

322

FIELD BOOK

No. 400

HOWARD SUTTON

NEW YORK



INDEX

609.5.115

66.665

67.225

67.210

**Sutton's**  
**Engineers'**  
**Field Books**



7368

WHEN REORDERING SPECIFY STOCK NUMBER ON FRONT COVER

LITHOGRAPHED IN WATERPROOF INK ON  
WATER-RESISTING PAPER

Made in U. S. A.



# INDEX

1	RANDY VILLENEUVE	NE 1/4 - 34 - 144-25
2	CHRISTMAS PT SHINGOBB TWP	
32	DUANE ENGER	SE-SW - 8-139-30
33	CRAWFORD (BILL HANSEN)	8-6-140-25
34	MAPLE LAND FILL	13-136-30
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78	WILLIAM BRYANT	NE-NE-33-137-29



RANDY WILLENEUVE

PT E 1/2 NE 1/4 34-144-25

TR 2 BS 1

90-12-11 3972.12 3972.081  
1210.704  
89-54-27 1321.39 1321.386  
1321.386

2987.52

TR 3 BS 1

0-0-40  
190-0-42 89-47-34  
89-48-14  
4 269-42-13 89-47-31

89-50-50

2977.43  
907.525

1323.89  
403.515

L. V. 66/ E. CURD

RANDY

1-31-89

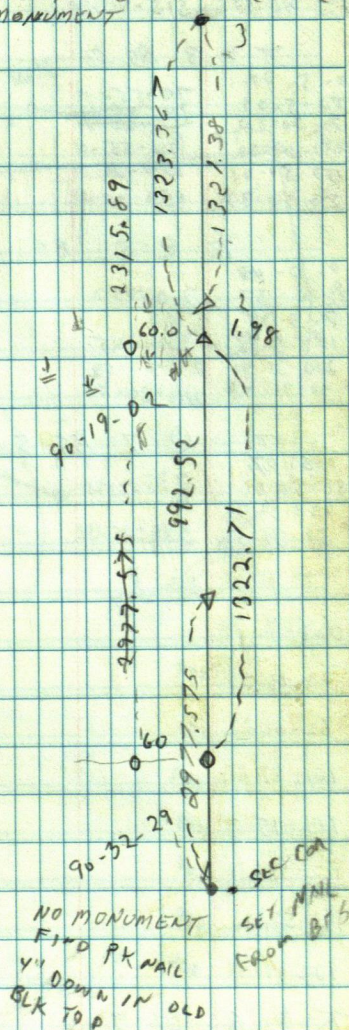
4 SET NAIL FROM MON  
AT 5

NE COR 34  
T 144 R 25  
NO MONUMENT

SET NAIL FROM  
AT 5

SET COR

7.89  
2.71  
1.18





# XMAS PT

π @ 2 BS 1				
0-06-43	313-40-03		4236.67	
180-6-58	<del>133-40-03</del>	81-46-31	1291.343	4236.629
313-46-46			1475.75	
3133-46-58	313-40-00	89-46-04	449.811	1475.739

π @ 3 BS 5				
0-5-07	70-55-13		2187.21	
180-5-09	<del>70-55-13</del>	84-55-0	666.661	2186.801
71-00-20	<del>70-55-11</del>		3514.42	
4251-0-20	70-55-11	89-53-52	1071.199	3514.405
150-30-41	150-25-34			
2370-30-37	150-25-28			

π @ 5 BS 3				
0-0-48				
180-0-57	7-04-50			
7-5-38			877.28	
6187-5-48	7-04-45	90-59-8	267.395	877.146
210-31-40	210-30-52		430.79	
730-31-48	210-30-51	86-48-10	131.304	430.116

π @ 7 BS 5				
0-6-07				
180-6-08	238-25-31			
238-31-38			274.60	
858-31-40	238-25-32	87-51-20	83.696	274.403

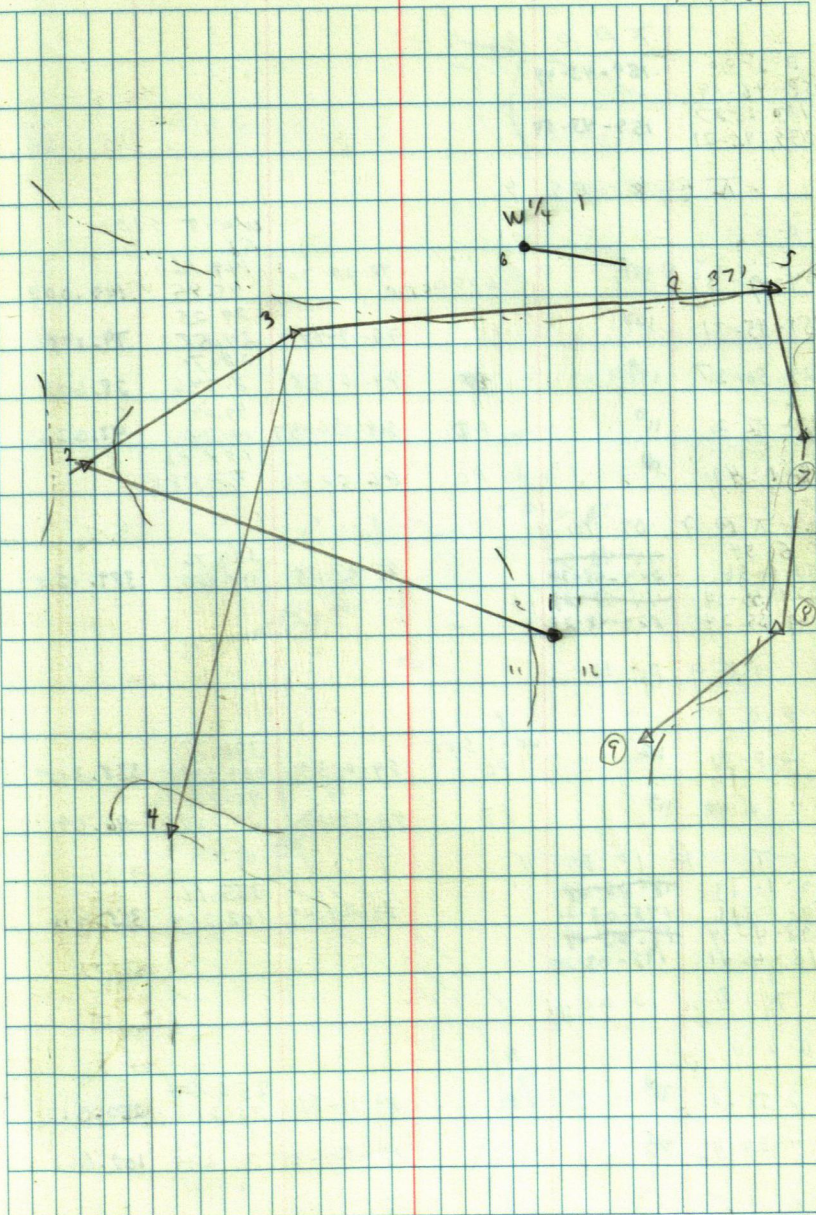
π @ 8 BS 8				
0-2-0				
			WEST SIDE 12	

1 23-13-51	100	271-15-49	69.08	
			21.04	69.052
2 62-21-22	101		49.42	
		267-15-16	15.062	49.361
3 101-37-21	102		66.91	
		267-56-58	20.406	66.556
4 114-45-3	103		107.44	
		267-40-31	32.738	106.270
5 117-47-16	104		158.05	
		267-54-42	48.172	157.155
6 120-57-1	105		61.502	
		264-32-26	201.78	200.963
7 126-40-5	106		251.68	
		265-21-01	76.208	250.944

π @ 8 BS 9				
0-3-46	159-43-27		238.71	
180-3-42		87-44-5	72.759	238.523
159-47-15				
7 39-47				

60° CLR LT WIND

E. CARD  
8. EDIE  
VOLBY  
4-22-89 2





TR 8 BS 9

159-43-49

0-2-30  
159-46-19

159-43-59

7 339-46-21

TR 8 BS 9

0-0-0

WEST SIDE

RT

1 154-19-39 107 LNO. 0.67 72-25-30 149.16 45.45 149.003

2 151-45-31 108 92-9-47 29.25 24.87 79.197

3 129-36-27 109 94-6-58 28.70 8.746 28.623

4 17-42-2 110 PT 88-56-53 47.04 14.34 47.026

5 4-1-49 111 PC 86-50-22 154.42 47.088

TR 9 BS 10

0-6-54 ~~114-48-30~~  
130-6-56 ~~324-48-30~~

88-47-35 389.76 118.800 389.150

224-55-24 ~~114-48-30~~  
44-55-24 ~~224-48-21~~

8 44-55-24

TR 9 BS 10

0-0-0

P

1 0-5-30 112 WEST SIDE PC 89-0-59 338.37 103.133 338.315

2 6-0-49 113 PT 88-29-57 96.72 29.484 96.692

TR 10 BS 11

0-1-13 ~~18-03-29~~  
180-1-16 ~~198-03-21~~

88-24-49 355.16 108.254 355.024

198-4-34 ~~18-03-29~~  
18-4-41 ~~198-03-25~~

9 18-4-41

TR 10 BS 11

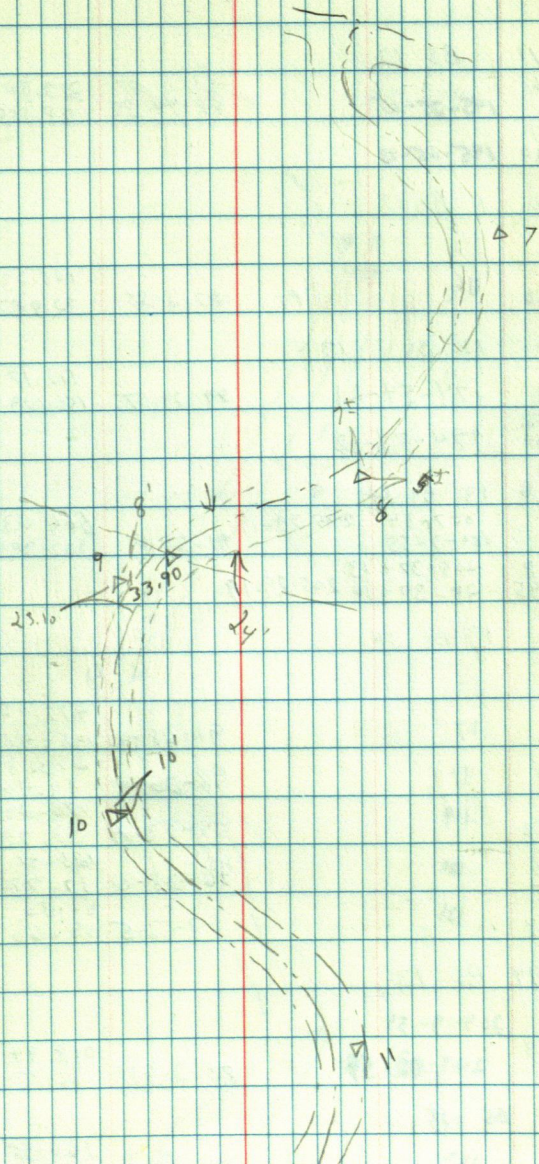
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P

