.7
S.N. 1+15		4.5	5.6
N 0+68		4.5	5.6
0+00		4.7	5.4
S. 0+50		4.6	5.5
S. 1+03		4.4	5.7
S. 1+58		4.5	5.6
S. 2+54		4.5	5.6
S. 3+11		4.1	6.0
S. 3+63		2.6	7.5
S. 3+81		2.1	8.0
S. 3+90		-1.5	11.6
T.P.		3.91	6.17

2x2 Hub
Sta W. 137
N 362x2 Hub
139+00
36+00 N

Sta	+ HI	-	Elev
B.M.	4.14	10.31	6.17
S. 4+28		-2.07	12.4
S. 4+20		1.2	9.1
S. 3+80		3.2	7.1
S. 3+22		4.3	6.0
S. 2+88		5.0	5.3
S. 2+60		4.8	5.5
S. 2+00		4.8	5.5
S. 1+42		4.8	5.5
S. 0+89		5.0	5.3
0+49		4.8	5.5
0+00		5.0	5.3
N 0+51		4.9	5.4
N 1+03		4.0	6.3
N 1+60		3.1	7.2
N 2+29		1.7	8.6
N 2+86		-1.32	11.6

2x2 Hub
139+00 W
36+00 N

PX

Sta. W. 139+00 N 36+00

Sta	+	H.I.	-	Elev
B.M.	4.06	10.23		6.17
N 1+87			-0.7	10.9
N 1+40			0.8	9.4
N 0+75			2.8	7.4
N 0+18			4.2	6.0
0+00			4.8	5.4
S-0+70			5.0	5.2
S-1+20			5.1	5.1
S-1+73			4.8	5.4
S-2+31			4.8	5.4
S-2+95			4.7	5.5
S-3+59			4.3	5.9
S-4+04			3.2	7.0
S-4+38			3.0	7.2
S-4+50			0.2	10.0

11-13-50

Sta. W. 140+00 N 36+00

(10)

PX

Sta.	+	H.I.	-	Elev.
B.M.	6.10	12.27		6.17
S-4+60			1.4	10.9
S-4+50			2.8	9.5
S-4+47			4.5	7.8
S-3+92			5.3	7.0
S-3+40			6.6	5.7
S-2+82			6.8	5.5
S-2+08			6.8	5.5
S-1+67			7.6	4.7
S-1+31			7.1	5.2
S-1+18			6.6	5.7
S-0+50			5.8	6.5
0+00			5.3	7.0
S-0+16			1.4	7.9
S-0+94			2.1	10.2
S-1+20			1.0	11.3

2x2 Hub
W 139+00
N 36+002x2 Hub
W 139+00
N 36+00

11-13-50

(1)

PX STA. 141+00 w - 0+00 = N 36+00

Sta 142+00 w - 0+00 = N 33+00

STA.	+	H.I.	-	Elev.
BM	9.31	15.48		6.17
0+00			4.6	10.9
S-0+43			6.1	9.4
S-1+00			7.8	7.7
S-1+63			9.2	6.3
S-2+48			9.8	5.7
S-3+00			10.2	5.3
S-3+61			9.3	6.2
S-4+35			7.0	8.5
S-4+50			5.0	10.5
S-4+57			2.8	12.7
T.P.			5.82	9.66

2x2 hub
W 139
N 36

2x2 hub

STA.	+	H.I.	-	Elev.
T.P.	2.44	12.10		9.66
S-1+73			0.4	11.7
S-1+67			3.1	9.0
S-1+16			5.2	6.9
S-0+65			5.7	6.4
0+00			5.0	7.1
0+50			4.1	8.0
1+14			1.8	10.3
1+32			1.3	10.8
1+40			0.2	11.9

PX
2x2 HUB

STA 143+00W 0+00-N33+00

STA	+	H.I.	-	Elev
T.P.	6.72	16.45		9.66
0+00			5.3	11.2
S-0+39			5.0	11.5
S-0+55			6.5	10.0
S-1+16			6.7	9.8
S-1+77			6.6	9.9
S-1+88			5.2	11.3
S-1+92			3.0	13.5
TP			5.15	11.30

11-13-60

STA 143+75 W 0+00-N33+00 (12)

STA	+	H.I.	-	Elev
T.P.	1.64	12.94		11.30
S-2+02			(1.4)	0.4 12.5
S-1+95			2.5	1.6 11.3
S-1+75			(0.6)	-0.3 13.2
S-1+20			(0.6)	-0.3 13.2
S-0+61			2.6	10.3
0+00			4.8	8.1

X-SECTIONS OF AREA EAST OF MIDWAY

8-10-50

BARRAGAN
SHERRY
BROWN
CARVER

13

Sta 38+00 - N

DRIVE - PROJECT NO 16

STA	+	H.I.	-	ELEV
B.M.	4.09	14.85		10.76
T.P.	1:09	11.44	4.50	10.35

COND. MAP
COR. 13' MAIN
W. 1/2 1/2 FAULT
@ DISTANCE
2 1/2" x 1 1/2" B
OF DETACH
STA-37+00

Sta	+	H.I.	-	Elev
		11.44		
W 485			5.6	5.8
W 430			5.5	5.9
W 380			5.3	6.1
W 364			4.6	4.8
W 356			5.6	5.8

STA - 38+00 NORTH

0+00 = STA - (38+00N) SECT. EAST & WEST

STA + H.I. - ELEV

W 686		11.44	1.6	9.8
W 683			2.0	9.4
W 668			5.5	5.9
W 620			5.7	5.7
W 560			5.5	5.9
W 550			8.2	3.2
W 535			8.5	2.9
W 531			5.3	6.1

W 395			5.3	6.1
W 358			5.4	6.0
W 205			5.3	6.1
W 155			5.2	6.2
W 100			5.4	6.0
W 050			5.2	6.2
W 0+28			5.2	6.2
W 0+27			6.6	4.8
W 0+15			6.4	5.0
W 0+12			5.5	5.9
0+00			5.1	6.3
E 0+43			5.6	5.8
E 0+50			5.9	5.5

Sta. 38+00 Cont

Sta	t	M1	-	Elev
		11.44		
E0+70			5.7	5.7
E1+30			5.6	5.8
E1+95			5.3	6.1
E2+45			5.1	6.3
E2+95			5.0	6.4
E3+50			4.8	6.6
E3+90			4.6	6.8

Sta. 39+00 - N

PX 8-1050 (19)

Sta	t	M1	-	Elev	
0+00					127+00W Sta 39+00N
T.P.	0.69	11.04		10.35	2x2 Hub 8937100N
E 422				4.5	6.5
E 375				4.4	6.6
E 328				4.6	6.7
E 280				4.7	6.3
E 230				4.5	6.5
E 180				4.5	6.5
E 130				4.5	6.5
E 80				4.6	6.4
E 30				4.7	6.3
E 00				4.8	6.2
E 0+50				5.0	6.0
E 1+00				5.1	5.9
E 1+50				5.0	6.0
E 2+05				5.0	6.0
E 2+50				5.0	6.0
E 3+00				5.0	6.0

Sta 39+00-N

PX

Sta 40+00-N

8-10-50. (15)

Sta	T	H	-	Elev
		11.04		
W 355			5.0	6.0
W 415			5.3	5.7
W 460			5.2	5.8
W 465			7.2	3.8
W 470			5.2	6.8
W 520			5.6	6.4
W 580			5.5	5.5
W 590			8.4	2.6
W 590			8.0	3.0
W 615			5.1	5.9
W 675			5.2	5.8
(SET)				
T.P.	4.86	11.04	4.86	6.18
0+00 = Sta-39+00-N On East Ch. Midway				
	4.46	15.60		11.14
0+00			4.6	11.0
E0+15			5.2	10.4
E0+26			9.6	6.0
E0+80			10.1	5.5
E1+30			10.2	5.4
E1+60			10.0	5.6
E1+64			11.2	4.4
E1+69			9.8	5.8
E2+25			9.6	6.0
E2+31			10.9	4.7
E.2+40			11.9	3.7

Hub.

8-11-58

CHISEL SQ W/2
MIDWAY DR. 15'
15' N/END P.O.Elev
2.0
2.0
13.4
-
E 246

0+00 Sta 40+00 - 12700 W

PX

Sta	T	H	-	Elev
J.P.	4.86	11.04	1	6.18
W 720			8.4	2.7
W 713			6.8	4.2
W 709			5.4	5.6
W 660			5.2	5.8
W 600			5.5	5.5
W 555			6.0	5.0
W 551			7.1	3.9
W 549			5.9	5.2
W 547			5.6	5.4
W 500			5.4	5.6
W 450			5.2	5.8
W 400			5.4	5.6
W 340			5.2	5.8
W 290			5.1	5.9
W 230			5.0	6.0
W 180			5.0	6.0

Sta 40+00 Cont.

V

Sta 40+00-N

PX

①

Sta	Ht	I	Elev	Sta	Ht	I	Elev
	11.04			E 594	11.04	4.8	6.2
W 125	11.04	5.0	6.0	E 670		4.6	6.4
W 0+70		5.0	6.0	E 720		4.2	6.8
0+00		4.9	6.1	E 770		4.1	6.9
E 0+50		4.8	6.2	E 820		4.1	6.9
E 105		4.8	6.2	E 885		4.1	6.9
E 156		4.8	6.2	E 930		4.2	6.8
E 210		4.7	6.3	E 975		4.0	7.0
E 265		4.6	6.4	E 1030		4.1	6.9
E 320		4.5	6.5	SECTION EAST FROM EAST CURB 2 1/2			
E 376		4.2	6.8	0+00	Sta 40+00-N	E. CURB	TB/11
E 425		4.2	6.8	T.P	4.4	15.61	11.15
E 480		4.5	6.5	E 245		14.0	1.6
E 525		4.6	6.4	E 290		12.5	3.1
E 565		4.4	6.4	E 228		10.0	5.6
E 575		3.2	7.8	E 190		10.2	5.4
E 580		1.8	9.8	E 135		10.0	5.6
E 588		3.5	7.5	E 0+80		10.2	5.4
				E 0+30		10.0	5.6
				E 0+21		7.4	8.8
				E 0+10		5.2	10.4
				E 0+00		5.0	10.6

8-11-50

"BOX" ON E/SB
NEAR I.C.
MIDWAY DRIVE

8-10-50

Sta 41+00

PX

8-10-50

Sta 41+00

PX (3)

0+00 = Sta 41+00^N - 127.00 W

Sta + HI - Elev

Sta + HI - Elev

Hub
10' E of
Sta 41+00

T.P. 4.99 11.17

6.18

E 425

4.6 6.6

E 367

4.9 6.1

E 1050 4.0 7.2

E 311

5.0 6.2

E 1000 4.1 7.1

E 260

4.9 6.3

E 950 4.0 7.2

E 202

5.1 6.1

E 900 4.1 7.1

E 148

4.8 6.4

E 850 4.4 6.8

E 0+95

4.8 6.4

E 800 4.5 6.7

E 0+90

5.0 6.2

E 740 4.5 6.7

E 0+80

5.0 6.2

E 700 4.5 6.7

E 0+70

5.2 6.0

E 650 4.3 6.9

E 0+60

5.3 6.9

E 600 4.3 6.9

E 0+50

5.5 5.7

E 545 4.5 6.7

E 0+40

5.6 5.6

E 495 4.5 6.7

E 0+30

5.7 5.5

E 465 4.6 6.6

E 0+20

6.2 5.0

E 455 3.8 6.4

E 0+22

7.1 4.1

E 447 2.1 9.1

E 0+30

6.1 5.1

E 445 3.5 7.7

E 0+44

5.2 6.0

E 0+29

5.3 5.9

STA 41+00 - N

PT

STA 42+00 - N

PT

STA	+	H.I.	-	ELEV
W-6+90		11.2	5.4	5.8
W-7+40			5.4	5.8
W-7+45			8.0	3.2
W-				

1097

STA	+	H.I.	-	ELEV
TP	5.03	11.21		6.18
W-7+40			8.5	2.7
W-7+30			6.1	5.1
W-7+25			7.0	4.2
W-7+07			5.5	5.7
W-6+55			5.5	5.7
W-6+00			5.9	5.3
W-6+35			5.6	5.6
W-6+30			3.8	5.4
W-6+60			6.6	4.6
W-6+22			5.6	5.6
W-6+20			5.5	5.7
W-6+12			5.3	5.9
W-6+22			5.2	6.0
W-6+12			5.1	6.1
W-6+00			4.8	6.4
E-0+93			5.0	6.2
E-1+01			4.7	6.5
E-2+30			7.8	6.4

16' E/STA-91400
(N-91400)
(W-927400)

8-10-50
 128
 PX
 4.54 (19)