1 2-55-20 114 PC 89-11-51 250.04 76.214 250.017

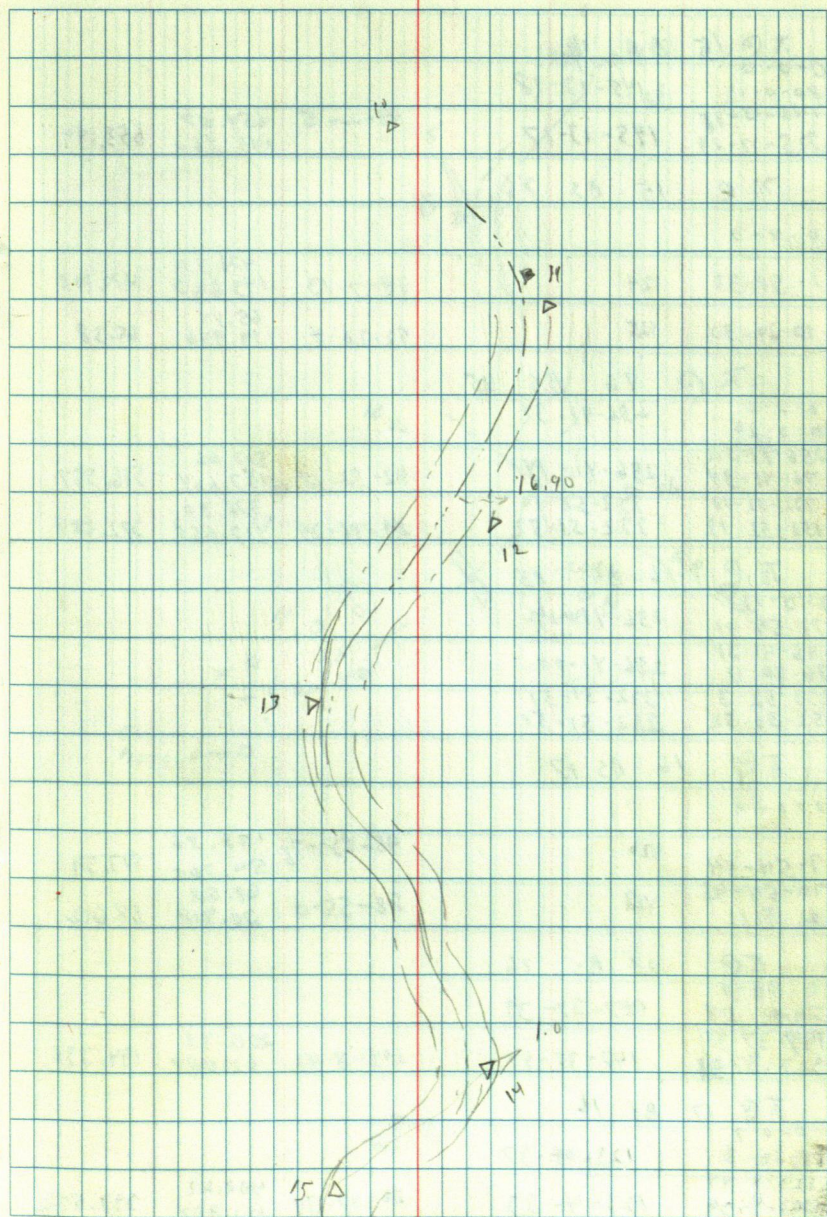
2 7-24-42 115 PT 88-54-35 102.69 31.295 102.663

3



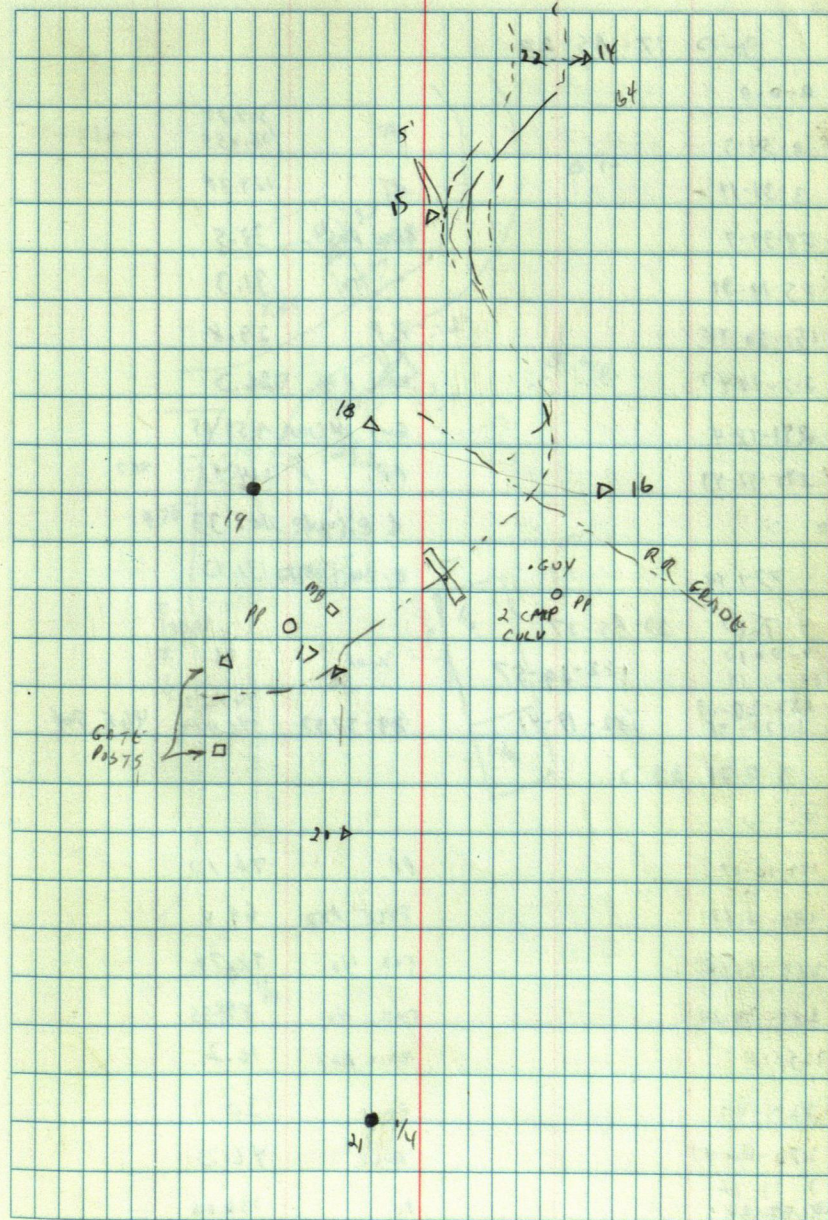


	T @ 11	B5 12		
	0-6-56			323.74
	180-7-7	145-25-15	88-44-39	98.555 323.263
	145-32-11			
10	25 32-20	145-25-13		
	T @	11 B5 12		
	0-0-0			
1	9-20-26	116	P_T	87-2-55 108.23 32.987 108.093
	T @	12 B5 13		
	0-6-37			512.17
	180-6-49	174-54-21	94-29-57	156.109 510.589
	175-0-58			
11	355-1-02	174-54-12		
	T @	13 B5 14		
	0-8-6	0-7-54	205-29-19	664.03
	180-8-6	180-7-55	91-2-0	202.394 663.915
	205-37-28	205-37-13		
12	25-37-45	25-37-14	205-29-19	
	T @	13 B5 14		
	0-0-0			
1	1235-0	117	91-28-40	477.07 145.419 476.923
2	1-115-9	118	93-20-44	273.80 83.464 273.358
3	4-35-52	119	94-53-54	176.28 53.739 175.652
4	6-56-13	120	96-03-0	123.91 37.772 123.226
5	197-8-18	121	87-52-5	51.36 15.66 51.334
	T @ 14	B5 13		
	0-0-0			
	180-0-7	209-9-59		
	209-3-59			
15	29-4-6	209-02-59	88-2-51	216.94 66.731 216.81
	T @ 14	B5 15		
	0-0-0			
	4-4-1)	122	87-37-31	166.55 50.768 166.412
	(2) 12-29-58	123	90-19-2	63.86 19.457 63.846





T @ 15 BS 14				
0-0-0				
180-0-12	145-13-18			
145-13-18		93-2-5	654.07	
16 325-13-29	145-13-17		199.360	653.149
T @ 15 BS 16				
0-0-0				
1 1-58-35	124	94-7-13	471.33	472.108
			143.660	
2 10-29-50	125	92-26-4	65.44	
			19.946	65.38
T @ 16 BS 15				
0-0-0	256-41-32			
181-0-20				
256-41-32			517.06	
17 76-41-34	256-41-14	92-32-18	152.624	516.557
			372.90	
332-52-10	332-52-10			
18 152-52-12	332-51-52	89-36-49	113.659	372.888
T @ 16 BS 15				
0-0-12				
179-59-01	256-41-19			
256-41-31				
17 76-40-11	256-41-10			
332-52-3	332-51-51			
18 152-50-52	332-51-51			
T @ 16 BS 17				
0-0-0				
1 7-54-44	126	95-38-38	178.56	
70-54-43			54.305	177.39
12 1-5	127	88-55-0	68.62	
			20.918	68.612
T @ 18 BS 16				
0-00-4				
179-59-54	147-37-39			
147-37-39			200.41	
19 327-37-38	147-37-44	104-8-41	61.087	194.336
T @ 17 BS 16				
0-0-7				
180-0-6	123-04-37			
123-4-44				
20 203-4-39	123-4-33	86-47-39	400.22	399.592
			121.987	









ΠC	21 BS 20			
0-0-11	266-17-29			
182-0-16				
266-17-40				
22 86-17-43	266-17-27	89-7-30	440.55 134.28	440.497

ΠC	21 BS 22			
0-0-0				
00-0-0			163.47	
50-42-14			61.59	

ΠC	22 BS 21			
0-0-02	168-15-49			
181-0-07				
168-15-51	168-15-41			
23-48-15-48				

ΠC	23 BS 22			
0-0-0			288.71	
180-0-5	191-06-30	92-0-39	85.562	280.539
191-6-30			425.38	
24 11-6-38	191-06-33	89-22-11	429.66	425.359