STA 42+00-N

PX

Sta 43+00 N

STA	+	H.I.	-	ELEV
E-2+95		11.2	4.5	6.7
E-3+20			3.5	7.7
E-3+37			4.8	6.4
E-4+36			4.9	6.3
F-5+31			4.6	6.6
E-6+28			4.5	6.7
E-7+40			4.6	6.6
F-8+43			4.6	6.6
F-9+30			4.3	6.9
E-10+22			4.4	6.8
E-11+15			4.5	6.7

1200'

Sta	+	H.I.	-	Elev
BM	4.54	10.72		6.18
E 12+35			4.3	6.4
E 11+30			3.8	6.9
E 10+30			3.8	6.9
F 9+40			3.9	6.8
E 8+30			3.8	6.9
E 7+35			3.7	7.0
E 6+20			4.1	6.6
F 5+20			4.2	6.5
E 4+20			4.3	6.4
E 3+52			4.6	6.1
E 3+35			2.3	6.4
E 3+20			4.1	6.6
F 2+43			4.3	6.4
F 1+55			4.1	6.6
E 1+00			3.9	6.8
E 0+55			4.6	6.1
E 0+50			5.4	5.3
E 0+48			4.6	6.1

10 ft East
 Sta 41+00 N

8-10-54

PX
8-14-54 (20)

Sta 43+00

PX

Sta 43+00

Sta	+	H _i	-	Elev
E 0+33		10.72	3.9	6.8
E 0+09			4.0	6.7
0+00			4.9	5.8
W 0+10			4.9	5.8
W 0+16			3.5	7.2
W 0+23			4.1	6.6
W 0+30			3.7	7.0
W 0+58			4.8	5.9
W 0+75			5.1	5.6
W 1+20			4.5	6.2
W 1+74			4.5	6.2
W 2+30			4.7	6.0
W 2+80			4.7	6.0
W 3+40			4.8	5.9
W 3+95			4.9	5.8
W 4+50			4.9	5.8
W 5+10			5.2	5.5
W 5+65			5.1	5.6

Sta	+	H _i	-	Elev
W 6+20		10.72	5.3	5.4
W 6+75			4.9	5.8
W 6+85			5.2	5.5
W 6+93			6.4	4.3
W 6+99			5.3	5.4
W 7+20			5.2	5.5
W 7+25			7.5	3.2

Sta 44+00 N

8-10-50

PX
8-14-50

(21)

Sta	+	H _i	-	Elev
BM	4.74	10.92		6.18
W 7+70			8.2	2.7
W 7+66			5.8	5.1
W 7+10			5.6	5.3
W 7+05				
W 7+02			6.3	4.6
W 6+97			5.5	5.4
W 6+35			5.3	5.6
W 5+85			5.2	5.7
W 5+25			4.9	6.0
W 4+70			4.8	6.1
W 4+10			4.8	6.1
W 3+55			4.8	6.1
W 3+00			4.7	6.2
W 2+30			4.6	6.3
W 1+70			4.4	6.5
W 1+10			4.6	6.3
W 0+55			4.7	6.4
0+00			5.1	5.8

2x2 10' 5"
Sta 4+00

PX
SOUNDINGS MISSION BAY PROJ #16

STA - 75+00-N

0+00 = STA - ^(19+00W) { 25+00N } : SOUND DUE WEST & EAST

Dist	SOUND		DIST	SOUND		Dist	SOUND		Dist	SOUND	Elev.
0+00	3.2	+1.0	+60	11.1	6.9	+70	5.2	(4.2) +1.0	5+00	9.1	4.9
+10	5.0	0.8	+70	11.1	6.9	+40	3.4	+0.8	+10	10.0	5.8
+20	5.3	1.1	+80	11.1	6.9	+50	3.6	+0.6	+20	10.0	5.8
+30	5.9	1.7	+90	11.1	6.9	+60	4.0	+0.2	+30	10.4	6.2
+40	6.0	1.8	2+00	11.0	6.8	+70	3.7	+0.5	+40	10.8	6.6
+50	7.0	2.8	+10	10.3	6.1	+80	3.9	+0.3	+50	11.1	6.9
+60	7.6	3.4	+20	9.2	5.0	+90	3.8	+0.4	+60	11.5	7.3
+70	8.1	3.9	+30	8.3	4.1	4+00	4.0	+0.2	+70	12.0	7.8
+80	8.5	4.3	+40	7.1	2.9	+10	4.9	0.7	+80	11.9	7.7
+90	8.8	4.6	+50	6.0	1.8	+20	5.5	1.3	+90	11.7	7.5
1+00	9.0	4.8	+60	5.2	1.0	+30	6.8	2.6	6+00	12.4	8.2
+10	9.4	5.2	+70	4.0	+0.2	+40	7.9	3.7	+10	12.3	8.1
+20	9.9	5.7	+80	3.7	+0.5	+50	9.1	4.9	+20	12.2	8.0
+30	10.1	5.9	+90	3.5	+0.1	+60	9.6	5.4	+30	12.0	7.8
+40	10.3	6.1	3+00	3.5	+0.7	+70	9.1	4.9	+40	12.0	7.8
+50	11.0	6.8	+10	3.4	+0.8	+80	9.2	5.0	+50	11.7	7.5
			+20	3.4	+0.8	+90	8.9	4.7	+60	11.1	6.9

PX

Sta. 75+00 N

(22)

T. Stamper
C. Barragan
A. Sherry
W. Carver

PX

8-14-50

Sta. 75400N

Dist.	Sound	Dist.	Sound
+70	10.9	6.6	18.5
(4.3) +80	10.5	6.3	19.5
+90	10.1	5.8	17.8
10:34 +100	9.9	5.6	Sound East
+10	9.9	5.6	+110 3.0
+20	9.8	5.5	+120 2.8
+30	9.7	5.4	+130 1.8
+40	9.7	5.4	+142 0.0
+50	9.6	5.3	
+60	9.4	5.1	
+70	8.7	4.4	
+80	10.2	5.9	
+90	12.2	5.9	
(4.3) 10:35 +100	13.9	9.6	
+10	16.0	11.7	
+20	17.7	12.9	
+30	19.5	15.2	

PX

(23)

Sta. 74100N.

0+100 = Sta. (190100 W)
74100N) Sound West.

Dist.	Sound	Dist.	Sound
0+100	?		13.0
10:40 (4.5) +56	0.0	+4.5	13.0
+40	1.0	+3.5	13.1
+50	2.0	+2.5	13.0
	2.8	+1.7	12.8
	4.0	+0.5	12.8
	4.4	+0.1	+50 12.0
	4.8	0.3	11.3
1+100	4.8	0.3	10.4
	5.5	1.0	10.0
	6.5	2.0	9.2
	7.4	2.9	3+100 8.2
	9.1	4.6	7.4
+50	10.3	5.8	6.0
	11.7	7.2	5.0
	12.2	7.7	4.3
	12.9	8.4	+50 4.1

PX

Sta. 74+00 N 8-14-50

0+100 = Sta. ^{(100+000) ?} { 74+00 N } Sound West

Dist.	Sound	Dist.	Sound
	4.1 +0.4	9.1	4.6
	4.1 +0.4	+56 9.3	4.8
	4.2 +0.3	9.6	5.1
	4.0 +0.5	(4.5) 9.9	5.4
10:55 +100 (4.5)	4.1 +0.4	10.2	5.7
	4.2 +0.3	10.7	6.2
	4.1 +0.4	6+00 10.5	6.0
	4.0 +0.5	11.0	6.5
	4.1 +0.4	11.0	6.5
+50	5.1 0.6	11.4	6.9
	6.5 2.0	11.9	7.4
	7 3 4.7 2.2	10:58 +50 11.8	7.3
	7.0 2.5	11.8	7.3
		11.8	7.3
5+00	7.2 2.7	11.9	7.4
	7.2 2.7	(4.6) 10:59	6.6
	7.6 3.1	7+00 10.9	6.3
	8.3 3.8	10.7	5.4

PX

Sta. 74+00 N

0+100 = Sta. ^{(100+000) ?} { 74+00 N } Sound West.

Dist.	Sound
	10.0 5.4
	9.8 5.2
	9.7 5.1
+50	9.5 4.9
	9.5 4.9
	12.5 7.9
	15.1 10.5
	16.9 12.3
8+00	18.6 14.0
	20.0 15.4
	20.2 15.6
	20.4 15.8
	19.9 15.3
11:02 (4.6) +50	18.3 13.7

PX

8-14-50

Sta 73+00 N

0+00 = Sta ^(140+00 N) (73+00 N) Sound West

Dist	Sound	Elev.	Dist	Sound	Elev.
11:11 0+00 (46)	1.7	+2.9	3.0	1.6	
	1.8	+2.8	4.0	+0.6	
	2.0	+2.6	5.0	0.4	
	2.2	+2.4	2+00 7.0	2.4	
	1.5	+3.1	10.5	5.9	
+50	1.5	+3.1	11.7	7.1	
	1.5	+3.1	13.0	8.4	
	1.5	+3.1	13.0	8.4	
	1.7	+2.9	+50 13.4	8.8	
11:16 (46)	3.0	+1.6	13.9	9.1	
1+00	0.6	+4.0	14.1	9.5	
			14.0	9.4	
			13.8	9.2	
			3+00 13.3	8.7	
			13.2	8.6	
11:29 +50 (46)	0.4	+4.2	12.9	8.3	
	2.2	+2.4	12.6	8.0	

Sound

PX

8-14-50

Sta 73+00 N

Dist	Sound	Elev.	Dist	Sound	Elev.
3+40	11.7	7.1	⁵⁺¹⁰ 5+00	4.9	0.3
11:34 +50	11.0	6.4		4.8	0.2
	10.0	5.4		5.0	0.4
	9.1	4.5		5.3	0.7
	8.1	3.5	+50	5.9	1.3
	7.8	3.2	+50	6.3	1.7
4+00	6.4	1.8		7.4	2.8
4+00	5.8	1.2		7.0	2.4
	5.0	0.4		7.3	2.7
	4.8	0.2	6+00	8.0	3.4
	4.8	0.2	6+00		
50	4.4	+0.2		8.1	3.5
11:37 +50	4.5	+0.1		8.3	3.7
	4.3	+0.3		8.9	4.3
	4.3	+0.3		9.1	4.5
	4.8	0.2	+50	9.2	4.6
5+00	4.8	0.2	6+00	10.0	5.4

PX

8-14-50

Sta 73+00 N

Dist	Sound	
6770	10.3	5.7
	10.2	5.6
	10.0	5.4
11:40 7+00	10.1	5.5
	10.2	5.6
	10.0	5.4
(46) 11:40	10.0	5.4
	9.8	5.2
+50	9.6	5.0
	8.9	-4.3
	7.8	-3.2
	9.7	-5.1
	14.5	-9.9
8+00	17.9	-13.3
11:43 (46)	19.2	-14.6

Aug 15 1950

(26)

PX

8-15-50 Sta 76+00 N

0+00 Sta. ^{5+00+00W?} 76+00 N } Sound Due West # East.

Dist	Sound		Dist	Sound	
0+00	7.3	3.9		4.8	1.4
	—			3.7	0.7
8:38 (3.4)	8.2	4.8	2+00	2.9	+0.5
	8.6	5.2		2.1	+1.3
	8.9	5.5		2.0	+1.4
+50	8.9	5.5	(3.4)	2.1	+1.3
	8.9	5.5		2.5	+1.0
	9.0	5.6	9:42 +50	2.4	+1.1
	9.1	5.7	(3.5)	2.3	+1.2
	9.1	5.7		2.2	+1.3
1+00	9.3	5.9		2.4	+1.1
	9.3	5.9		2.5	+1.0
	9.4	6.0	3+00	2.5	+1.0
	9.2	5.8		2.4	+1.1
	8.5	5.1		2.4	+1.1
+50	7.9	4.5		2.5	+1.0
	6.9	3.5		3.0	+0.5
	5.6	2.2	+50	5.0	1.5

~~PX~~

8-15-50 Sta. 76+00 N Sound West

Dist.	Sound	Dist.	Sound
	6.8	3.3 +50	11.8
	6.9	3.4	12.1
	7.1	3.6	11.9
	7.9	4.4	11.8
4+00	8.1	4.6	11.1
	8.2	4.7 6+00	11.9
	8.6	5.1	11.5
	8.3	4.8 (3.6)	11.0
(3.5)	9.2	5.7	11.0
+50	9.7	6.2	11.3
(3.6)	9.8	6.2 +50	10.8
	9.6	6.0	9.9
	9.7	6.1	9.9
	9.9	6.3	9.8
9.45 5+00	10.8	7.2	9.6
	10.7	7.1 7+00	9.5
	11.1	7.5	9.1
	11.6	8.0 (3.6) 9.49	8.9
	11.8	8.2	8.8

~~PX~~

8-15-50 Sta. 76+00 N Sound West (27)