ΠC	23 BS 24			
0-0-10				
1-57-13			311.39	
18102-40		PC	94.912	
20-48-30		PT	47.12?	
			82.71	

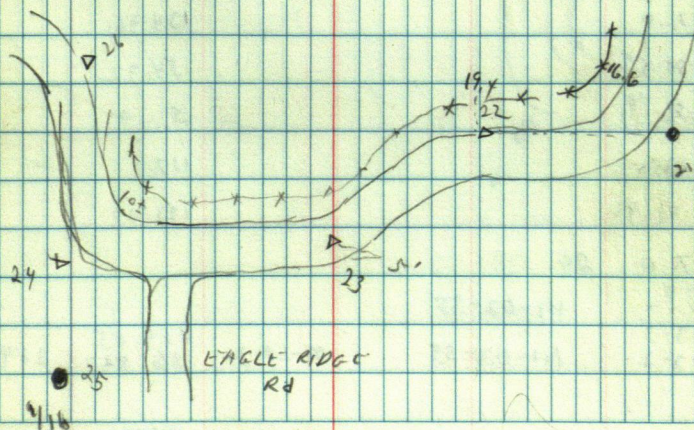
ΠC	24 BS 23			
0-0-36	85-40-33	91-8-20	41.507	
180-0-24			136.17	136.629
265-40-59	85-40-33	87-19-57		
25 85-40-09	288-18-16			
26 288-18-38	288-18-02			
109-18-40				

ΠC	24 BS 23			
0-0-0				
58-14-07	W SIDE RD		133.23	
23-42-1	"		66.67	
21-35-16	TELE BOT		54.81	5' W OF
6-28-57	SIC N		47.64	EDGE

E. CURS  
L. VOLLEY  
B. EDIE

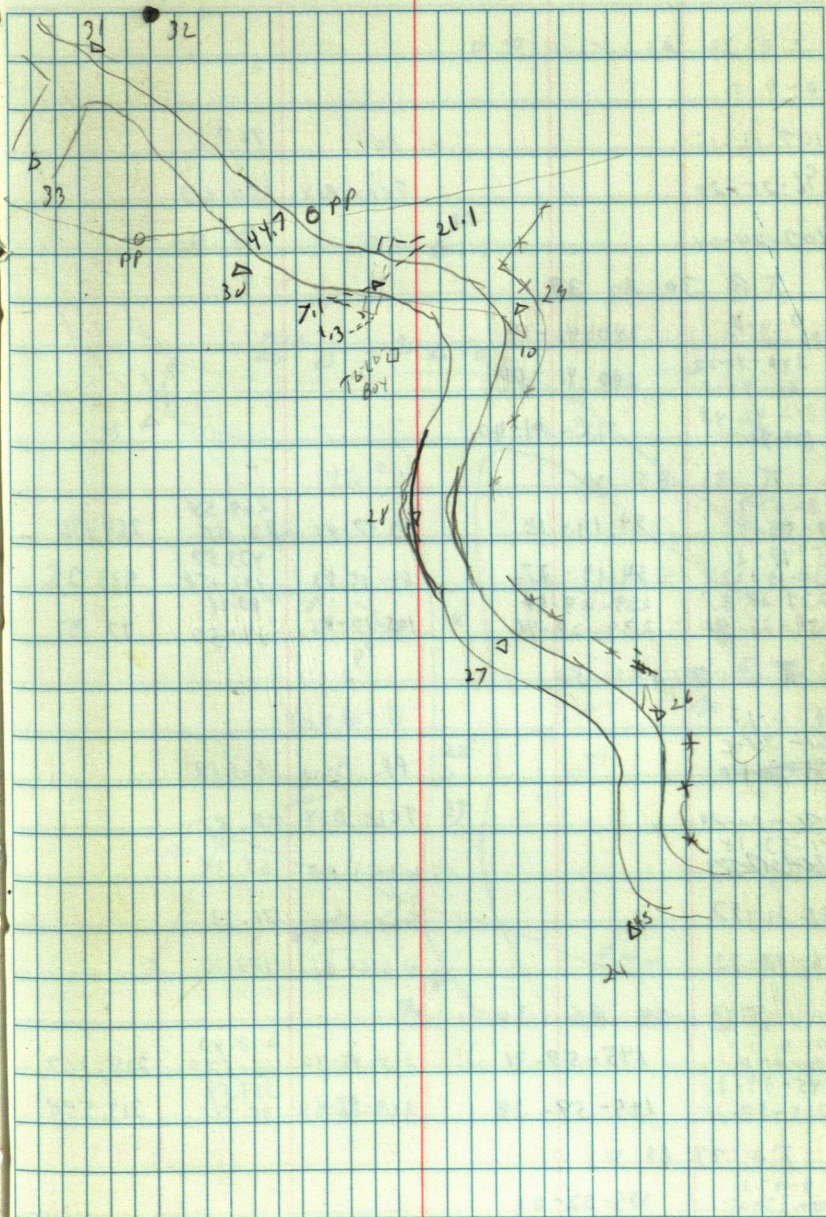
5-6-69

7





$\pi @$ 26 BS 24			
0-0-13	119-01-24	87-17-33	294.72
180-0-21			89.837
119-1-37			209.60
27 299-1-34	119-01-13	92-14-42	63.886
209.438			
$\pi @$ 26 BS 27			
0-0-0			
3-1-5		PC	191.72
7-57-47		PT	83.96
227-16-38		PC	72.02
$\pi @$ 27 BS 26			
0-0-0	194-11-17		
179-59-59			
194-11-17			
28 14-11-22	194-11-23		
$\pi @$ 28 BS 27			
0-0-12		84-50-11	242.32
180-0-13	240-57-20	275-27-20	23.859
240-57-32			167.31
29 6-57-39	240-57-26	94-5-46	50.997
166.883			
$\pi @$ 28 BS 29			
0-0-0			
1-31-21			134.36
13-54-59			54.32
109-56-14			59.19
111-22-10			117.
114-41-42			193.03
$\pi @$ 29			
0-0-8	111-02-55		
180-0-7			
111-3-3			
30 291-3-2	111-02-55	91-29-30	284.85
86.822			
284.36			
CULV. 265-57-25			
285.17			
228.14			
69.537			
284.30			





8  
 T @ 29 BS 28

0-0-0

107-12-15

PC

167.2

96-25-28

TELE BOX

154.62

102-24-04

PT

95.90

T @ 30 BS 29

0-0-8

240-41-14

180-0-5

240-41-22

240-41-00

31

60-41-5

312-41-48

312-41-40

PP

T 31 BS 30

0-0-3

54-19-18

93-7-41

269.54

269.136

179-59-56

54-19-21

54-19-27

86-15-23

433.59

433.28

33

234-19-23

239-28-57

239-28-54

105-17-46

80.21

77.37

32

59-28-42

239-28-46

24.450

T @ 31 BS 30

0-0-10

54-19-18

PP

161.19

61-54-6

~~136-20-20~~

136-20-20

TELE BOX

42.37

71-53-18

W EOGAL RD

68.39

~~81-21-53~~

81-21-53

SIGN POST

71.33

56-47-32

W 6068 RD

180.00

T @ 34 BS 30

0-0-1

145-59-31

267-46-40

218.43

218.267

180-0-0

145-59-32

267-46-40

66.529

35

325-59-28

145-59-28

269-56-42

313.59

313.588

T @ 33 BS 31

0-0-1

185-52-08

93-12-35

198.40

198.087

179-59-55

185-52-9

185-52-13

36

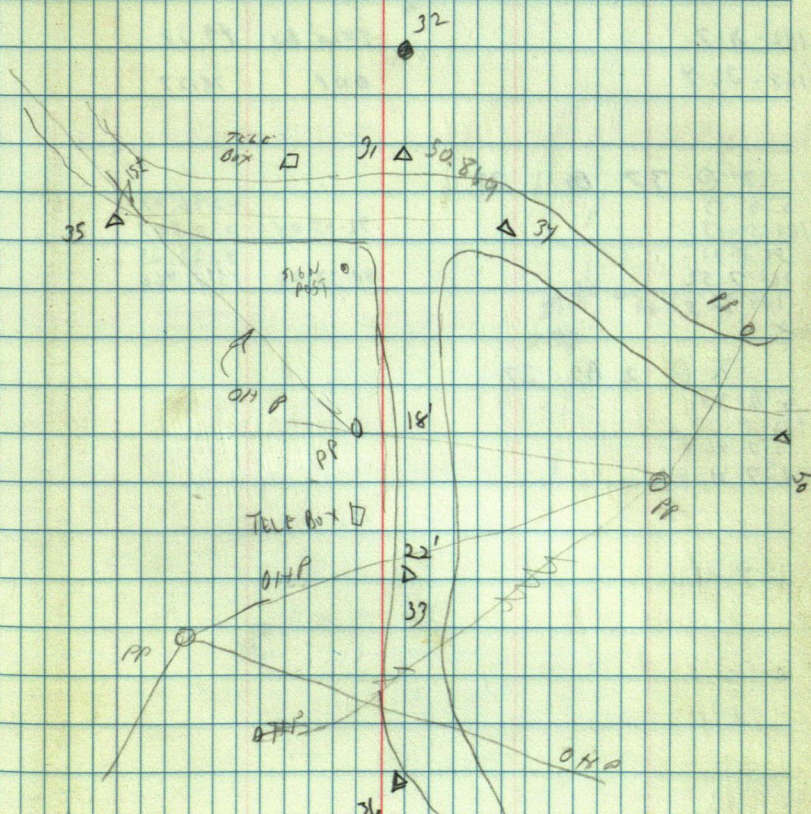
5-52-8

60.472

9

2 P

37





$\pi$  c 33 B5 36

0

3-1-12

PC

160.19

4-56-33

OHP

100.76

142-21-7

TOL6 8x

49.18

168-32-4

ONP

78.27

 $\pi$  c 37 B5 32

0-0-03

2396.67

180-0-13

92-42-04

230.507

31-7-41

4322.35

2 261-7-52

91-32-03

1317.466

184-32-50

1-2

 $\pi$  c 2 B5 37

0-0-30

180-0-37

312-41-41

3 137-41-46

3  
2

2 2

 1  
 39.40 12  
 237

32



6/22/89

## CHRISTMAS POINT RD

T @ A BS 8

VERT

89-19-16" 196.29' 59.835 m 196.2487'

T @ A BS B

95-37-58" 167.75' 51.140 m 166.9553'

T @ D

9 90-50-48" 304.53' 92.822 m 304.4975'

T @ E

2 92-22-30" 216.17' 65.889 m 215.9840'

12 271-02-12" 215.08' 65.555 m 215.0416'

T C F to H

3 98-27-06" 159.01' 48.462 m 158.7221'

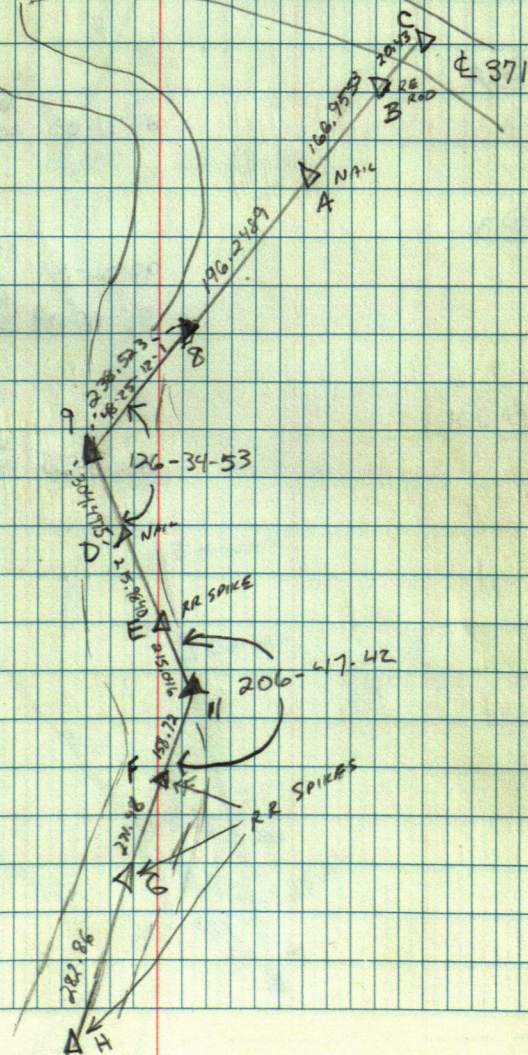
6 91-18-24" 271.55' 271.55 m 271.4807'

T @ H

6 85-20-34" 283.80' 86.503 m 282.8630'

TAPED From C to B 20.43'

HWY # 371





6-22-89

I @ H

I

VERTICALS

263-55-68 103.49' 31.544 m 102.9076'

TAPED FROM I TO 200

2.91'

I @ A

200

89-11-00 707.11' 215.527 m 705.3946'

I @ B

C

93-06-14 205.52' 62.612 m 205.2173'

A

95-07-09 126.86' 38.666 m 126.3519'

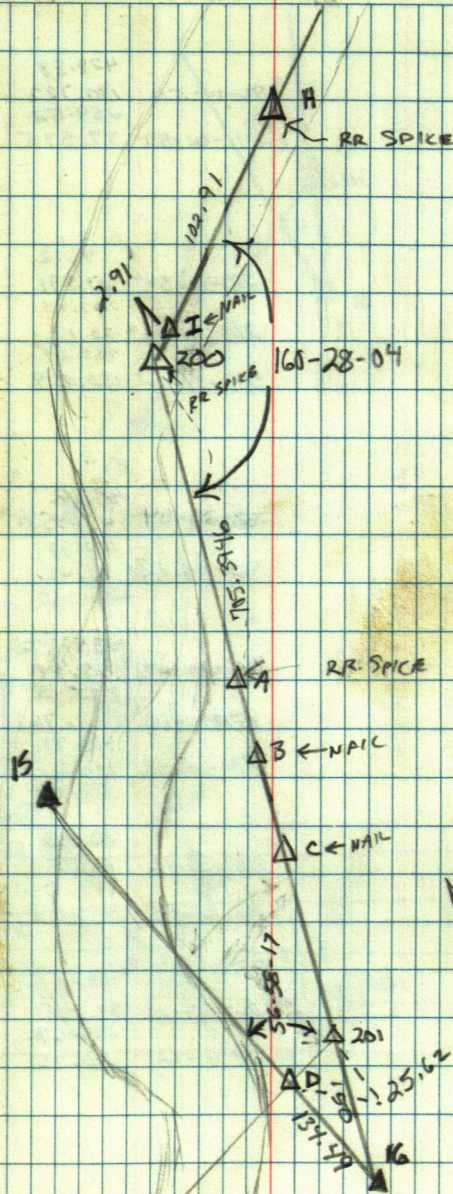
I @ 201

3 C

86-20-45 223.45' 98.588 m 322.7917'

CHRISTMAS POINT RD

12



RR



6/23/89

T @ E

D	86-14-54	428.88 130.722 254.52	427.958
202	271-01-57	77.575	254.1731

T @ F

G	289-10-54	74.12 22.591 107.15	70.0035
202	263-04-26	32.621 433.24	106.3710
T @ H	271-21-15	132.059	473.14

T @ I

H	268-26-04	148.16 45.155 M	148.0772
203	92-29-49	172.18 52.48	172.015

T @ J

203	95-00-00	258.56 78.811 337.15	257.5781
K	272-18-16	102.761 428.77	336.8721

T @ K

T @ L

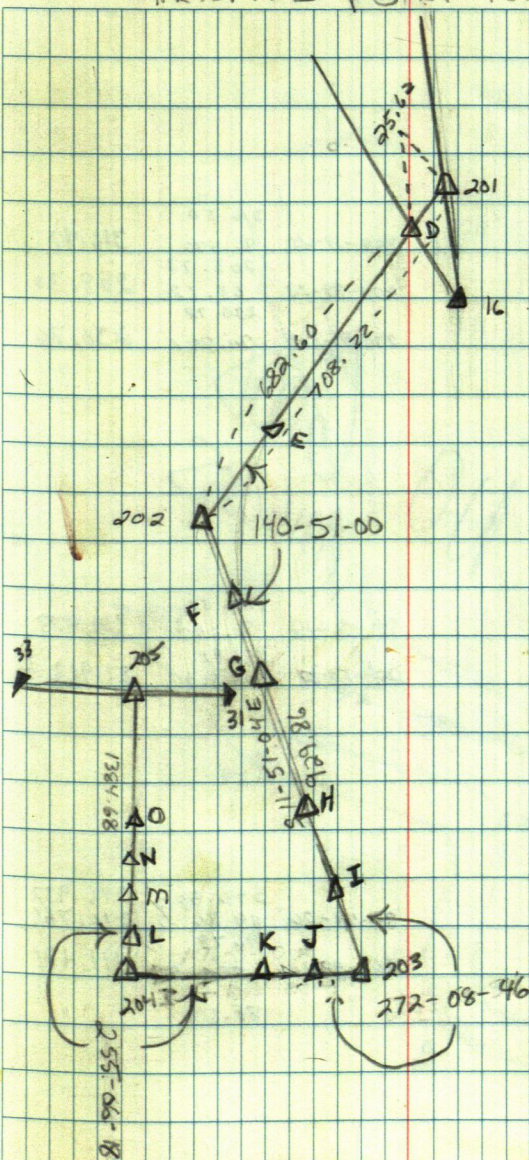
M	267-59-12	180.63 55.055 117.10	180.5160
204	26-16-27	35.693	116.8535

T @ N

O	262-49-12	109.04 33.265 297.67	108.2829
M	90-11-12	90.73	297.6664

CHRISTMAS POINT RD

13





TC 36 BS 33

0-0-0  
180-00-06  
133-11-28  
313-11-32

TC 100 BS 36

0-0-0  
180-00-11  
154-59-84  
101 334-59-06  
211-20-39  
102 31-20-42  
BS 0-0-0  
180-0-06

316.50  
269-38-25 96.476 316.42  
208.73 208.30  
63.620  
230.78  
270-41-54 70.841 230.76

TC 102 BS 100

0-0-0  
181-0-08  
238-58-20  
103 55-58-25

TC 103 BS 104

0-0-0  
180-00-13  
150-51-00  
102 330-51-06

310.51  
90-56-18 94.647 310.473  
81.91  
268-59-38 24.962 81.912

TC 104 BS 103

0-0-0  
180-6-04  
105 267-10-21  
87-10-24

TC 105 BS 101

0-0-0  
180-00-03  
135-35-21  
106 305-35-22  
Prop 99-52-29

276.987 276.937  
89-44-26 84.36 276.766  
196.78  
266-45-31 58.454 191.471  
88.50

TC 106 BS 105

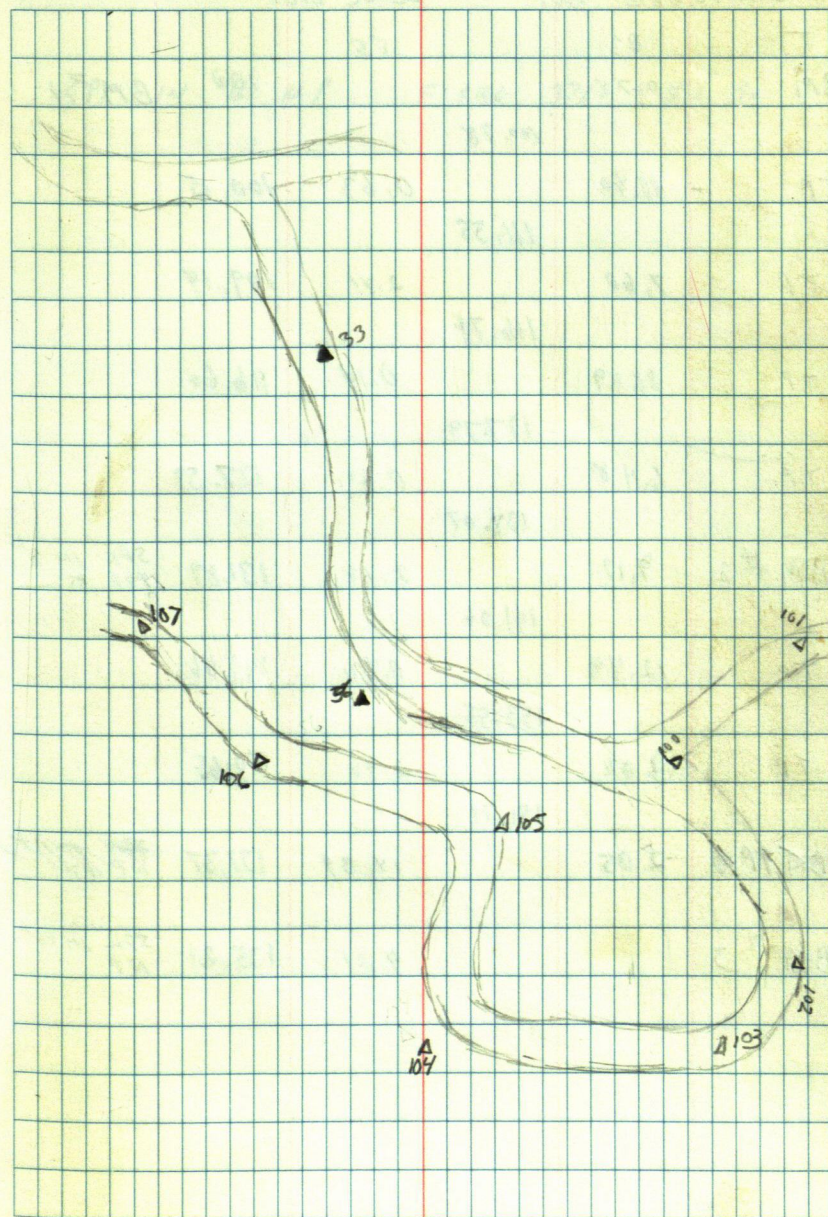
0-0-0  
180-00-04  
107 196-35-05  
16-35-13  
Prop 42-00-19

42.90

NO GOOD ANGLES

Christmas Pt. Rd.