Dist.	Sound	Dist.	Sound
	9.0	5.4 10.00 1+00	2.4 +1.2
	9.0	5.4 +50	1.4 +2.2
	9.1	5.5	1.0 +2.6
	9.2	5.6 10.00	0.0 +3.6
	9.1	5.5 (3.6)	
	9.1	5.5	
8+00	6.0	2.4	
	3.8	0.2	
9.50 (3.6)	1.5	+2.1	
<u>Sound East</u>			
9.56 +10	7.0	3.4	
	7.0	3.4	
	7.0	3.4	
	6.8	3.2	
+50	6.1	2.5	
	5.2	1.6	
	4.2	0.6	
	3.8	0.2	
	3.0	+0.6	

8-15-50 ~~PX~~ Sta. 77+00 N

0+00 = Sta. ^{120+00W?} { 77+00 N } Sound Due West ~~East~~

Dist.	Sound	Dist.	Sound
0+00	8.9	4.8 ¹⁰	2.2 +1.9
^{10:20}			2.5 +1.6
<u>4.1</u> ^{west}	8.8	4.7 2+00	2.7 +1.4
<u>Sound</u>	9.0		2.6 +1.5
	8.8		2.6 +1.5 1+00
+50	8.1	4.0	2.5 +1.6
	7.9	3.8	2.5 +1.6
	7.7	3.6 +50	2.8 +1.3
	7.0	2.9	3.2 +0.9
	6.9	2.8	6.3 2.2 +50
1+00	6.2	2.1	5.9 1.8
	4.8	0.7	7.0 2.9
	3.3	10.8 3+00	7.7 3.6
	1.8	+2.3	7.6 3.5
	1.7	+2.4	7.0 2.9 5+00
+50	1.7	+2.4	6.9 2.7
	1.8	+2.3	8.0 3.9
	2.1	+2.0 +50	8.0 3.9

PX Sta. 77+00 N. 8-15-50

Sound West

Dist.	Sound	Dist.	Sound
<u>4.2</u>	8.0	3.8	4.2
	8.4	4.2 +50	12.7 8.5
	9.3	5.1	12.6 8.4
	9.1	4.9	11.8 7.6
	9.2	5.0	11.8 7.6
	9.2	5.0	11.6 7.4
	9.2	5.0	11.5 7.3
	10.1	5.9 6+00	11.5 7.3
	11.2	7.0	11.0 6.8
	11.9	7.7	10.8 6.6
	11.6	7.4	10.3 6.1
	12.0	7.8	10.0 5.8
	12.6	8.4 +50	9.8 5.6
	12.8	8.6	9.3 5.1
	13.1	8.9	9.0 4.8
	13.2	9.0	8.8 4.6
	13.1	8.9	8.1 3.9
	13.1	8.9 7+00	8.0 3.8
	12.7	8.5 7+10	8.0 3.8

8-15-50

8-15-50

Sound East (29)

PX		77+00 N				Sta 78+00 N				
Dist.	Sound		Dist.	Sound		Dist.	Sound		Dist.	Sound
7+20	5.0	0.7	9.5	5.0	0+00 = Sta					
	1.3	+3.0	+50 9.1	4.6		{190+00 W}				
(10:35)	0.5			4.3		{78+00 N}				
(4:37)+45	0.0	+3.8	8.8	4.4	(10:45)	5.5	1.0		9.3	4.8
+50		+4.3	8.9	4.4	(9.5)	6.0	1.5	2+00	8.7	4.2
			8.8	4.3		7.1	2.6		8.7	4.2
			8.0	3.5		7.7	3.2		8.8	4.3
			1+00 8.0	3.5	+50	7.7	3.2		9.9	5.4
			8.0	3.5		7.0	2.5		9.9	5.4
8+00			8.2	3.7		8.1	3.6	+50	8.0	3.5
			8.0	3.5		8.1	3.6		9.1	4.6
			8.9	4.4		8.3	3.8		8.0	3.5
			10:15 +50 8.3	3.8	1+00	8.3	3.8		7.7	3.2
			8.8	4.3		8.2	3.7		5.7	1.2
+50			8.1	3.6		8.1	3.6	3+00	3.3	+1.2
Sound East			7.0	2.5		8.4	3.9		2.8	+1.7
10:11 0+00	8.9	4.4	4.0	+0.5		8.2	3.7	(4.5)	2.0	+2.5
	9.3	4.8	2+00 2.4	+2.1	+50	8.6	4.1		1.7	+2.8
	8.8	4.3	1.9	+2.6		8.7	4.2	10:50	1.3	+3.2
	8.0	3.5	10:17 9.0	+3.5		9.0	4.5	+50	0.9	+3.6

PX Sound West Sta 78+00-N Sound West

Dist	Sound		Dist	Sound
0+00			5.2	0.6
+10	4.2	+0.3	2+00	6.1 1.5
10:55	2.8	+1.7		6.9 2.3
(4.5)	2.3	+2.2		6.8 2.2
(4.6)	2.3	+2.3		6.8 2.2
+50	2.3	+2.3		7.0 2.4
	2.3	+2.3	+50	7.0 2.4
	2.3	+2.3		7.1 2.5
	2.2	+2.4		7.7 3.1
	2.2	+2.4		7.9 3.3
1+00	2.1	+2.5		8.0 3.4
	2.4	+2.2	3+00	7.9 3.3
	2.6	+2.0		8.0 3.4
	2.9	+1.7		8.1 3.5
	3.3	+1.3	11:00	8.7 4.1
+50	3.4	+1.2		9.1 4.5
	3.8	+0.8	+50	9.8 5.2
	3.7	+0.9		9.9 5.3
	4.0	+0.6		10.1 5.5

PX 78+00-N

Dist	Sound	Dist	Sound
10.6	6.0	12.0	7.4
10.8	6.2	11.2	6.6
4+00	12.0	7.4	10.7 6.1
12.9	8.3	6+00	10.3 5.7
13.1	8.5		10.1 5.5
(4.6)	14.2	9.6	9.8 5.2
13.9	9.3		8.2 3.6
+50	13.9	9.3	5.0 0.4
14.8	10.2	+50	2.8 +1.8
13.6	9.0		2.1 +2.5
14.0	9.4	+70	0.0 +4.6
14.0	9.4		
14.0	9.4	(11:05)	(4.6)
14.0	9.4		
13.9	9.3		
14.3	9.7		
+50	13.8	9.2	
12.9	8.3		

8/17/50

PX Sound East

Sta 90+00 N

13000 W

Dist

Sound

Dist

Sound

11:30 PM

0+00

6.8

1.5

8.1

2.4

(5.3)

6.8

1.5

2+00

8.6

3.3

6.8

1.5

8.2

2.9

7.0

1.7

8.0

2.7

7.0

1.7

(5.3)

8.4

3.1

+50

7.0

1.7

(5.2)

8.9

3.7

7.0

1.7

+50

9.3

4.1

7.1

1.8

9.2

4.0

7.1

1.8

9.2

4.0

7.3

2.0

9.4

4.2

1+00

7.3

2.0

(1:35)

9.3

4.1

7.2

1.9

3+00

9.1

3.9

7.1

1.8

9.2

4.0

7.3

2.0

9.0

3.3

7.2

1.9

8.8

3.6

+50

7.1

1.8

8.9

3.7

7.2

1.9

+50

8.8

3.6

7.3

2.0

8.9

3.7

7.5

2.2

+10

9.3

4.1

Sound East

Sta 90+00 N

(31)

PX

Dist

Sound

Dist

Sound

+80

11.0

5.8

(5.2)

16.3

11.1

(5.2)

11.7

6.5

(1:39)

14.0

8.8

4+00

14.9

9.7

16.7

11.5

6+00

18.3

13.1

Sound west

19.9

14.7

0+00

(1:43 PM)

20.9

15.7

+10

6.8

1.6

+50

22.2

17.0

6.7

1.5

+50

22.8

17.6

6.6

1.4

23.5

18.3

6.5

1.3

24.2

19.0

+50

6.5

1.3

24.3

19.1

6.4

1.2

5+00

23.6

18.4

6.5

1.3

22.8

17.6

6.4

1.2

21.0

15.8

6.2

1.0

19.8

14.6

1+00

6.4

1.2

19.0

13.8

6.3

1.1

+50

19.0

13.8

6.5

1.3

18.2

13.0

+50

6.6

1.4

Sound west
Sta 90+00 N

px

Dist	Sound		Dist	Sound
1+40	6.5	1.4		9.1 4.0
1+50			(5.1)	9.0 3.9
(5.1)	6.8	1.7	+50	9.1 4.0
	6.8	1.7		9.1 4.0
	7.0	1.9		9.4 4.3
	6.9	1.8		9.5 4.4
2+00	7.0	1.9		9.6 4.5
	7.1	2.0	4+00	9.8 4.7
	6.8	1.7		10.0 4.9
	7.2	2.1		10.0 4.9
	7.8	2.7		9.9 4.8
+50	7.9	2.8		9.7 4.6
	8.0	2.9	+50	9.5 4.4
	8.2	3.1		9.6 4.5
	8.4	3.3		9.7 4.6
	8.3	3.2		8.9 3.8
3+00	8.5	3.4		7.5 2.4
	9.1	4.0	5+00	7.3 2.2
	9.0	3.9		6.8 1.7

Sound west
Sta 90+00 N

8-17-50

(32)

px

Dist	Sound	
5+20	6.0	0.9
	4.8	+0.3
(5.1)	3.7	+1.4
+50	3.1	+2.0
	2.5	+2.6
	1.9	+3.2
	1.7	+3.4
(1:50)	2.0	+3.1
6+00	1.9	+3.2
	1.7	+3.4
	1.6	+3.5
+30	1.3	+3.8

Sound East

Sta 21 + 00 N

~~0+00~~ = { 94+00 N }
 { 130+00 W }

Dist Sound Dist Sound

~~1.59~~
 0+00

5.0 0.0

5.8 0.8

(5.0)

5.0 0.0

(5.0) 5.7 0.7

5.1 0.1

2+00 5.9 0.9

5.2 0.2

6.0 1.0

5.3 0.3

6.0 1.0

+50

5.1 0.1

6.1 1.1

5.2 0.2

6.2 1.2

5.4 0.4

+50 6.0 1.0

5.3 0.3

6.2 1.2

5.4 0.4

6.2 1.2

1+00

5.5 0.5

6.3 1.3

5.6 0.6

6.5 1.5

5.3 0.3

3+00 6.4 1.4

5.5 0.5

6.3 1.3

5.6 0.6

5.9 0.9

+50

5.5 0.5

6.1 1.1

5.4 0.4

6.6 1.6

5.6 0.6

+50 6.5 1.5

Sound East

Sta 21 + 00 N

RX (33)

Dist Sound Dist Sound

+60

6.5 1.5

5+50

21.6 16.7

6.9 1.9

21.1 16.2

(5.0)

7.0 2.0

(4.9)

21.0 16.1

7.2 2.2

20.8 15.9

4+00

7.4 2.4

19.6 14.7

7.8 2.8

6+00

18.7 13.8

8.0 3.0

(2.05)

18.1 13.2

8.2 3.2

17.0 12.1

10.7 5.7

15.9 11.0

+50

15.3 10.3

14.3 9.4

18.0 13.0

+50

12.8 7.9

20.3 15.3

11.0 6.1

22.0 17.0

8.8 3.9

22.1 17.1

5.5 0.6

5+00

22.4 17.4

4.3 +0.6

22.6 17.6

7+00

3.3 +1.6

22.6 17.6

2.9 +2.0

22.2 17.2

(2.08)

2.3 +2.6

+40

21.9 16.9

+30

2.0 +2.9

+40

1.4 +3.5

Sound west
Sta 91 +00 N

~~PX~~

Dist	Sound		Dist	Sound	
0+00	-		1+90	7.3	2.5
+10	5.0	0.1	2+00	7.5	2.7
<u>2:10</u>	5.0	0.1		8.2	3.4
<u>4.9</u>	5.0	0.1	<u>4.8</u>	8.0	3.2
	5.0	0.1		9.0	4.2
+50	5.0	0.1		8.8	4.0
	5.0	0.1	+50	9.0	4.2
	5.0	0.1		9.2	4.4
	5.1	0.2		9.4	4.6
	5.2	0.3		9.5	4.7
1+00	5.2	0.3		9.5	4.7
	5.2	0.3	3+00	9.3	4.5
	5.3	0.4		9.5	4.7
	5.2	0.3	<u>2:15</u>	9.5	4.7
	5.3	0.4		9.7	4.9
+50	5.9	1.0		9.5	4.7
	5.8	0.9	+50	9.3	4.5
	6.7	1.8		8.8	4.0
	7.0	2.1	+70	8.3	3.5

Sound west
Sta 91 +00 N

(34)

~~PX~~

Dist	Sound		Dist	Sound	
3+80	7.7	2.9	5+70		
	7.0	2.2			
4+00	6.6	1.8			
<u>4.8</u>	5.8	1.0	6+00		
	5.0	0.2			
	3.7	+1.1			
	2.8	+2.0			
+50	2.0	+2.8			
	2.0	+2.8			
	1.9	+2.9			
<u>2:18</u>	1.6	+3.2			

Sound East

Sta 92+00 N

PX
 $0+00 = \left\{ \begin{array}{l} 92+00 N \\ 130+00 W \end{array} \right\}$

Dist	Sound		Dist	Sound
(2:28) 0+00	4.1	+0.6	3.0	+1.7
	4.1	+0.6	3.1	+1.6
(4.7)	4.1	+0.6	2+00 3.0	+1.7
	4.4	+0.3	(4.7) 3.0	+1.7
	4.5	+0.2	3.1	+1.6
+50	3.7	+1.0	3.1	+1.6
	3.6	+1.1	3.2	+1.5
	4.0	+0.7	+50 3.2	+1.5
	3.5	+1.2	(2:30) 3.2	+1.5
	3.5	+1.2	3.2	+1.5
1+00	3.4	+1.3	3.3	+1.4
	3.2	+1.5	3.2	+1.5
	3.0	+1.7	3+00 3.3	+1.4
	3.0	+1.7	3.3	+1.4
	3.1	+1.6	3.3	+1.4
+50	3.0	+1.7	3.3	+1.4
	3.0	+1.7	3.3	+1.4
	3.0	+1.7	+50 3.3	+1.4

Sound East

Sta 92+00 N

(36)

Dist	Sound		Dist	Sound
3+60	3.3	+1.4	5+50	19.6
	3.4	+1.3		14.9
	3.4	+1.3		20.4
	3.5	+1.2		15.7
(4.7)	3.5	+1.2		20.8
	3.6	+1.1	(4.7)	21.0
	3.6	+1.1		16.3
4+00	3.8	+0.9	(4.6)	21.1
	3.8	+0.9		16.5
	3.9	+0.8	6+00	20.9
	3.9	+0.8		16.3
	4.1	+0.6		20.7
	4.1	+0.6		16.1
	4.4	+0.3	(2:35)	20.7
	4.4	+0.3		16.1
	5.0	0.3		20.6
	5.0	0.3		16.0
+50	5.2	0.5		20.2
	5.2	0.5		15.6
	5.0	0.3	+50	19.5
	5.0	0.3		14.9
	4.9	0.2		17.4
	4.9	0.2		12.8
	5.3	0.6		7+50-2.8
	5.3	0.6		+60 2.0
	10.2	5.5		11.4
	10.2	5.5		+70 1.0
	10.2	5.5		7+80 1.3
	13.2	8.5		16.0
	13.2	8.5		10.4
	14.8	10.1	7+00	15.0
	14.8	10.1		10.4
	15.3	10.6		13.0
	15.3	10.6		8.4
	17.5	12.8		11.9
	17.5	12.8		7.3
	18.9	14.0		10.0
	18.9	14.0		5.4
	18.9	14.0	+50	4.8
	18.9	14.0	+40	3.4
	18.9	14.0		0.2
	18.9	14.0	(2:37)	3.4
	18.9	14.0		+1.2

Sound West
Sta 92+00 N

Dist	Sound		Dist	Sound
0+00	0.1		8.0	3.5
+10	4.3	+0.2	2+00	8.0 3.5
+20	4.5	0.0		8.0 3.5
(2.90)	4.7	0.2		8.0 3.5
(4.5)	4.9	0.4	(4.5)	8.0 3.5
+50	4.9	0.4		8.1 3.6
	4.9	0.4	+50	8.0 3.5
	4.5	0.0		8.0 3.5
	4.7	0.2		7.8 3.3
	4.9	0.4		7.0 2.5
1+00	4.8	0.3		7.2 2.7
	5.1	0.6	3+00	7.0 2.5
	5.3	0.8		6.7 2.2
	5.7	1.2		5.2 0.7
	6.7	2.2		4.1 +0.4
+50	7.0	2.5		3.8 +0.7
	7.0	2.5	+50	3.5 +1.0
	7.3	2.8		3.2 +1.3
	7.9	3.4		2.8 +1.7

Sound West Sta 92+00 N

(36)

Dist Sound

3+80 2.2 +2.3

(2.45) 1.7 +2.8

4+00

(4.5)

(4.5)

+50

Sound EAST		Sta 33+00 N	
PX			
0+00 = { 33+00 N } { 130+00 W }			
Dist	Sound	Dist	Sound
(2:55) 0+00	4.8 0.5		2.9 +1.4
	5.1 0.8		2.8 +1.5
(4.3)	5.2 0.9	2+00	2.8 +1.5
	5.3 1.0	(4.3)	2.7 +1.6
	5.3 1.0		2.8 +1.5
+50	5.0 0.7		2.8 +1.5
	4.0 +0.3		2.8 +1.5
	3.7 +0.6	+50	2.8 +1.5
	3.4 +0.9		2.8 +1.5
	3.3 +1.0		2.8 +1.5
1+00	3.2 +1.1		2.7 +1.6
	3.0 +1.3		2.6 +1.7
	3.1 +1.2	3+00	2.7 +1.6
	3.0 +1.3		2.7 +1.6
	3.1 +1.2		2.7 +1.6
+50	3.2 +1.1		2.6 +1.7
	3.5 +0.8		2.6 +1.7
	3.2 +1.1	+50	2.6 +1.7

Sound East		Sta 33+00 N	
		PX (37)	
Dist	Sound	Dist	Sound
3+00	2.6 +1.7	5+50	9.0 4.7
	2.6 +1.7		12.5 8.2
(4.3)	2.7 +1.6	(4.3)	14.3 10.0
	2.7 +1.6	(4.2)	15.6 11.4
4+00	2.7 +1.6		17.0 12.8
	2.7 +1.6	6+00	17.7 13.5
	2.6 +1.7	(3:00)	18.1 13.9
	2.6 +1.7		18.9 14.7
	2.7 +1.6		19.2 15.0
+50	2.6 +1.7		19.5 15.3
	2.7 +1.6	+50	19.4 15.2
	2.6 +1.7	+60	19.4 15.2
	2.7 +1.6	+70	19.0 14.8
	2.7 +1.6	+80	19.0 14.8
	2.8 +1.5	+90	18.9 14.7
	2.8 +1.5	7+00	18.7 14.5
	2.8 +1.5	+10	18.0 13.8
	2.8 +1.5	+20	17.4 13.2
5+00	2.8 +1.5	+30	16.5 12.3
	2.8 +1.5	+40	15.3 11.1
	2.8 +1.5	+50	13.4 9.2
	2.8 +1.5	+60	11.9 7.7
	4.5 0.2	+70	9.8 5.6
		+80	6.5 2.3
		+90	3.8 +0.4
		8+00	3.0 +1.2
		+10	2.3 +1.9
		+20	2.2 +2.2
		+30	1.0 +3.2

Sound West
Sta 23 + 00 N

Dist	Sound	Dist	Sound
0+00		6.5	2.5
	4.7 0.6	2+00	6.3 2.3
(4.1)	4.7 0.6	(4.0)	5.7 1.7
	4.2 0.1		5.8 1.8
	3.8 +0.3		5.5 1.5
+50	4.0 +0.1		5.8 1.8
(3:10) →	4.0 +0.1	+50	4.8 0.8
	4.6 0.5		3.9 +0.1
	5.1 1.0		3.3 +0.7
	5.5 1.4		2.8 +1.2
1+00	5.5 1.4		2.7 +1.3
	6.0 1.9	3+00	2.8 +1.2
	6.0 1.9		2.7 +1.3
	6.7 2.6		3.1 +0.9
	6.9 2.8		3.9 +0.1
+50	7.0 2.9		3.8 +0.2
	7.2 3.1	+50	3.7 +0.3
	7.0 2.9	+60	3.5 +0.5
		+70	3.2 +0.8
		+80	3.1 +0.9
		+90	3.0 +1.0
	6.7 2.6	(3:15) →	2.0 +2.0
		4+00	

PX CROSS SECTIONS OF MISSION BAY PROJ # 16

Aug 22, 1950

T. Stamper
E. Watson
W. Carver

Sta	+	H. I	-	Elev.
B.M.	5.06	16.20		11.14
T.B.M.			5.30	10.90
	4.44	15.34		

Chis'd on W. Curb Approx 15' N. Sta 38+60
Top Lead Plug Sta. 40+00 E. Curb B/L

Sta. 41+00 0+00 = E. Curb B/L.

0.7W			5.1	10.2
0+00			4.45	10.89
E 12			5.1	10.2
E 19			7.9	7.4
E 24			9.8	5.5
E 37			9.9	5.4
E 187			10.0	5.3
E 190			9.9	5.4
E 236			9.9	5.4
E 290			9.8	5.5
E 332			10.7	4.6
E 336			9.8	5.5
E 340			11.9	3.4
E 346			13.1	2.2

E Gutter
E Top Curb

PX

Sta. 42+00-0+00 = E. Curb B/L

Aug. 22, 1950

Sta	+ H.I	-	Elev	40+00
T.B.M.	4.00	14.90		E. Curb
E 444		11.3	3.6	
E 450		12.8	2.1	
E 440		9.5	5.4	
E 400		9.6	5.3	0+00
E 395		11.4	3.5	W. 0.7
E 393		9.7	5.2	
E 340		9.5	5.4	
E 285		9.6	5.3	
E 227		9.6	5.3	
E 173		9.5	5.4	
E 112		9.5	5.4	
E 110		12.6	4.3	
E 106		9.6	5.3	
E 75		9.8	5.1	
E 72		10.8	4.1	
E 65		10.5	4.4	
E 62		9.6	5.3	
E 51		9.7	5.2	
E 50		10.7	4.2	
E 45		10.9	4.0	
E 43		9.6	5.3	

Sta 42+00 Contd

Sta	+ H.I	-	Elev	
	14.90			
E 22			9.6	5.3
E 12			4.7	10.2
0+00			4.2	10.7 Top E. Curb
W. 0.7			4.9	10.0 E. Gutter

PX

Sta 43+00 - 0+00 = E. Curb B/L

Aug 22, 1950

Sta	+	H.I	-	Elev.
TBM.	4.42	15.32		10.90 ⁴⁰⁺⁰⁰ E. Curb B/L
TBM	4.66	14.94	5.04	10.28 ⁴⁴⁺⁰⁰ E. Curb B/L
W.O.7			5.2	9.7 E. Gutter
0+00			4.6	10.3 TORE Curb
E 8			4.6	10.3
E 23			11.6	3.3
E 40			11.7	3.2
E 47			9.7	5.2
E 85			10.4	4.5
E 91			11.4	3.5
E 94			10.2	4.7
E 150			9.6	5.3
E 205			9.6	5.3
E 260			9.6	5.3
E 297			10.0	4.9
E 300			10.8	4.1
E 302			10.0	4.9
E 321			9.8	5.1
E 323			10.6	4.3

Sta 43+00 Contd

Sta	+	H.I	-	Elev
				14.94
				9.9
				9.5
				10.2
				9.4
				9.5
				9.5
				9.4
				10.9
				11.8
				13.3

PX

STA. 44+00 - 0+100 = E. Curb Elev.

Sta	+ H.I.	- Elev.
T.B.M.	4.63 14.91	10.28
E 565		11.7 3.2
E 573		13.2 1.7
E 562		9.5 5.4
E 506		9.4 5.5
E 450		9.4 5.5
E 395		9.4 5.5
E 335		9.6 5.3
E 331		11.4 3.5
E 326		9.9 5.0
E 269		9.5 5.4
E 214		9.5 5.4
E 156		9.5 5.4
E 95		9.6 5.3
E 55		9.8 5.1
E 54		11.4 3.5
E 50		11.9 3.0
E 45		11.5 3.4
E 41		9.9 5.0

PX

Aug 22, 1950

(42)

STA. 44+00 CONTD

Sta	+ H.I.	- Elev.	
	14.91		
E 20		9.5	5.4
E 8		4.3	10.6
0+00		4.6	10.3 Top E. Curb
W 0.7		5.3	9.6 E. Gutter

PX

STA. 45+00 - 0+00 = E. CURB B/L.

Sta	+	H.I.	-	Elev.
		14.91		46+00
T.B.M.			4.72	10.19 E. CURB B.
	4.51	14.70		
W.O.7			5.2	9.5 E. GUTTER
0+00			4.6	10.1 Top E. CURB
E 8			4.4	10.3
E 23			10.8	3.9
E 35			10.5	4.2
E 39			11.5	3.2
E 43			11.8	2.9
E 48			11.5	3.2
E 52			10.0	4.7
E 99			9.4	5.3
E 153			9.4	5.3
E 210			9.4	5.3
E 263			9.3	5.4
E 290			9.6	5.1
F 297			11.8	2.9
E 360			9.5	5.2

PX

Aug 22, 1950

STA 45+00 CONTD.

Sta	+	H.I.	-	Elev
				14.70
E 355			9.3	5.4
E 405			9.8	4.9
E 412			10.5	4.2
E 413			9.8	4.9
E 467			9.1	5.6
E 508			9.2	5.5
E 510			11.8	2.9
E 519			13.7	1.0

PX STA. 46+00 - 0+00 = E. CURB B/L.