14





SUNINGO BEE TWP		LEVEL LOOP		
	BS	FS		
BM	0.78		100	BM #1
		100.78		
TP	11.40	0.63	100.15	
		111.55		
TP	7.60	2.41	109.14	
		116.74		
TP	11.19	0.14	116.60	
		127.79		
TP	6.48	0.20	127.59	
		134.07		
BM #2	9.17	2.18	131.89	SPK IN 8' APP RT
		141.06		
TP	12.49	0.00	141.06	
		153.55		
TP	1.06	2.90	150.65	
		151.71		
<del>TP</del>	2.05	14.34	137.37	<del>SPK IN 14'</del> <del>NP RT</del>
BM #3		4.21	135.21	SPK IN 16" NP

SPK IN 6" NP E SIDE 371 50' S.



TC 107 BS 106

0-0-0

143.22

180-00-08

267-47-18

43.654

143.114

108 180-00-03

259.77

353-47-37

88-55-04

79.184

259.743

TC 107 BS 108

0-0-0

180-00-07

186-13-18

10606-13-25

TC 108 BS 107

180-00-19

193-46-45

13-46-49

Prop

42-33-30

37.44

TC 4 BS 108

0-0-0

312.40

180-00-18

87-12-13

95.217

312.02

144-26-30

3324-26-49

TC 4 BS 3

0-0-0

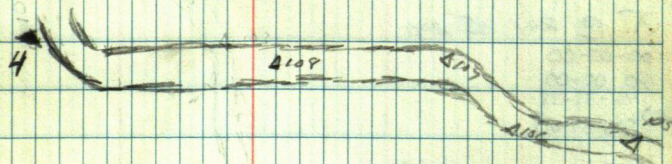
180-00-00

215-39-11

118 35-33-53

Christmas R6. Rd

16





17  
 $\pi$  @ 35 BS 34

0-0-0		313.60	
180-00-24	90-14-32	95.884	313.593
223-14-58		402.27	
200 43-15-13	201-25-30	122.615	402.149

$\pi$  @ 200 BS 35

0-0-0  
 180-00-13  
 127-47-01  
 301-47-07

$\pi$  @ 201 BS 200

0-0-0		211.99	
180-00-26	91-13-42	64.611	211.934
213-40-47		288.86	
200 33-20-55	92-07-41	28.045	

$\pi$  @ 201 BS 202

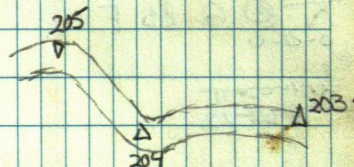
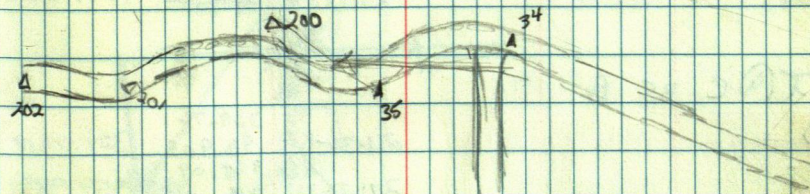
00-00-00  
 180-00-00  
 146-37-33  
 200 326-39-29

$\pi$  C 200 BS 201

0-0-0  
 185-08-14  
 171-58-08  
 361-58-19

$\pi$  C 203 BS 202

0-0-0		269.48	
180-00-00	86-32-27	72.137	
145-66-26			
204 325-00-16	89-18-40		





T @ A BS 23

B

269-27-15

151.50

46.179

151.4954

117.82

~~39.915~~

117.7255

700 BS B

D

261-36-5)

327.76

99. 905

324.2618

B

271-27-31

355.09

168. 2.22

354.9871

$\pi @ E$  BSD

F

282-54-5

80.76

24-617

78. 7192

D

90-10-33

352.00

107.29

351.9974

X @ G B S F

0-0-0

108.77

275-52-1

33-153

108.199

197.94

~~268-21-4~~

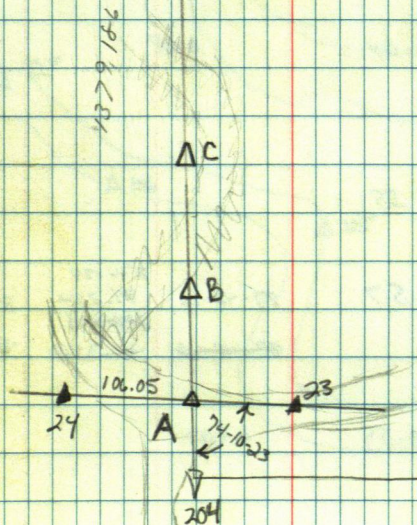
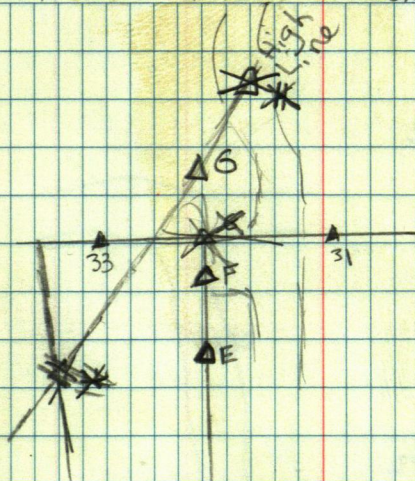
~~44-332~~

CHRISTMAS PT. RID

BILL & DALE

7/5/89 19

SUNNY & HOT Temp 96°



EAGLE RIDGE  
RD.



TC 36 BS 33  
0-0-0

100 133-12-12  
266-24-24 133-12-12

TC 100 BS 36  
0-0-0

154-57-02  
14 309-53-49 154-56-55  
211-17-35  
102 6-35-10 211-17-35

TC 102 BS 100  
0-0-0

288-59-43  
103 117-59-24 238-59-42

TC 103 BS 102  
0-0-0

209-10-08  
104 58-20-08 209-10-04

TC 104 BS 103  
0-0-0

267-11-56  
105 174-23-50 267-11-55

TC 105 BS 104  
0-0-0

125-33-57	89-42-16	276.74	84.252	276.7398
125-34-07		276.74		
106 251-10-21 251-07-51	89-42-16	84.352	276.7377	

TC 106 BS 105  
0-0-0

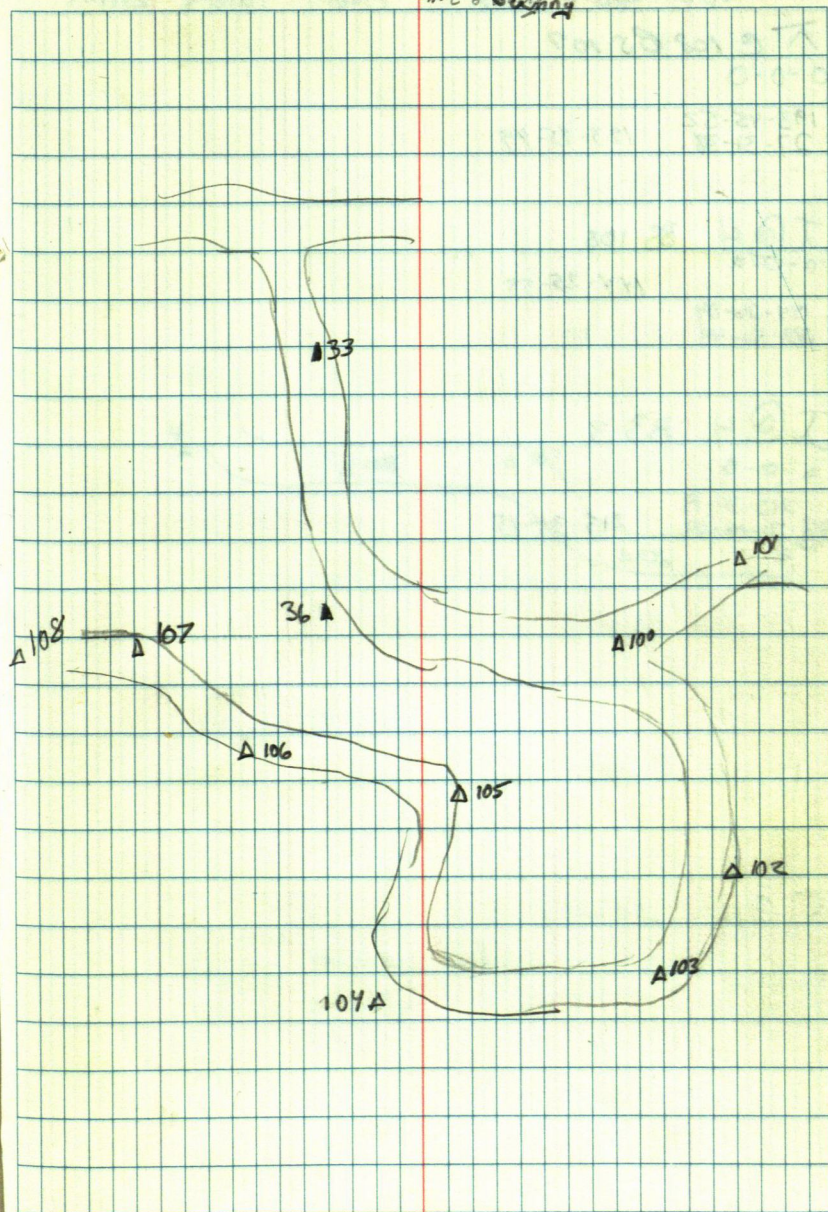
176-37-55  
107 196-34-02  
33-07-49

TC 107 BS 106  
0-0-0

173-49-30  
106 173-49-38  
347-38-59

B. Edie  
D. Farnham  
Hol + Survey

716189  
94° 19





PC 108 BS 107

0-0-0

4 193-45-52  
27-31-38

193-45-49

I@4 BS 108  
0-0-0

144-25-55

3 144-26-04  
288-51-49

I@4 BS 3

0-0-0

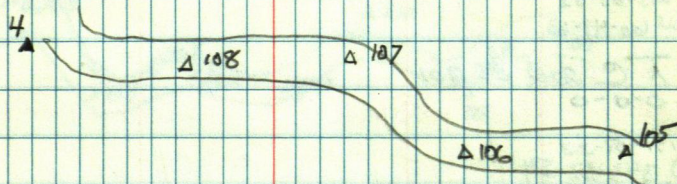
215-34-19  
108 71-08-29

215-34-15

XMAS POINT ROAD

JULY 6, 1989 B. EDIE  
D. PARKMAN  
SUNNY & HOT 94°

20





X @ 35	BS 34
0-0-0	



120

	BS	FS	R.R. SAILER
BM#4	3.79	84.26	24" NP
TP	9.74	0.515	69.56
TP	8.41	1.365	77.93
TP	2.21	2.37	79.97
TP	7.325	0.14	81.69
TP	6.11	0.955	82.71
TP	0.53	8.65	89.37
TP	3.95	6.91	83.49
TP	2.4	4.35	87.29
TP	7.92	6.44	81.05
TP	9.91	1.745	85.55
TP	9.065	0.49	85.64
TP	12.825	1.59	100.12