PX Aug. 22, 1950

Sta.	+	H.I.	-	Elev.
T.B.M.				10.19
	4.49	14.68		
E 507			11.4	3.3
E 506			11.6	3.1
E 504			9.4	5.3
E 488			9.8	4.9
E 475			11.0	3.7
E 466			9.7	5.0
E 415			9.0	5.7
E 358			8.8	5.9
E 306			9.3	5.4
E 278			9.6	5.1
E 276			11.4	3.3
E 274			11.9	2.8
E 272			11.5	3.2
E 269			9.6	5.1
E 216			9.4	5.3
E 165			9.5	5.2
E 111			9.5	5.2

46+00
Lead Plug
E. Curb B/L

STA. 46+00 CONTD

Sta.	+	H.I.	-	Elev.
		14.68		
E 75			10.2	4.5
E 64			11.5	3.2
E 56			12.3	2.4
E 50			11.5	3.2
E 28			9.5	5.2
E 21			8.1	6.6
E 10			4.3	10.4
0+00			4.5	10.2
W.O.T			5.1	9.6
T.B.M.			4.25	10.43
B.M.			4.01	10.67

48+00
Lead Plug
E. Curb B/L
Base Lamp
Past Ventura
+ E. Curb
Midway
10.69

PX

STA 47+00 - 0+00 = E. CURB B/L

Sta.	+	H.I.	-	Elev.
TBM.				10.43
	4.42	14.85		
W0.7			5.15	9.70
0+00			4.55	10.30
E 10			4.4	10.4
E 21			9.4	5.4
E 62			9.7	5.1
E 82			10.6	4.2
E 90			11.6	3.2
E 108			13.0	1.8
E 112			11.4	3.4
E 118			10.0	4.8
E 153			9.8	5.0
E 158			11.8	3.0
E 160			12.6	2.2
E 163			10.7	4.1
E 166			9.8	5.0
E 227			9.6	5.2
E 266			9.6	5.2

48+00
Lead Pkg
E. Curb B/L

Aug 23, 1950

PX

45

T. Stampcy

E. Watson

W. Carver

Sta 47+00 Contd

Sta	+	H.I.	-	Elev
				14.85
				10.4
				4.4
				9.5
				5.3
				9.5
				5.3
				9.3
				5.5
				9.3
				5.5
				9.3
				5.5
				9.3
				5.5
				9.8
				5.0
				11.8
				3.0
				12.6
				2.2
				15.1
				-0.3

PX

STA 48+00 0+00 = E. CURB B/L

Aug 23, 1950

PX

Sta

+ H.I

-

Elev

STA. 48+00 CONT'D.

TBM.

4.52 15.0
14.95

10.43

48+00
Lead Plus
E. Curb B/L

Sta

+

H.I

-

Elev.

15.0
14.95

E 475

11.7 3.3

E 78

10.8 4.2

E 483

14.5 0.5

E 53

9.9 5.1

E 474

9.6 5.4

E 20

9.9 5.1

E 420

9.5 5.5

E 8

3.8 11.2

E 365

9.4 5.6

0+00

4.5 10.5 Top E. Curb

E 310

9.5 5.5

W 0.7

5.2 9.8 E. Gutter

E 300

9.6 5.4

E 298

10.5 3.5

T.B.M.

4.28 10.67

E 295

9.8 5.2

TP

4.40 10.55
50+00
Lead Plus
E. Curb B/L

E 242

9.6 5.4

E 190

9.8 5.2

E 135

9.9 5.1

E 119

9.8 5.2

E 113

10.9 4.1

E 110

12.3 2.7

E 100

13.6 1.4

E 92

12.0 3.0

PX

STA 49+00 0+00 = E. CURB

Sta	+	H.I.	-	Elev
T.B.M.				10.55
	4.41	15.0 14.96		
W0.7			5.1	9.9
0+00			4.37	10.59
E 6			4.3	10.7
E 13			4.3	10.7
E 30			9.5	5.5
E 42			10.4	4.6
E 45			11.6	3.4
E 50			13.3	1.7

Aug 23, 1950

(47)

STA 50+00 0+00 = E. CURB B/L.

Sta.	+	H.I.	-	Elev.
T.B.M.				10.55
	4.55	15.10		
W0.7			5.1	10.0
0+00			4.55	10.55
E 12			5.2	9.9
E 21			9.3	5.8
E 53			9.9	5.2
E 95			10.1	5.0
E 97			11.3	3.8
E 100			12.5	2.6
E 106			13.5	1.6

PX

50+00
Lead Plug
E. Curb B/L

PX

STA. 51+00 0+00 = E. CURB B/L

Sta.	+	H.I.	-	Elev
TBM.				10.55 <small>50+00 L. PIUG E. CURB B/L</small>
	4.78	15.33		
W.O.7			5.3	10.0
0+00			4.6	10.7
E 13			4.6	10.7
E 20			9.7	5.6
E 52			10.2	5.1
E 105			10.3	5.0
E 115			12.7	2.6
E 122			14.5	0.8
TBM.			4.49	10.84 <small>52+00 L. PIUG E. CURB B/L</small>

Aug 23, 1950

PX

(48)

STA. 52+00 0+00 = E. CURB B/L.

Sta.	+	H.I.	-	Elev.
TBM.				10.48 <small>52+00 L. PIUG E. CURB B/L</small>
		15.0		
	4.47	14.95		
W.O.7			5.1	9.9
0+00			4.5	10.5
E 10			4.1	10.9
E 19			9.4	5.6
E 65			10.3	4.7
E 98			11.0	4.0
E 118			10.5	4.5
E 120			13.2	1.8
E 129			14.6	0.4

PX

STA. 53+00 0+00 = E. CURB B/L.

Aug. 23, 1950

PX

(79)

Sta	+	H.I.	-	Elev.
T.B.M.				10.48
	4.43	14.91		
W.O.7			5.1	9.8
0+00			4.5	10.4
E.10			4.4	10.5
E.20			9.3	5.6
E.45			10.9	4.0
E.52			12.1	2.8
E.56			11.0	3.9
E.85			10.6	4.3
E.115			10.6	4.3
E.120			12.9	2.0
E.128			13.9	1.0
T.B.M.			4.58	10.33

52+00
L. Plug
E. Curb B/L

Sta

T.B.M.

STA. 54+00 0+00 = E. CURB B/L.

Sta	+	H.I.	-	Elev.
T.B.M.				10.33
	4.48	14.81		
W.O.7			5.1	9.7
0+00			4.5	10.3
E.8			4.6	10.2
E.19			9.6	5.2
E.42			10.4	4.4
E.45			12.8	2.0
E.54			15.6	-0.8

54+00
L. Plug
E. Curb B/L

PX

STA. 55+00 0+00 = E. CURB B/L

AUG 23, 1950

PX

Sta.	+	H.I.	-	Elev.
T.B.M.				10.33
	4.45	14.78		
W.O.7			5.1	9.7
0+00			4.5	10.3
E 8			4.2	10.6
E 19			10.1	4.7
E 48			10.6	4.2
E 51			12.5	2.3
E 60			14.0	0.8
T.B.M.			4.45	10.33

54+00
L. P109
E. CURB B/L

56+00
L. P109
E. CURB B/L

Sta.	+	H.I.	-	Elev.
T.B.M.				10.33
	4.44	14.77		
W.O.7			5.1	9.7
0+00			4.4	10.3
E 10			3.9	10.9
E 20			9.8	5.0
E 65			10.9	3.9
E 68			12.3	2.5
E 70			13.3	1.5
E 78			14.2	0.6

56+00
L. P109
E. CURB B/L

PX

STA. 57+00 0+00 = E. CURB B/L

Aug 23, 1950

PX

Sta.	+	H.I	-	Elev
TBM.				10.33 ⁵⁶⁺⁰⁰ L. Plug E. Curb B/L
	4.32	14.65		
W 0.7			5.1	9.5 E. Gutter
0+00			4.4	10.2 Top E. Curb
E 11			4.3	10.3
E 20			9.8	4.8
E 57			10.8	3.8
E 90			10.6	4.0
E 92			12.6	2.0
E 100			13.8	0.8
TBM			4.35	10.30 ⁵⁸⁺⁰⁰ L. Plug E. Curb B/L

Sta.	+	H.I	-	Elev.
TBM.				10.30 ⁵⁸⁺⁰⁰ L. Plug E. Curb B/L
	4.44	14.74		
W 0.7			5.1	9.6 E. GUTTER
2+00			4.4	10.3 Top E. Curb
E 13			4.3	10.4
E 22			10.0	4.7
E 76			10.3	4.4
E 135			10.4	4.3
E 137			11.6	3.1
E 139			13.4	1.3
E 147			14.7	0.0

8-29-50

PX

Sta 94+00 N

0+00 = { 94+00N } sound East
 { 130+00W }

Dist	Sound	Dist	Sound
9:30 0+00	4.0 +0.6	(4.6)	3.0 +1.6
(4.6)	4.0 +0.6		2.9 +1.7
	4.5 +0.1	2+00	2.9 +1.7
	5.3 0.7		3.0 +1.6
	6.1 1.5		3.0 +1.6
+50	6.5 1.9		2.9 +1.7
	6.7 2.1		2.9 +1.7
	6.8 2.2	+50	2.9 +1.7
	6.5 1.9		3.0 +1.6
	5.6 1.0		3.0 +1.6
1+00	4.4 +0.2		3.4 +1.2
	4.0 +0.6		3.0 +1.6
	4.1 +0.5	3+00	2.9 +1.7
	3.7 +0.9		2.9 +1.7
	3.8 +0.8		2.8 +1.8
+50	3.3 +1.3		2.7 +1.9
	3.4 +1.2		2.8 +1.8
	3.0 +1.6	+50	2.8 +1.8

Sta 94+00 N

PX

(52)

Dist	Sound	Dist	Sound
3+60	3.1 +1.5	+50	4.9 -0.3
(4.6)	3.1 +1.5	(4.6)	8.0 3.4
	3.2 +1.4		11.1 6.5
	3.0 +1.6		12.3 7.7
4+00	2.9 +1.7		14.4 9.8
(9.3)	2.8 +1.8	6+00	15.3 10.7
(4.6)	3.0 +1.6		16.0 11.4
	2.8 +1.8		16.9 12.3
	2.8 +1.8		17.8 13.2
+50	2.7 +1.9		18.8 14.2
	2.9 +1.7	+50	19.0 14.4
	2.8 +1.8		19.4 14.8
	2.7 +1.9	+70	19.8 15.2
		+80	19.9 15.3
		+90	19.9 15.3
	2.8 +1.8	7+00	20.0 15.4
		+10	20.2 15.6
5+00	2.8 +1.8	+20	20.6 16.0
		+30	20.6 16.0
	3.0 +1.6	+40	20.8 16.2
		+50	19.2 14.6
	3.1 +1.5	+60	17.0 12.4
		+70	16.5 11.9
	3.9 +0.7	+80	15.8 11.2
		+90	14.7 10.1
	4.0 +0.6	8+00	12.9 8.9
		+10	11.5 6.9
		+20	8.7 5.1
		+30	5.7 1.1

(9.4)
 3.3 +1.3
 2.8 +1.8
 2.0 +1.0
 1.0 +0.0
 8+00
 4+50
 2+00
 1+00

PX

8-24-50

94+00 N

0+00 = { 94+00 N } Sound west
 { 130+00 W }

Dist	Sound	Dist	Sound
0+00		(4.5)	4.0 +0.5
(9.45)	4.0 +0.5		3.9 +0.6
(4.5)	4.3 +0.2	2+00	3.8 +0.7
	4.8 0.3		3.3 +1.2
	5.1 0.6		3.3 +1.2
+50	5.8 1.3		3.3 +1.2
	6.0 1.5		3.0 +1.5
	6.1 1.6	+50	2.9 +1.6
	6.3 1.8		2.6 +1.9
	6.3 1.8		2.6 +1.9
1+00	6.4 1.9		2.7 +1.8
	6.3 1.8		2.8 +1.7
	4.2 1.7	3+00	2.8 +1.7
	6.0 1.5		2.8 +1.7
	5.2 0.7		2.6 +1.9
+50	5.1 0.6		2.8 +1.7
	4.8 0.3		2.8 +1.7
	5.4 0.9	+50	2.7 +1.8

94+00 N

PX

Sound west

(53)

Dist	Sound
(4.5)	2.7 +1.8
	2.7 +1.8
	3.0 +1.5
	3.1 +1.4
4+00	3.2 +1.2
	3.1 +1.4
	2.8 +1.7
	2.9 +1.6
	3.1 +1.4
+50	3.0 +1.5
(9.50)	3.0 +1.5

5+00

PT

8 - 24 - 50
95+00 N

95+00 N PX

(59)

0+00 = { 95+00 N
130+00 W

Sound East

Dist

Sound

Dist

Sound

Dist
0+00

Sound

Dist Sound

3+60

2.4

+2.0

5+00

11.2

6.8

(10:00)

0+00

4.1

+0.3

(4.4)

2.9

+1.5

(4.4)

2.5

+1.9

(10:05)

11.5

7.1

(7.4)

4.2

+0.2

2.9

+1.5

2.5

+1.9

(7.4)

12.0

7.6

4.0

+0.4

2+00

2.7

+1.7

2.4

+2.0

12.2

7.8

3.9

+0.5

2.8

+1.6

4+00

2.6

+1.8

12.3

7.9

4.9

0.5

3.1

+1.3

2.8

+1.6

6+00

13.0

8.6

+50

5.4

1.0

3.3

+1.1

2.8

+1.6

13.0

8.6

7.1

2.7

3.7

+0.7

2.7

+1.7

13.2

8.8

8.3

3.9

+50

3.2

+1.2

2.5

+1.9

13.8

9.4

8.9

4.5

3.0

+1.4

+50

2.4

+2.0

14.0

9.6

8.7

4.3

2.6
3.6

+1.8

2.6

+1.8

+50

14.8

10.4

1+00

7.0

2.6

2.7

+1.7

2.9

+1.5

17.2

12.8

4.8

0.4

2.5

+1.9

3.1

+1.3

18.8

14.4

4.5

0.1

3+00

2.6

+1.8

3.0

+1.4

19.0

14.6

1.0

+0.4

2.7

+1.7

5+00

2.9

+1.5

19.1

14.7

3.9

+0.5

2.2

+2.2

4.0

+0.4

7+00

19.2

14.8

+50

3.7

+0.7

2.5

+1.9

6.9

2.5

19.3

14.9

3.2

+1.2

2.1

+2.3

10.0

5.6

19.5

15.1

3.0

+1.4

+50

2.3

+2.1

11.1

6.7

19.4

15.0

PX 8-24-50
95+00 N

Sound East Sound west

Dist	Sound	Dist	Sound
7+40	19.1	14.7	0+00
+50	18.9	14.5	10:15
4.4	18.5	14.1	4.2
	18.1	13.7	4.5
	17.7	13.3	0.3
	17.0	12.6	5.9
	16.7	12.3	1.7
	16.2	11.8	6.2
	15.5	11.1	2.0
	14.9	10.5	5.9
	13.3	8.9	1.7
	12.2	7.8	5.7
	9.8	5.4	1.5
	4.5	0.1	5.1
	3.4	+1.0	0.9
	2.8	+1.6	4.3
	2.0	+2.4	0.1
	1.5	+2.9	4.0
	1.0	+3.4	+0.2

95+00 N Sound west

Dist Sound Dist Sound

Dist	Sound	Dist	Sound
1+80	1.7	+2.5	4.2
4.2	1.6	+2.6	2.2
2+00	1.8	+2.4	2.1
	2.0	+2.2	10:20
	2.3	+1.9	2.1
	2.5	+1.7	4+00
	2.8	+1.4	2.1
	2.8	+1.4	+2.1
	2.9	+1.3	
	3.0	+1.2	
	3.1	+1.1	
	3.2	+1.0	
	3.3	+0.9	
	3.4	+0.8	
	3.4	+0.8	
	3.4	+0.8	
	2.9	+1.3	
	2.1	+2.1	
	2.1	+2.1	

9+00
10:10
+10
+20

PX 55

PX

8-24-50

96+00 N

000 = $\begin{cases} 96+00N \\ 130+00W \end{cases}$

Sound East

Dist	Sound	Dist	Sound
0+00	4.1 +0.1	(4.2)	2.8 +1.4
(10:25)	3.9 +0.3		2.8 +1.4
(4.2)	3.7 +0.5	2+00	2.6 +1.6
	4.0 +0.2		2.5 +1.7
	5.2 1.0		2.2 +2.0
+50	6.2 2.0		2.0 +2.2
	7.3 3.1		2.1 +2.1
	8.4 4.2	+50	2.0 +2.2
	8.2 4.0		2.0 +2.2
	7.1 2.9		2.1 +2.1
1+00	6.6 2.4		2.1 +2.1
	5.2 1.0		2.2 +2.0
	4.4 0.2	3+00	2.0 +2.2
	4.0 +0.2		2.0 +2.2
	3.8 +0.4		2.2 +2.0
+50	3.4 +0.8		2.3 +1.9
	3.3 +0.9		2.4 +1.8
	3.0 +1.2	+50	2.2 +2.0

96+00 N

PX

(56)

Dist	Sound	Dist	Sound
3+60	2.4 +1.8	5+50	12.8 8.6
(4.2)	2.1 +2.1	(4.2)	12.8 8.6
	2.0 +2.2		12.8 8.6
	2.0 +2.2		12.8 8.6
4+00	2.1 +2.1		12.8 8.6
	2.1 +2.1	6+00	12.9 8.7
	2.1 +2.1		12.8 8.6
	2.2 +2.0		13.1 8.9
	2.2 +2.0		13.0 8.8
+50	2.2 +2.0		12.4 8.2
	3.0 +1.2	+50	12.4 8.2
	3.9 +0.3		13.2 9.0
(10:30)	7.2 3.0		15.8 10.6
10.4	6.2		17.0 12.8
5+00	11.1 6.9		16.9 12.7
	11.2 7.0	7+00	16.2 12.0
	11.6 7.4		15.9 11.7
	11.8 7.6		16.1 11.9
	12.2 8.0	7+30	16.4 12.2

8-24-50

PX

96+00 N

Dist	Sound		Dist	Sound		
7+40	17.0	12.8	9+30	2.6	+1.5	
+50	17.0	12.8	(4.1)	1.7	+2.4	
(4.2)	17.0	12.8	+50	1.2	+2.9	
	17.1	12.9	(10:35)	+60	0.5	+3.6
	17.4	13.2	Sound west			
	17.5	13.3	0+00			
8+00	17.4	13.2	(10:40)	4.1	0.1	
	16.8	12.6	(4.0)	4.7	0.7	
	16.2	12.0		4.8	0.8	
	15.8	11.6		4.8	0.8	
	15.1	10.9	+50	4.7	0.7	
+50	14.9	10.7		4.0	0.0	
	13.8	9.6		2.9	+1.1	
	12.8	8.6		1.0	+3.0	
	11.9	7.7		1.1	+2.9	
	10.3	6.1	1+00	1.0	+3.0	
9+00	9.8	5.6				
	8.2	4.0				
	3.7	+0.5	+30			

8-29-50

PX

(57)

97+00 N

Dist	Sound		Dist	Sound		Sound	East
0+00	3.6	+0.3	(3.9)	2.8	+1.1		
(10:50)	3.6	+0.3	2+00	2.9	+1.0		
(3.9)	5.0	1.1		2.8	+1.1		
	6.0	2.1		2.6	+1.3		
	7.3	3.4		2.4	+1.5		
+50	7.9	4.0		2.2	+1.7		
	7.5	3.6	+50	1.8	+2.1		
	7.1	3.2		1.9	+2.0		
	6.9	3.0		1.9	+2.0		
	5.8	1.9		1.9	+2.0		
1+00	5.0	1.1		1.8	+2.1		
	2.9	+1.0	3+00	1.7	+2.2		
	3.3	+0.6		1.9	+2.0		
	3.0	+0.9		2.0	+1.9		
	2.8	+1.1		2.1	+1.8		
+50	2.9	+1.0		2.0	+1.9		
	2.8	+1.1	+50	2.0	+1.9		
	2.6	+1.3		2.0	+1.9		
	2.8	+1.1	+70	1.8	+2.1		

8-24-50
97+00 N

Dist	Sound	Dist	Sound
3+80	1.7 +2.2	5+70	12.8 8.9
(3.9)	1.8 +2.1	(3.9)	13.0 9.1
4+00	1.8 +2.1		13.0 9.1
	2.0 +1.9	6+00	13.0 9.1
	3.1 +0.8		12.9 9.0
	5.4 1.5		13.0 9.1
	8.9 5.0		12.8 8.9
+50	10.5 6.6		12.5 8.6
	10.4 6.5	+50	12.1 8.2
	11.2 7.2		12.0 8.1
	11.4 7.4	10:55	10.9 7.0
	11.8 7.9		9.2 5.3
5+00	12.0 8.1		9.3 5.4
	12.3 8.4	7+00	11.4 7.5
	12.4 8.5		11.9 8.0
	13.0 9.1		12.4 8.5
	13.3 9.4		13.1 9.2
+50	13.2 9.3		14.2 10.3
	13.0 9.1	+50	14.8 10.9

8-24-50
97+00 N

FX (58)

Dist	Sound	Dist	Sound
7+60	14.9 11.0	9+50	6.4 2.5
(3.9)	15.0 11.1	(3.8)	3.2 +0.6
	15.2 11.3		2.4 +1.4
	14.9 11.0		1.8 +2.0
8+00	14.8 10.9	11:00	1.0 +2.8
	14.8 10.9	10+00	0.5 +3.3
	15.0 11.1	Sound west	
	15.1 11.2	0+00	
	15.0 11.1	11:05	2.7 +1.1
+50	15.0 11.1	(3.8)	2.7 +1.1
	15.5 11.6		3.3 +0.5
	14.8 10.9		2.9 +0.9
	12.4 8.5	+50	2.3 +1.5
	11.8 7.9		2.1 +1.7
9+00	11.0 7.1		1.7 +2.1
	10.2 6.3		1.3 +2.5
	9.8 5.9		1.0 +2.8
	9.2 5.9	1+00	1.0 +2.8
9+40	8.4 4.5		

8-24-50
 PX 98+00 N

0+00 = { 98+00 N
 130+00 W

Dist	Sound	Dist	Sound
0+00	6.4 2.8	1+80	2.5 +1.1
(11:20)	6.7 3.1	(3.6)	2.7 +0.9
(3.6)	8.0 4.4	2+00	2.5 +1.1
	8.2 4.6		2.4 +1.2
	7.1 3.5		2.2 +1.4
+50	6.8 3.2		2.3 +1.3
	5.2 1.6		2.4 +1.2
	4.4 0.8	+50	2.5 +1.1
	3.2 +0.4		2.6 +1.0
	2.8 +0.8		2.5 +1.1
1+00	2.4 +1.2		2.0 +1.6
	2.2 +1.4		2.1 +1.5
	2.0 +1.6	3+00	2.2 +1.4
	2.0 +1.6		2.0 +1.6
	2.0 +1.6		1.9 +1.7
+50	2.3 +1.3		1.8 +1.8
	2.6 +1.0		1.5 +2.1
	2.5 +1.1	+50	1.6 +2.0

8-24-50
 98+00 N Sound East PX (59)

Dist	Sound	Dist	Sound
3+60	1.7 +1.9	5+50	12.7 9.1
(3.6)	3.0 +0.6	(3.6)	12.9 9.3
	3.6 0.0		13.1 9.5
	8.1 4.5		13.1 9.5
4+00	9.7 6.1		12.6 9.0
	10.2 6.6	6+00	11.9 8.3
	10.1 6.5		11.7 8.1
	10.2 6.6		10.1 6.5
	10.2 6.6		7.2 3.6
+50	10.4 6.8		6.5 2.9
	10.5 6.9	+50	5.1 1.5
	10.8 7.2	(11:25)	4.8 1.2
	11.2 7.6		4.8 1.2
	11.8 8.2		4.9 1.3
5+00	11.8 8.2		5.3 1.7
	12.0 8.4	7+00	5.8 2.2
	12.3 8.7		7.0 3.4
	13.3 9.7		8.1 4.5
	13.0 9.4		9.1 5.5

8-24-50

PX 98+00 N Sound East

Dist	Sound	Dist	Sound
7+40	10.2	6.6	9+30
+50	11.0	7.4	12.1
(3.6)	11.5	7.9	11.2
	11.9	8.3	+2.2
	12.0	8.4	7.6
	12.3	8.7	7.1
8+00	12.9	8.3	10.7
	13.3	9.7	10.0
	13.4	9.8	9.0
	13.7	10.1	9.1
	13.5	9.9	5.5
+50	13.2	9.6	7.9
	13.0	9.4	4.3
	13.1	9.5	6.8
	13.1	9.5	3.2
	13.2	9.6	5.5
9+00	13.1	9.5	4.4
	13.0	9.4	0.8
	12.6	9.0	3.2

8-24-50

98+00 N PX Sound West (60)

Dist	Sound	Dist	Sound
0+00			
(11.34)	5.5	2.0	
(3.5)	4.3	0.8	
	3.0	+0.5	
	2.3	+1.2	
+50	2.2	+1.3	
	2.2	+1.3	
	2.1	+1.4	
	2.2	+1.3	
	2.5	+1.0	
1+00	2.9	+0.6	
	2.9	+0.6	
	2.9	+0.6	
	3.0	+0.5	
	2.9	+0.6	
	2.9	+0.6	

(11.35)