XMAS PT. RD

JULY 7, 1989

SUNNY

22

B. EDY - D. FARNAM



	BS	FS	
<del>Bm#3</del>			
TP	7.285	3.295	11.05
Bm#3		1.73	135.19
Bm#3	1.73		135.21
TP	0.18	13.52	135.46
TP	0.21	10.96	99.17
TP	1.53	11.43	93.46
TP	7.56	6.325	71.66
TP	4.65	3.1	83.12
TP	12.16	4.25	82.52
TP	0.185	1.7	97.98
TP	8.36	13.125	81.04
TP	0.97	5.365	61.27

X-MAS Pt. RD

JULY 7, 1989  
B. EDIE - D. FARNAM

23



	BS	FS	
TP	0.17	14.28	<del>84.23</del>
Bm#4		4.6	84.26
Bm#5	1.995 <del>5.115</del>		60.08 R.R. SIZE 8" OAK
TP	1.9	6.01	
TP	4.48	4.505	
TP	12.24	2.28	
TP	9.49	0.505	
TP	8.08	2.98	
TP	6.65	3.63	
Bm#4		1.275	
Bm#4	1.275	<del>8.</del>	84.25
TP	3.09	6.43	
TP	1.44	8.3	

B. F. DIE - D. FARNAM



FS

	BS	FS	
TP	.64	7.95	
TP	2.695	12.5	
TP	5.82	6.36	
TP	<del>6.87</del> <del>4.365</del>	2.55	
Bm#5		1.92	70.59
<hr/>			
Bm#5	2ND ATTEMPT		
Bm#5	2.09		60.08
TP	2.1	6.105	
TP	7.765	7.46	
TP	11.925	2.81	
TP	8.69	0.185	
TP	9.085	2.17	
TP	6.47	1.905	
Bm#4		3.295	84.27

JULY 7, 1989

SUMM 25

B. EDG - D. FARNAM

HOT AFTERNOON

XMAS PT RD



	BS	FS	
Bm #4	3.295		84.26
TP	.93	8.5	
TP	0.895	11.82	
TP	2.42	13.405	
TP	4.76	4.63	
TP	6.8	1.91	
Bm #5		3.015	60.08



IC H BS 200

0-0-0

G 167-53-31  
335.46-38

IC H BS G

0-0-0

192-06-48  
24-18-39 192-06-50

89-55-32	302-15 92.399	303.147
271-39-26	310.48 94.635	310.35

IC G BS H

0-0-0

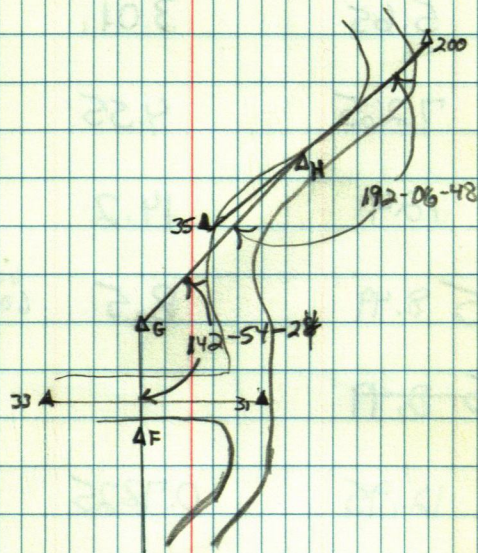
G 142-54-28  
285-48-48 142-54-24

XMAS PT RD

July 10, 1989

27

B. EDIE - D. FARNAM





	BS	FS	
Bm#6	9.435		72.46 R.R. SPIKE 10" NP
TP	2.325	7.0	
TP	5.65	3.01	
TP	7.265	4.55	
TP	1.24	14.2	
Bm#5	8.49	8.5	60.12 60.08
<del>Bm#5</del>	<del>8.49</del>		
TP	12.95	0.7825	
TP	2.46	6.23	
TP	6.61	2.07	
Bm#6		9.045	72.46
Bm#7	3.33		107.03 RR SPIKE 10" OAC
TP	0.705	6.725	



22

B.S.

FS

TP 6.205

1027

TP	0.58
----	------

2.35

TP	1.86
----	------

14.29

TP 3.05

12.1

TP 6.42

2,105

BM #6

8,85	72,49
------	-------

BM#6 8.925

~~6.5~~ 72.46

TP 3.13

6.5

TP 10.13

4.17

TP	6.82
----	------

1.14

TP	10,86
----	-------

0.73

TP 14.03

5,58

TP 41,905

2.68

BM#7

3.44	107.03
------	--------

July 10, 1989

29

B. Edie - D. Farnham

XMAS PT RD



12

BS

F8

Bm#8

.075

65.76

## POWER POLE

TP

1.08

14.21

TP

1.365

12.32

TP

13,45

4.77

TP

11.26

1.325

TP

13.89

1.285

TP

13.45

.785

TP

4,485

1.615

TP

12.25

1.75

TP

8:43

.925

TP

5.35

5.54

Bm#7

3.32

Bm#7

3,415

107.03

XMAS PIR D

July 10, 1989

B. B. DE - D. FARNAM

30



OE

BS

FS

TP

2.32

5.54

TP

0.08

11.095

TP

.33

8.82

TP

.31

12.42

TP

.97

11.845

TP

.61

13.2

TP

1.325

11.665

TP

14.42

1.43

TP

12.44

1.1

BM#8

.375

65.76



18  
DUANE KNGER  
I @ 1/4  
3 90-47-30 488.84 488.842  
149.017 486.46  
2.38  
488.77

K @ 3 BS 2  
0-0-0

4 91-31-42 33.00

K @ 5 BS 3

3 91-28-32 194.03 193.9659  
59.141  
419.02  
6 91-14-44 127.718 418.9203

K @ 7 BS 6

6 270-55-31 240.95 240.9150  
73.44  
349.11  
8 90-24-20 106.412 349.1051

I @ 8 BS 7

9 267-42-29 125.11 122.75  
57.135  
128.06  
267-43-06 37.508 122.96

K @ 9 BS 8

10 91-25-12 205.53 205.4684  
62.647  
143.521  
11 89-48-55 470.87 470.8652

K @ 11 BS 10

8-0-0  
274-14-42 1344.58 1344.4480  
270-46-36 409.829

OVERCAST

JULY 11, 1989 B. EDIE - D. FARNAM

32

269-14-19

9 10 11

08

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91-31-42

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02

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28.33  
486.46  
1/4



# CRAWFORD

π @ 2 BS 1

96-16-50	98.48 30.617	97.89
88-49-0	230.55 70.272	230.50

π @ 3 BS 2

0-0-14	
180-0-13	77-16-36
77-16-50	
252-16-54	77-16-41

π @ 4 BS 3

0-0-03		178.07	
180-0-06	194-07-37	90-10-46	54.277
194-07-40			178.07
14-07-43	194-07-37	86-47-40	276.94
			24.411
			276.505

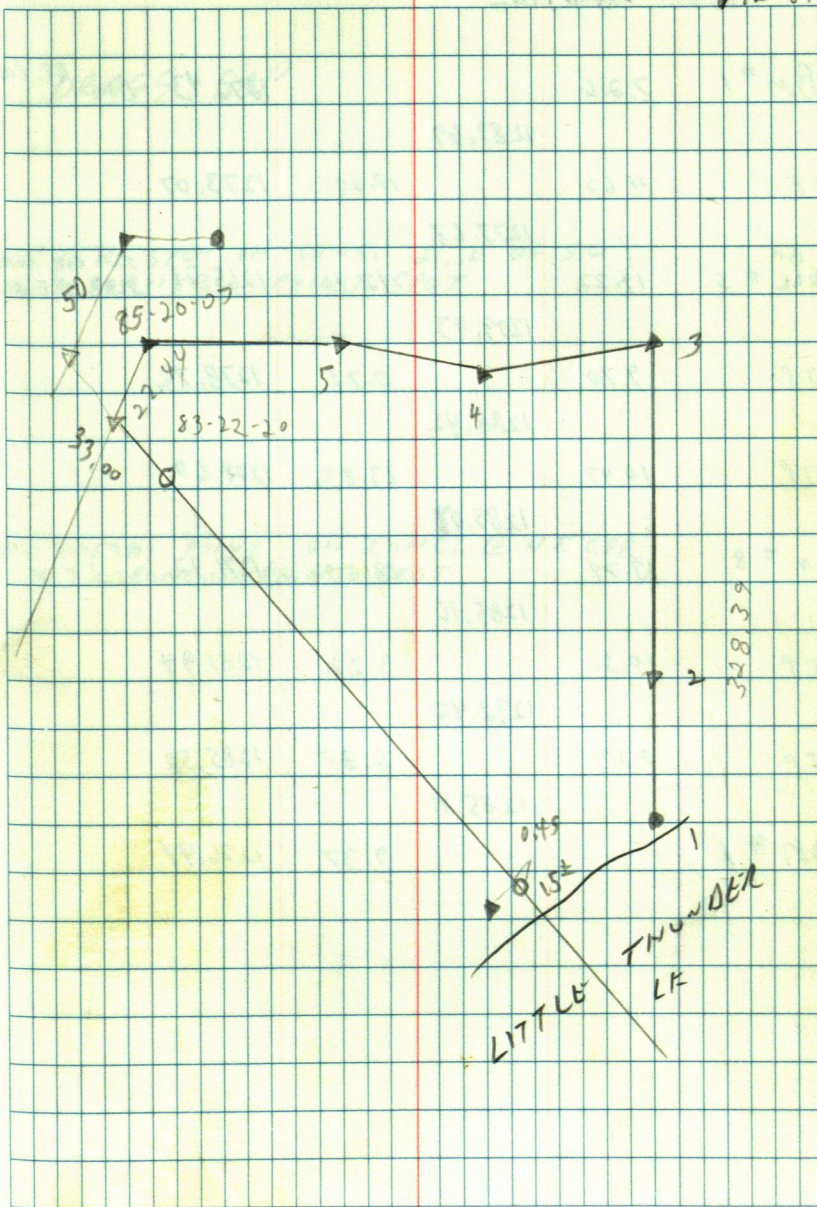
π @ 5 BS 4

0-0-04			
180-0-05	179-54-55		
179-54-59		231.37	
359-54-56	179-54-51	92-22-06	70.521
			231.170