+50

PX 8-25-50
66+00 N

0+00 = { 66+00 N } Sound East
 { 140+00 W }

Dist	Sound	Dist	Sound
0+00	2.0 +2.8	1+80	2.8 +2.0
(4.8)	1.9 +2.9	(4.8)	2.7 +2.1
(10:00)	2.0 +2.8	2+00	2.6 +2.2
	1.9 +2.9		2.6 +2.2
	2.0 +2.8		2.6 +2.2
+50	1.9 +2.9		2.0 +2.8
	2.0 +2.8	2+40	1.8 +3.0
	2.0 +2.8	Sound west	
	2.0 +2.8	0+00	
	1.9 +2.9	(4.8)	1.9 +2.9
1+00	2.1 +2.7	(10:05)	1.9 +2.9
	2.1 +2.7		1.9 +2.9
	2.0 +2.8		2.0 +2.8
	2.1 +2.7	+50	1.9 +2.9
	2.6 +2.2		2.0 +2.8
+50	2.7 +2.1		2.0 +2.8
	2.5 +2.3		2.0 +2.8
1+70	2.8 +2.0	+90	2.1 +2.7

8-25-50
66+00 N

PX (61)

Dist	Sound	Dist	Sound
1+00	2.0 +2.8	2+90	3.3 +1.5
2+00	2.1 +2.7	3+00	3.3 +1.5
(4.8)	2.3 +2.5	(4.8)	3.3 +1.5
	3.1 +1.7		3.3 +1.5
	3.2 +1.6		3.4 +1.4
+50	2.8 +2.0		3.2 +1.6
	2.6 +2.2	+50	3.2 +1.6
	2.9 +1.9		3.2 +1.6
	3.0 +1.8		3.0 +1.8
	2.9 +1.9		2.7 +2.1
	3.0 +1.8		2.1 +2.7
2+00	3.1 +1.7	4+00	1.9 +2.9
	3.1 +1.7		1.9 +2.9
	3.1 +1.7		1.9 +2.9
	3.1 +1.7		1.9 +2.9
	3.2 +1.6		1.9 +2.9
+50	3.2 +1.6	+50	1.8 +3.0
	3.2 +1.6		1.8 +3.8
	3.3 +1.5	4+70	1.9 +2.9

8-25-57

PX

Dist	Sound	
4+80	1.8	+2.9
(4.7)	1.7	+3.0
5+00	1.6	+3.1
	1.5	+3.2
	1.2	+3.5
	1.0	+3.7
	1.1	+3.6
+50	1.2	+3.5
	1.7	+3.0
	2.9	+1.8
	3.5	+1.2
	4.1	+0.6
6+00	3.6	+1.1
	3.2	+1.5
	1.8	+2.9
+30	1.0	+3.7
+33	0.3	+4.4

(10:10)

10:15
(4.7)

8-25-57

65+00 N

PX

(62)

0+00 = { 65+00 N } { 140+00 W }		Sound East	
Dist	Sound	Dist	Sound
0+00	2.9 +1.8	1+80	2.0 +2.7
(10:20) (4.7)	2.8 +1.9	(4.7)	2.0 +2.7
	2.8 +1.9	2+00	2.1 +2.6
	2.8 +1.9		2.3 +2.4
	2.8 +1.9		2.4 +2.3
+50	2.8 +1.9		2.5 +2.2
	2.8 +1.9		2.5 +2.2
	2.8 +1.9	+50	2.5 +2.2
	2.7 +2.0		2.5 +2.2
	2.6 +2.1		2.5 +2.2
1+00	2.6 +2.1		2.6 +2.1
	2.5 +2.2		2.6 +2.1
	2.0 +2.7	3+00	2.5 +2.2
	2.0 +2.7		2.6 +2.1
	2.3 +2.4		2.5 +2.2
+50	2.2 +2.5		2.5 +2.2
	2.3 +2.4		2.5 +2.2
+70		3+50	2.6 +2.1

PX 8-25-50
65+00 N

Dist	Sound	Dist	Sound
3+60	2.5 +2.1	5+58	2.7 +1.9
	2.5 +2.1		2.7
(4.6)	2.5 +2.1	(4.6)	2.7
	2.6 +2.0		2.7
4+00	2.6 +2.0		2.7
(10:25)	2.6 +2.0	6+00	2.7
	2.5 +2.1		2.7
	2.5 +2.1		2.7
	2.5 +2.1		2.7
+50	2.6 +2.0		2.7 +1.9
	2.6 +2.0	+50	2.5 +2.1
	2.7 +1.9	(10:30)+60	1.8 +2.8
	2.7 +1.9	6+70	1.0 +3.6
	2.7 +1.9	Sound west	
5+00	2.7	0+00	
	2.7	(10:35)	2.8 +1.7
	2.7	(4.5)	2.8
	2.7		2.8
5+90	2.7 +1.9	0+40	2.8 +1.7

8-25-50
65+00 N

Dist	Sound	Dist	Sound
0+50	2.8 +1.7	2+40	1.6 +2.9
	2.8	+50	1.7 +2.8
(4.5)	2.8 +1.7	(4.5)	1.3 +3.2
	2.0 +2.5		1.8 +2.7
	1.8 +2.7		1.1 +3.4
1+00	1.8		1.3 +3.2
	1.8	3+00	1.5 +3.0
	1.8		1.7 +2.8
	1.8		1.8 +2.7
	1.8 +2.7		1.8
+50	1.7 +2.8		1.8
	1.8 +2.7	+50	1.8
	1.8 +2.7		1.8 +2.7
	1.7 +2.8		1.7 +2.8
	1.7		1.7 +2.8
2+00	1.7		1.8 +2.7
	1.7	4+00	1.8 +2.7
	1.7		1.7 +2.8
2+30	1.7 +2.8	4+20	1.5 +3.0

(62)

8-25-50

65+00 N

PX

Dist	Sound	
4+30	1.4	+3.0
51	1.2	+3.2
+50	1.2	+3.2
(4.4)	1.0	+3.4
	0.9	+3.5
	0.9	+3.5
	1.0	+3.4
5+00	1.2	+3.2
	1.5	+2.9
	1.7	+2.7
	2.1	+2.3
	2.6	+1.8
+50	3.3	+1.1
	3.3	+1.1
	1.8	+2.6
	1.2	+3.2
	0.9	+3.5
6+00	1.1	+3.3
(10.40)	0.0	+4.4
+10		

10:45
4.4

8-25-50

64+00 N

PX

(69)

Dist	Sound	Dist	Sound
0+00 = {	64+00 N		Sound west
	140+00 W		
0+00	1.2	+3.1	1+80 3.9 +0.4
(10:55)	1.2	+3.1	3.4 +0.9
(4.3)	1.2	+3.1	2+00 3.2 +1.1
	1.2	+3.1	(4.3) 2.0 +2.3
	1.3	+3.0	1.0 +3.3
+50	1.5	+2.8	1.2 +3.1
	1.9	+2.4	1.3 +3.0
	2.0	+2.3	+50 1.6 +2.7
	2.0	+2.3	(11:00) 1.7 +2.6
			1.8 +2.5
1+00	1.8	+2.5	2.0 +2.3
	0.9	+3.4	2.5 +1.8
	1.1	+3.2	3+00 2.6 +1.7
	1.0	+3.3	2.7 +1.6
	2.3	+2.0	2.4 +1.9
+50	2.4	+1.9	2.6 +1.7
	2.0	+2.3	(11:03) 3.5 +0.8
	3.3	+1.0	3.8 +0.5
+70			3+50 +57 0+0 +4.3

8-25-50 64+00 N Sound East

Dist	Sound	Dist	Sound
0+00	1.0 +2.8	1+90	1.8 +2.5
(11:33)	1.4 +2.4	2+00	1.7 +2.6
	1.3 +2.5		1.9 +2.4
(3.8)	1.5 +2.3	(4.3)	2.1 +2.2
	1.5 +2.3		2.2 +2.1
+50	1.4 +2.4		2.1 +2.2
	0.9 +2.9	+50	2.1 +2.2
	1.0 +2.8		2.2 +2.1
	1.0 +2.8		2.2 +2.1
	1.1 +2.7		2.2 +2.1
1+00	1.0 +2.8		2.4 +1.9
	1.0 +2.8	3+00	2.5 +1.8
	1.0 +2.8		2.3 +2.0
	1.0 +2.8		2.1 +2.2
(11:30)	1.4 +2.4		2.0 +2.3
			2.0 +2.3
+50			
(11:10) +60	1.9 +2.4	+50	2.1 +2.2
(4.3) ↓	1.7 +2.6		2.2 +2.1
+80	1.7 +2.6	+70	2.1 +2.2

8-25-51 64+00 N Sound East (65)

Dist	Sound	Dist	Sound
3+80	1.8 +2.5	5+70	2.0 +2.3
	1.8 +2.5		2.0 +2.3
4+00	1.7 +2.6		2.0 +2.3
(4.3)	1.8 +2.5	6+00	1.9 +2.3
	1.9 +2.4	(4.2)	1.9 +2.3
	2.0 +2.3		1.9 +2.3
	1.9 +2.4		1.8 +2.4
+50	2.0 +2.3		1.8 +2.4
	1.9 +2.4		2.1 +2.1
	1.9 +2.4	+50	2.0 +2.2
	1.9		2.1 +2.1
	1.9		2.1
	1.9		2.1
	1.9		2.1
	1.9	7+00	2.1
	1.9		2.1
	1.9		2.1
	1.9		2.1 +2.1
+50	1.9 +2.4		2.2 +2.0
50+60	2.0 +2.3	7+50	2.2 +2.0

PX 8-25-50

64+00 N Sound East

Dist	Sound		Dist	Sound		
7+60	2.2	+2.0	9+50	1.9	+2.9	
	2.2	+2.0		1.6	+2.6	
	2.3	+1.9	(4.2)	1.5	+2.7	
	2.3			1.5	+2.7	
8+00	2.3			1.4	+2.8	
	2.3		10+00	1.4	+2.8	
	2.3		+10	1.3	+2.9	
(11:15)	2.3		(11:17)	+20	1.0	+3.2
(4.2)	2.3	+1.9	+30	1.0		
+50	2.0	+2.2	+40	1.0		
	2.1	+2.1	10+50	1.0	+3.2	
	2.1	+2.1				
	2.0	+2.2				
	2.1	+2.1	(11:35)			
9+00	2.0	+2.2	3.8			
	2.0	+2.2				
	2.0	+2.2				
	1.8	+2.4				
9+40	1.7	+2.5				

PX

290

142+90 N-67+00 8-28-50

N67+00 8-28-50

0+00 = (N-67+00) Sound West
142+90 W

Dist. Sound

Sound West

Dist	Sound	Dist	Sound
0+00	0.0 +4.6	1480	3.0 +1.6
+10	1.0 +3.6		2.9 +1.7
2.0	2.3 +2.3	2100	2.9 +1.7
3.0	3.2 +1.4		3.0 +1.6
+50	4.0 +0.6		3.1 +1.5
			3.2 +1.4
	5.1 0.5		3.2 +1.4
	6.2 1.6	+50	3.1 +1.5
	6.5 1.9		3.3 +1.3
	6.0 1.4		3.4 +1.2
1+00	5.8 1.2		3.8 +0.8
	3.9 +0.7		3.9 +0.7
	3.0 +0.6	3+00	4.0 +0.6
	3.0 +1.6		4.1 +0.5
	3.0 +1.6		4.5 +0.1
+50	3.0 +1.6		3.9 +0.7
	3.0 +1.6		4.8 0.2
+70	3.0 +1.6	+50	4.0 +0.6

Ab

Ab

144+30 } N-68+00
0+00 = } N-68+00
 } W-144+30

8-28-50

Sound West

Dist.	Sound	Dist.	Sound
0+00	0.2 14.2	1+80	2.8 +1.6
+10	2.9 +1.5		2.8 +1.6
+1:05	3.9 +0.5	2+00	2.8 +1.6
(AA)	1.9 +2.5		3.3 +1.1
	1.4 +3.0		3.8 +0.6
+50	1.5 +2.9		5.0 -0.6
	1.5 +2.9		2.8 +1.6
	1.8 +2.6	2+46.	0.0 14.4
	1.3 +3.1		
	1.5 +2.9		
1+00	1.5 +2.9		
	1.4 +3.0		
	2.1 +2.3		
	2.0 +2.4		
	2.9 +1.5		
+50	3.3 +1.1		
	3.3 +1.1		
+70	3.0 +1.4		

144+80 N 69+00

PX

8-28-50

480

0+00 } N 69+00
W 144+80

Sound West

Dist.	Sound		Dist.	Sound	
0+00	0.4	+3.8	1+80	11.0	6.8
1.5	0.5	+3.7	(4.2)	12.0	7.8
(A.2)	0.7	+3.5	2+00	14.1	9.9
	1.0	+3.2		15.0	10.9
	1.3	+2.9		16.8	12.6
+50	1.8	+2.4		16.5	12.3
	2.2	+2.0			
	2.2	+2.0	+50	14.6	10.4
	2.8	+1.4		14.5	10.3
	3.0	+1.2		15.2	11.0
1+00	3.3	+0.8		14.0	9.8
	3.8	+0.4		12.8	8.6
	4.6	0.4	2+00	13.3	9.1
	7.1	2.9		13.0	8.8
	7.9	3.7		13.0	8.8
+50	9.4	5.2		12.8	8.7
	10.5	6.3		12.8	8.6
+70	10.7	6.5	+50	12.5	8.3

N 69+00

8-28-50

(69)

PX

Dist. Sound Dist. Sound

3+60	13.0	8.8
	13.2	9.0
(12)	13.1	8.9
	13.1	8.9
4+00	13.7	9.5
	14.1	9.9
+20	14.5	10.3

143+90 N 70+00 8-28-50 30' 70' PX

0+00 → { N 70+00 } 2 on
 { W 143+90 } 3 1/2 Sound West

Dist.	Sound		Dist.	Sound	
0+00	+0.1	+4.0	1+70	12.8	8.9
+05	0.0	+3.9	(3.9)	12.0	8.1
+10	0.7	+3.2		11.8	7.9
³⁰ 3	1.2	+2.7	2+00	11.6	7.7
	1.8	+2.1		11.5	7.6
	3.0	+0.9		13.3	9.4
+50	4.0	0.1		13.7	9.8
	5.0	1.1		13.3	9.4
	7.8	3.9	+50	12.9	9.0
	10.0	6.1		12.9	9.0
	11.4	7.5		13.0	9.1
1+00	12.0	8.1		13.0	9.1
	12.2	8.3		13.1	9.2
	12.4	8.5	3+00	13.0	9.1
	13.0	9.1		12.9	9.0
	13.3	9.4			
+50	13.3	9.4		14.1	10.2
+60	13.0	9.1	+40	14.0	10.1

2X N 70+00

8-28-50

Dist.	Sound	Sound	West Dist.	Sound	
3+50	15.5	11.6	5+40	11.9	8.0
(3.9)	15.0	11.1	5+50	11.9	8.0
	15.0	11.1	1.20		
	14.9	11.0	(3.9)		
	14.5	10.6			
4+00	14.0	10.1			
	14.8	10.9			
	14.3	10.4			
	13.0	9.1			
	13.3	9.4			
4+50	13.4	9.5			
	12.9	9.0			
	12.9	9.0			
	12.5	8.6			
	12.6	8.7			
5+00	12.3	8.4			
	12.3	8.4			
	12.0	8.1			
5+30	11.8	7.9			

PT

N71+00 8-28-50

3.00

0+00-5+00 { N71+00 20W
143+00 5.9% Sound West

Dist.	Sound		Dist.	Sound	
0+00	?		1+00	13.3	9.6
1+07	0.0	+3.7	(3.7)	13.0	9.3
(3.7) +10	0.4	+3.3		14.2	10.5
	0.8	+2.9	2+00	13.0	9.3
	1.9	+1.8		9.5	5.8
	2.4	+1.3		8.5	4.8
+50	3.6	+0.1		8.0	4.3
	7.1	3.4		7.9	4.2
	8.2	4.5	+50	7.9	4.2
	10.3	6.6		7.5	3.8
	11.8	8.1		6.8	3.1
1+00	13.0	9.3		5.5	1.8
	14.3	10.6		4.8	1.1
	15.1	11.4	3+00	4.2	0.5
	15.0	11.3		4.0	0.3
	15.1	11.4		4.0	0.3
+50	15.0	11.3		4.0	0.3
+60	14.2	10.5	+40	4.7	0.5

N71+00 8-28-50

Sound West

Px 92

Dist.	Sound		Dist.	Sound	
3+50	4.6	0.9	5+00	9.9	6.2
(3.7)	4.4	0.7	5+50	10.0	6.3
	4.8	1.1	(3.7)	10.0	6.3
	4.9	1.2		9.8	6.1
	5.2	1.5		9.5	5.8
4+00	5.8	2.1		10.0	6.3
	5.5	1.8	6+00	10.1	6.4
	5.5	1.8		10.3	6.6
	6.2	2.5		10.6	6.9
	7.7	4.0		10.9	7.2
+50	9.8	6.1		11.0	7.3
	12.0	8.3	6+50	10.8	7.1
	14.5	10.8	(3.7)		
	14.9	11.2			
	14.8	11.1			
5+00	13.3	9.6			
	9.7	6.0			
	8.8	5.1			
+30	10.0	6.3			

PX

Sta 71+00 N 8-28-50

0+00 = Sta { 71+00 N }
 { 140+00 W } Sec E & W.

Dist	+	H.I.	-	Elev
	6.72	8.72		2.0
E338			3.0	5.7
285			3.0	5.7
246			2.8	5.9
241			3.4	5.3
190			3.4	5.3
178			3.8	4.9
163			4.8	3.9
135			5.2	3.5
129			6.3	2.4
79			6.8	1.9
55			4.7	4.0
0+00			4.6	4.1
W. 74			8.3	3.4
101			3.5	5.2
150			3.4	5.3
212			3.4	5.3
260			3.8	4.9

Sta 71+00 N 8-28-50

PX

Dist	+	H.I.	-	Elev
W. 300		8.72	4.3	4.4

210
 PX N72+00 8-28-50

0+00 = stop (N72+00) } 20' Sound West
 (W42+10) } 8'

Dist	Sound		Dist	Sound		Dist	Sound
0+00	?		1+60	12.5	9.0		
+07	+1.0	+4.5	(3.5)	12.5	9.0	(3.5)	38
+07	0.0	+3.5		12.2	8.7		40
(1.5) +10	0.3	+3.2		11.9	8.4		41
(5)	1.2	+2.3	2+00	11.3	7.8		4.3
	1.5	+2.0		11.0	7.5	4+00	4.6
	1.9	+1.6		10.8	7.3		5.0
+50	2.5	+1.0		10.3	6.8		5.1
	5.5	2.0		8.9	5.4		5.3
	6.4	2.9	+50	6.9	3.4		5.7
	8.3	4.8		4.9	1.4	+50	5.9
	10.1	6.6		3.9	0.4		6.1
1+00	11.2	7.7		3.3	+0.2		6.8
	11.9	8.4		3.4	+0.1		7.7
	12.0	8.5	3+00	3.4	+0.1		7.3
	12.2	8.7		3.5	0.0	5+00	7.7
	12.3	8.8		3.4	+0.1		7.8
1+50	12.4	8.9	3+30	3.0	+0.5	+20	8.0

PX 94
 N72+00 8-28-50 Sound West

Dist Sound Dist Sound

Dist	Sound		Dist	Sound
3+00	3.5	0.0	5+30	51.9
				4.7
		0.1	(3.5)	8.1
				4.6
		0.3	3+50	8.0
				4.5
		0.5		7.6
				4.1
		0.6		9.3
				5.8
		0.8		12.2
				8.7
		1.1		12.8
				9.3
		1.5	6+00	11.0
				7.5
		1.6		10.5
				7.0
		1.8		9.0
				5.5
		2.2		9.1
				5.6
		2.4		9.3
				5.8
		2.6	+50	8.9
				5.4
		3.3		8.9
				5.4
		4.2		9.1
				5.6
		3.8	(1.5) 4	9.5
				6.0
		4.2		10.1
				6.6
		4.3	7+00	10.2
				6.7
		4.5	+10	10.3
			120	10.7
				6.8
				7.2

PX

sta 72+00 N

PX

0+00 = sta. { 72+00 } sec. W & E

Dist	+	H.I.	-	elev
	0.22	862		2.4
W. 30			4.8	3.8
42			5.7	2.9
57			3.7	4.9
103			3.7	4.9
146			3.5	5.1
190			3.4	5.2
210			3.6	5.0
215			3.9	4.7
217			5.4	3.2
00			4.7	3.9
E 17			4.7	3.9
37			6.0	2.6
48			6.8	1.8
58			7.0	1.6
74			3.9	4.7
130			3.2	5.4
180			3.2	5.4

Dist	+	H.I.	-	Elev
		862		
250 E			3.2	5.4
305			3.1	5.5

8-28-50

PT STA - 87+00 N
 0+00 = { N-87+00 }
 { W-140+00 } SEC. E & W

DIST	+	H.I.	-	ELEV
WATER	5.68	8.88		3.2
E-96			5.7	3.2
68			4.9	4.0
32			4.6	4.3
00			4.9	4.0
W-47			4.8	4.1
93			4.9	4.0
137			5.2	3.7
182			5.2	3.7
224			5.3	3.6
272			3.9	5.0
304			5.4	3.5
338			5.6	3.3
385			5.5	3.4
420			5.7	3.2
423			6.0	2.9
426			5.3	3.6
475			0.0	8.9

8-28-50

70

PT STA - 86+00 N
 0+00 = STA { N-86+00 }
 { W-140+00 } SEC. West

DIST	+	H.I.	-	Elev.
	-0.96	7.92		8.88
00			5.1	2.8
W 17			4.2	3.7
52			4.0	3.9
100			4.4	3.5
145			4.2	3.7
186			4.2	3.7
240			4.0	3.9
287			4.0	3.9
332			4.3	3.6
365			4.7	3.2
395			4.3	3.6
432			4.9	3.0
434			5.3	2.6
445			5.2	2.7
447			4.8	3.1
495			4.3	3.6
525			0.0	7.9

8-28-50

Sta 85400 N

~~0100 = Sta~~ ^{85400 N} ~~191100 W~~ } Sec. E. & W.

Dist.	+	H.I.	-	Elev
-------	---	------	---	------

	0.08	8.96		8.88
--	------	------	--	------

E 10			61	2.8
------	--	--	----	-----

00			5.3	3.6
----	--	--	-----	-----

W 13			4.9	4.0
------	--	--	-----	-----

48			4.7	4.2
----	--	--	-----	-----

83			5.3	3.6
----	--	--	-----	-----

106			4.8	4.1
-----	--	--	-----	-----

153			4.9	4.0
-----	--	--	-----	-----

202			5.0	3.9
-----	--	--	-----	-----

265			5.4	3.5
-----	--	--	-----	-----

270			6.0	2.9
-----	--	--	-----	-----

276			5.3	3.6
-----	--	--	-----	-----

310			5.5	3.4
-----	--	--	-----	-----

330			6.3	2.6
-----	--	--	-----	-----

378			6.5	2.4
-----	--	--	-----	-----

423			6.7	2.2
-----	--	--	-----	-----

462			7.3	1.6
-----	--	--	-----	-----

496			6.3	2.6
-----	--	--	-----	-----

8-28-50

Sta 85400 N

PX

Dist	+	H.I.	-	Elev
------	---	------	---	------

		8.96		
--	--	------	--	--

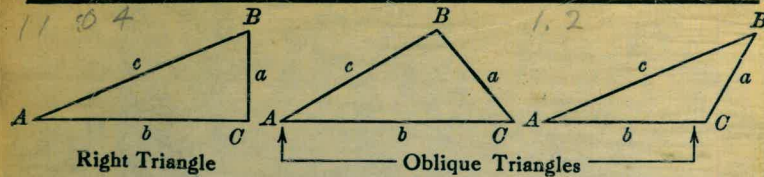
498			6.2	2.7
-----	--	--	-----	-----

519			3.5	5.4
-----	--	--	-----	-----

533			0.0	8.9
-----	--	--	-----	-----

19.28
 11.00
 16.43
 5.15
 11.30
 8.82
 0.8
 7.90
 10.74
 $+ 0.52$
 11.26
 187 $9.3.0$
 2.2
 $- 7.30$
 2.07
 2.86
 1.43
 1.1
 1.31
 0.97
 1.95
 1.55
 8.8 3.9 6.0
 53 48 30
 36 11 30
 1.01
 1.4
 53 48 30
 30
 143 48 30
 97

TRIGONOMETRIC FORMULÆ



Solution of Right Triangles

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

Given	Required	Formula
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	$B = 90^\circ - A$, $b = a \cot A$, $c = \frac{a}{\sin A}$
A, b	B, a, c	$B = 90^\circ - A$, $a = b \tan A$, $c = \frac{b}{\cos A}$
A, c	B, a, b	$B = 90^\circ - A$, $a = c \sin A$, $b = c \cos A$

Solution of Oblique Triangles

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

REDUCTION TO HORIZONTAL



Horizontal distance = Slope distance multiplied by the cosine of the vertical angle. Thus: slope distance = 319.4 ft. Vert. angle = $5^\circ 10'$. From Table, Page IX, $\cos 5^\circ 10' = .9959$. Horizontal distance = $319.4 \times .9959 = 318.09$ 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. $\cosine 5^\circ 10' = .9959$. $1 - .9959 = .0041$. $319.4 \times .0041 = 1.31$. $319.4 - 1.31 = 318.09$ 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.