0-0-53	
180-01-06	125-50-08
125-51-08	
305-51-12	125-50-06

85° NOT IN MID

E. CURD  
D. FARNUM 33  
7-12-89





## MAPLE LANDFILL

Bm #1	7.26		1276.43	Bm BR. CAP.
		1283.69		
TP	4.60	10.62	1273.07	
		1277.67		
Bm WELL #5	14.22	12.46	1265.21	SW COR CONC. SLAB 2 <sup>ND</sup> E OF COR
		1279.43		
TP	9.70	0.71	1278.72	
		1288.42		
TP	10.47	13.82	1274.60	
		1285.07		
Bm #8	13.74	13.65	1271.42	NE COR CONC. WELL #8
		1285.16		
TP	10.51	3.22	1281.94	
		1292.45		
TP	0.23	6.87	1285.58	
		1285.81		
Bm #1		9.37	1276.44	

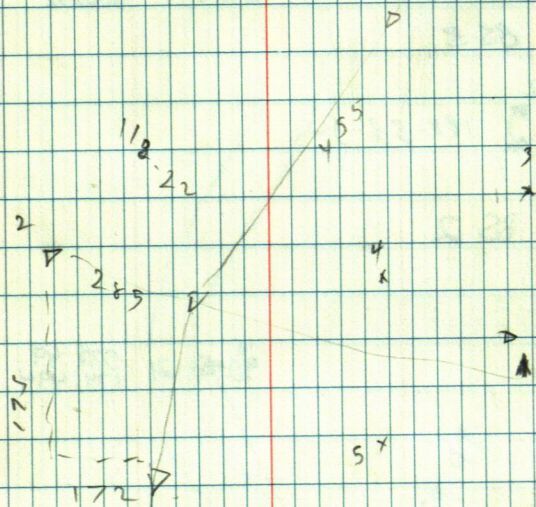
## DRASS CAP

(HI SPOT ON CONC. 2" E OF SW  
CORNER - PAINT SPOT)

(HI POINT ON CONC. @ NE COR)  
CONC. - PAINT SPOT



	$\pi$	$\Theta$	1	03	2		
0-0-57						1424.03	
			74-11-	28		90-30-03	434.242
3	74-12-25					97-58-50	113.20
							112.10
4	0-0-57					96-16-35	140.37
							139.53
5	312-12-31	312-11-34				91-30-13	259.25
							259.16





RENNIS STAVOS

TC2 BS1

174-39-55	174-39-40	91-11-24	235.89 71.899	235.838
<del>174-39-55</del>		268-01-24	235.01 71.63	234.867

TC3 BS2

0-0-0

233-10-35			216.18	
10-20-36	237-10-18	270-31-11	65.872	216.17

TC4 BS3

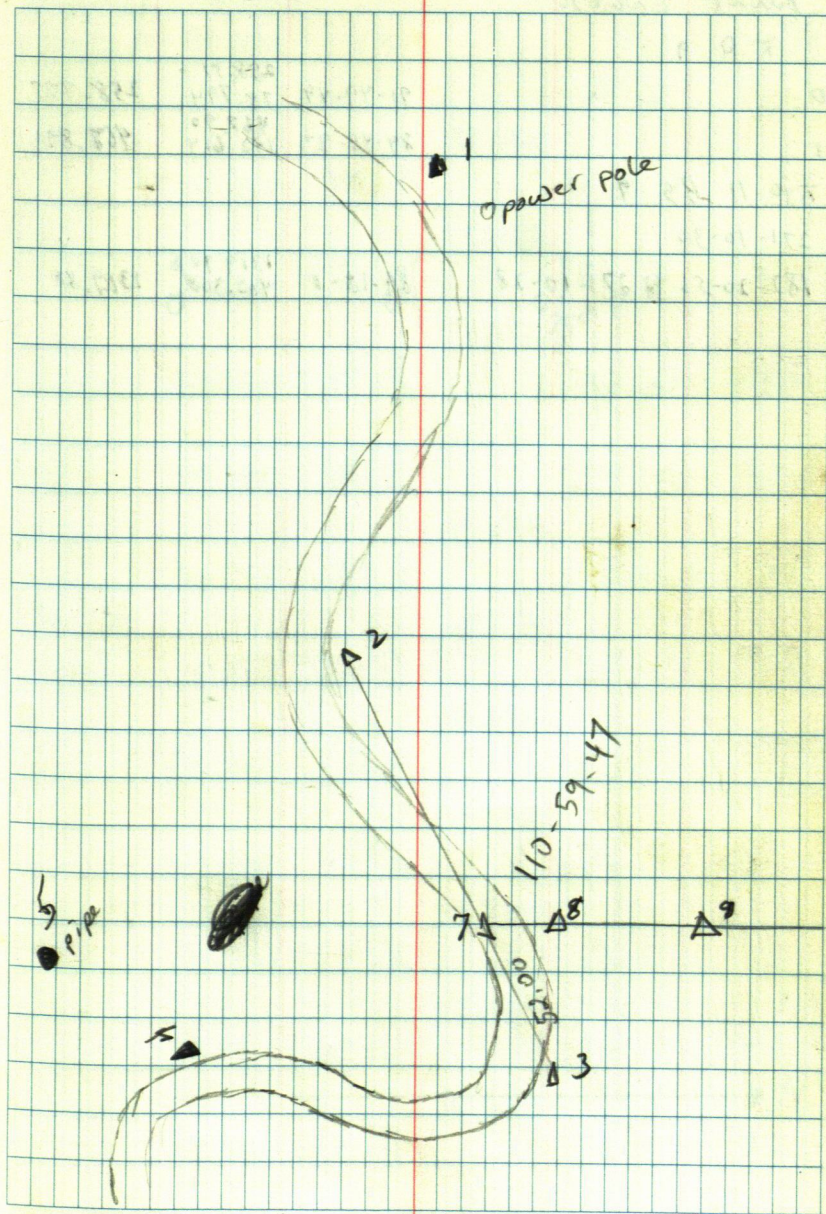
188-58-42		
17-57-03		
188-58-42	188-58-30	

TC7 BS2

0-0-0

8	110-59-47		35.80
9	<del>110-59-47</del>	90-51-21	572.49 174.494

36





DVANE ENGER

K 0 9

10

91-49-44 258.51  
78.794 258.777

11

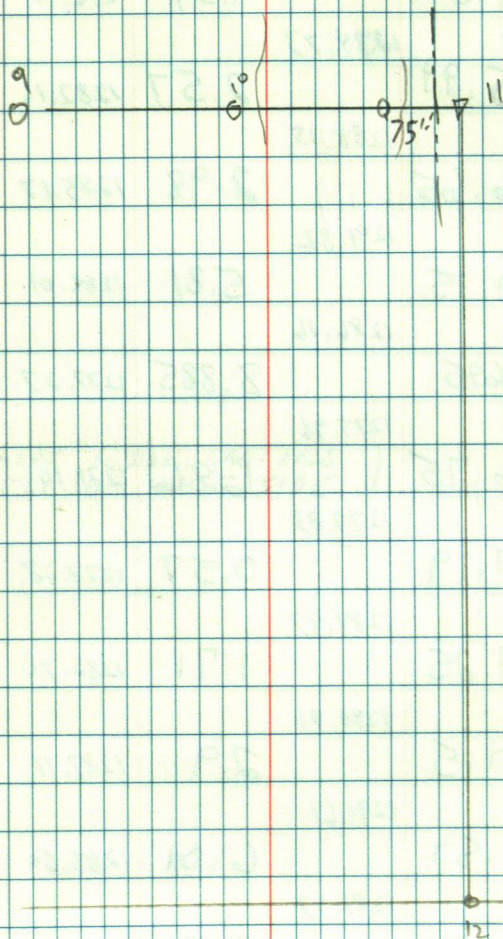
89-48-23 467.90  
142.614 467.892

K 0 11 BS 9

271-10-30

12 182-20-56 271-10-28 89-18-0 1319.90  
402.308 1319.80

37





BX 322

## MAPLE LANDFILL

Bm #1	BS	FS	1276.43	BK CAP
	4.02			

1280.45

TP	8.62	4.34	1276.11
----	------	------	---------

1284.73

TP	5.99	2.57	1282.16
----	------	------	---------

1288.15

TP	6.65	2.98	1285.17
----	------	------	---------

1291.82

TP	0.15	5.81	1286.01
----	------	------	---------

1286.16

TP	0.685	8.885	1277.27
----	-------	-------	---------

1277.96

BM	6.75	6.86	1271.10
----	------	------	---------

1277.85

TP	7.19	0.57	1277.28
----	------	------	---------

1284.47

TP	7.25	1.71	1282.76
----	------	------	---------

1290.01

TP	4.5	2.9	1287.11
----	-----	-----	---------

1291.61

TP	1.87	6.01	1285.60
----	------	------	---------

1287.47

TP	0.57	7.76	1279.71
----	------	------	---------

1280.28

TP	3.67	3.57	1276.71
----	------	------	---------

1280.38

JULY 18, 1989

OVER CAST - COOL A.M.

38

D. FARNAM - B. EIDE

(FILE MARK N SIDE CASTING  
OF WELL ON WEST SIDE)



# MAPLE LAND FILL

	BS	FS		
Bm #8	8.91	8.96	1271.42	WELL #8
	1280.33			
TP	4.065	3.48	1276.85	
	1280.92			
TP	1.9	11.5	1269.42	
	1271.32			
TP	7.17	2.525	1268.79	
	1275.96			
TP	0.95	12.19	1263.77	
	1264.72			
Bm	2.99	3.01	1261.71	NAIL IN CORNER FENCE POST
	1264.70			
TP	4.63	5.76	1258.94	
	1263.57			
TP	3.93	3.55	1260.02	
	1263.95			
TP	5.36	2.69	1261.26	
	1266.62			
TP	4.42	5.34	1261.28	
	1265.70			
Bm	2.61	2.565	1263.13	WELL IN YARD
	1265.74			
TP	5.56	4.47	1261.27	
	1266.83			
TP	1.27	3.94	1262.89	
	1264.16			

July 18, 1989

B. EDIE - D. FARNAL

39

(PAINT SPOT ON CONC. SLAB @ WELL #8)

(SPK IN COR. FENCE POST @ SE COR  
OF LANDFILL)

(FILE MARK ON CASTING OF WELL  
@ FARM HOUSE NE COR)



# MAPLE LAND FILL

	BS	FS		
TP	6.82	3.63	1260.53	
			1267.35	
TP	6.24	4.73	1262.62	
			1266.86	
Bm #3	6.93	3.65	1265.21	well #5
			1272.14	
TP	10.98	4.41	1267.73	
			1278.71	
TP	4.61	2.1	1276.61	
			1281.22	
Bm #1		4.79	1276.43	Bk. CAP

July 18, 1989

40

B. EDIE - D. FARNAM

(PAINT SPOT ON CONC. BASE @  
WELL # 5)



LEE ARMSTRONG

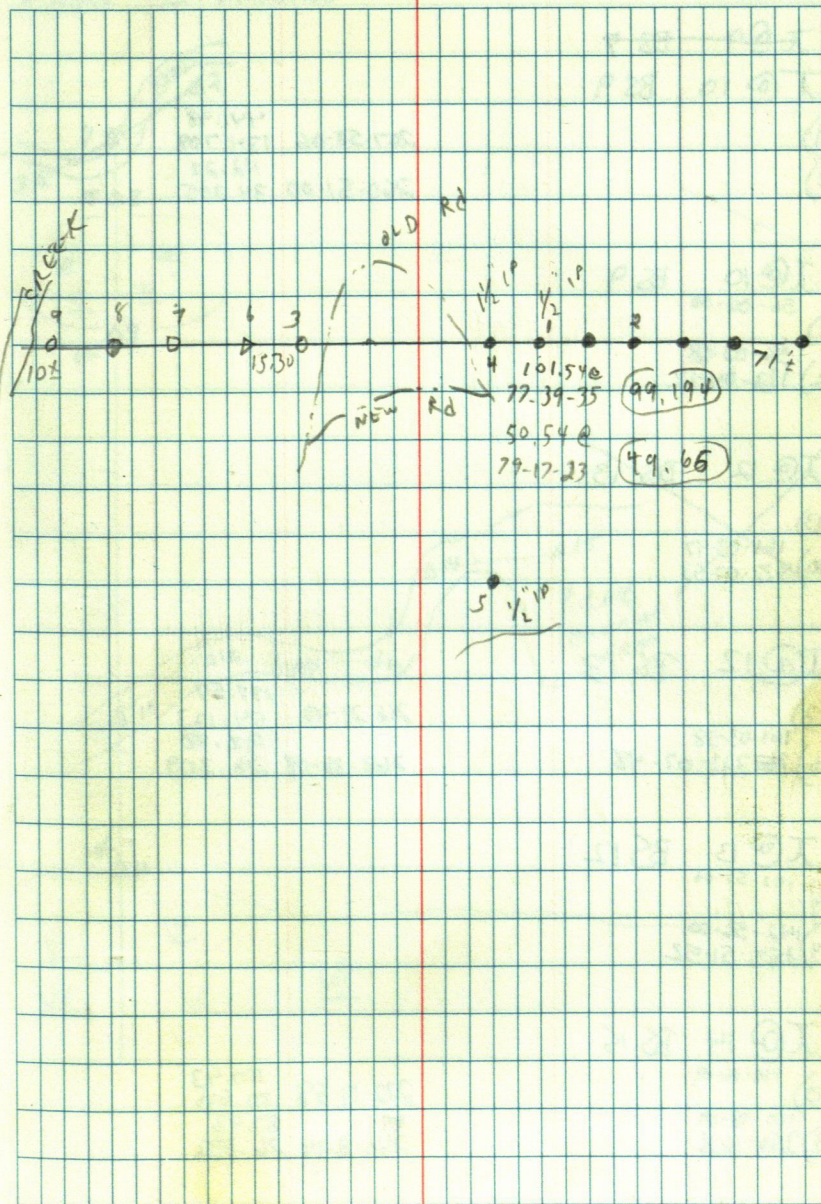
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0-0-18		228.05	
180-0-29	0-10-40	69.511	227.824
0-10-58		177.16	
4180-11-25	0-10-36	54.004	177.131
71-10-27			

C Rd (new)			
A 12-22-30	202.17	2	2
B 10-57-11	161.55		
C 13-59-15	97.92		
D 35-25-23	56.65		
E 75-26-15	60.83	2	2
OLD Rd			
0-0-0	27		
326-44-10	52.75		
328-25-50	97.72		
342-20-40	139.44		
354-05-10	158.19		

T @ 4 BS 5			
0-0-16		252.53	
180-0-11	90-19-49	76.972	252.151
90-20-05			
3270-20	90-19-49		

T @ 7 BS 6			
		85.39	
	112-47-08	26.026	78.724
		125.05	
8	261-38-16	38.115	123.72

T @ 8			
		160.51	
9	250-43-38	48.94	156.273





# LIZZIE LAKE

~~X@9 BS 7~~

X@10 BS 9

9)	267-58-06	441.98 134.708
11)	260-51-00	112.22 34.205

X@10 BS 9

56-02-08

9)  
56-02-08  
12) 112-04-12

~~X@12 BS 13~~

13)

161-03-47  
10) 322-07-53

X@12 BS 13

13)

161-03-58

10) 322-07-48

	268-24-48	177.57 54.123
	268-38-08	92.88 28,309

X@13 BS 12

12) 142-56-00

14) 142-56-00

14) 285-51-52

X@14 BS 15

15) 140-06-09

140-08-09

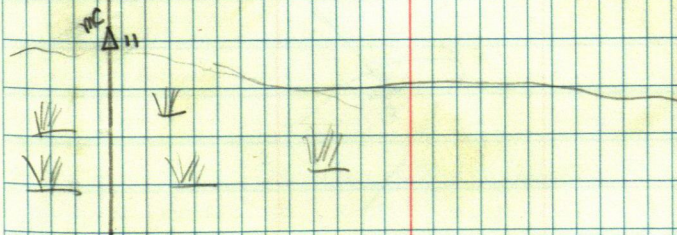
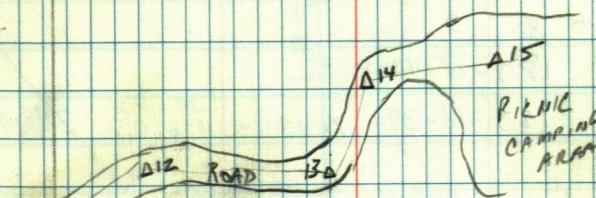
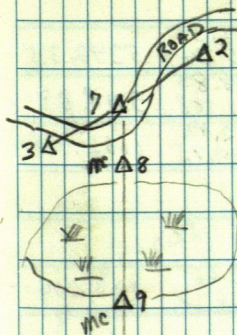
13) 280-16-26

	272-17-58	100.43 30.611
	268-8-14	87.93 26.802

JULY 21, 1989

B. EDIE - D. FARNAM

42





B/A

K @ 3 BS 2

0-0-06			5342.33	
180-0-18	19-45-50	89-56-50	1628.349	5342.315
4 19-45-56	19-45-52	89-58-45	5318.85	5318.83
199-46-10			1621.188	
50-03-26	50-03-20		6662.45	
5 330-03-41	50-03-23	89-57-35	2030.72	6662.428

K @ 5 BS 3

0-0-50				
180-1-10	177-23-17			
177-24-05			193.06	
6 357-24-30	177-23-20	91-13-02	58.634	193.004

K @ 2 BS 3

0-1-10				
180-1-24	207-38-10			
207-39-21			565.04	
1 27-39-32	207-38-08	88-55-46	172.221	564.933

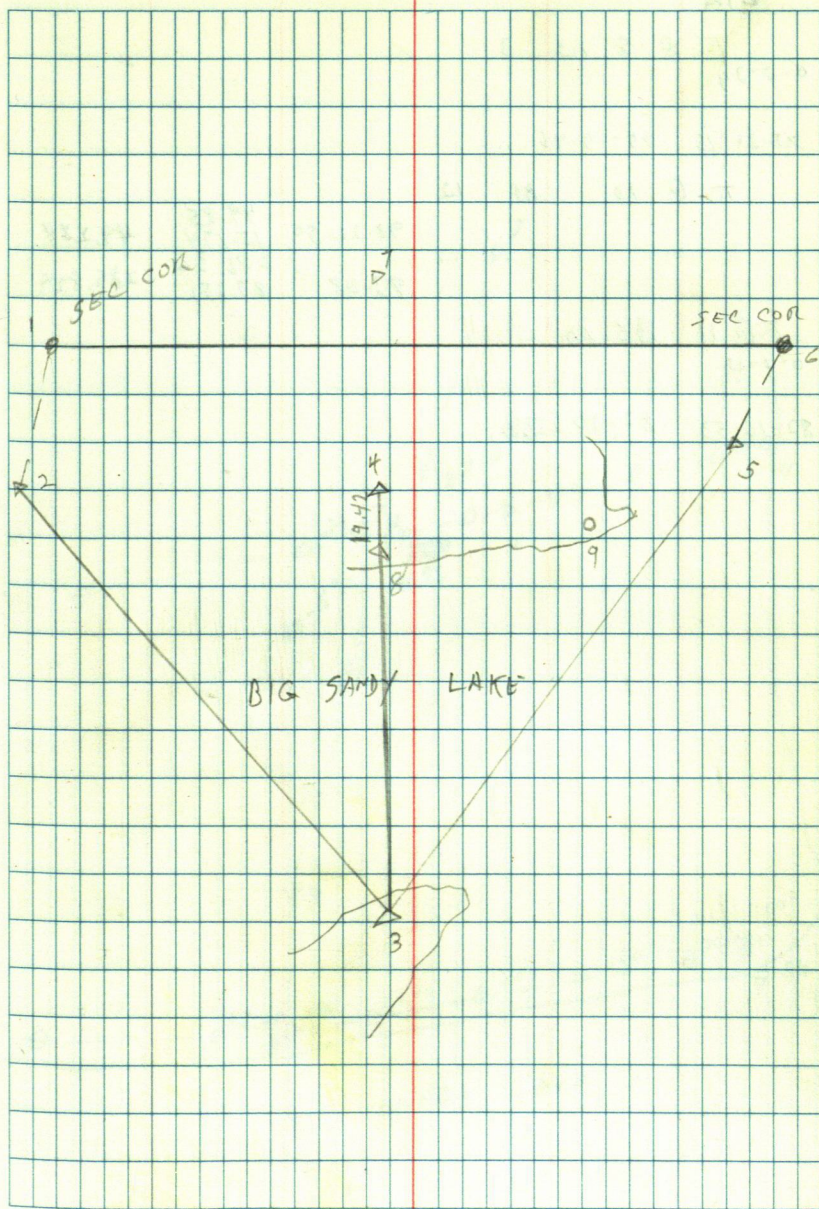
K @ 4 BS 3

0-0-16				
180-0-27	183-18-40			
183-18-56			381.03	
7 3-19-06	183-18-39	90-15-20	116.135	381.02

K @

0-0-15				
180-0-18	247-13-22			
247-13-37			376.10	
9 67-13-45	247-13-27	90-05-36	114.632	376.093

43





BJA

7 @ 8 BS 3

0-0-29

75-20-15      75-19-46

$\pi$	0	10	BS	12
-------	---	----	----	----

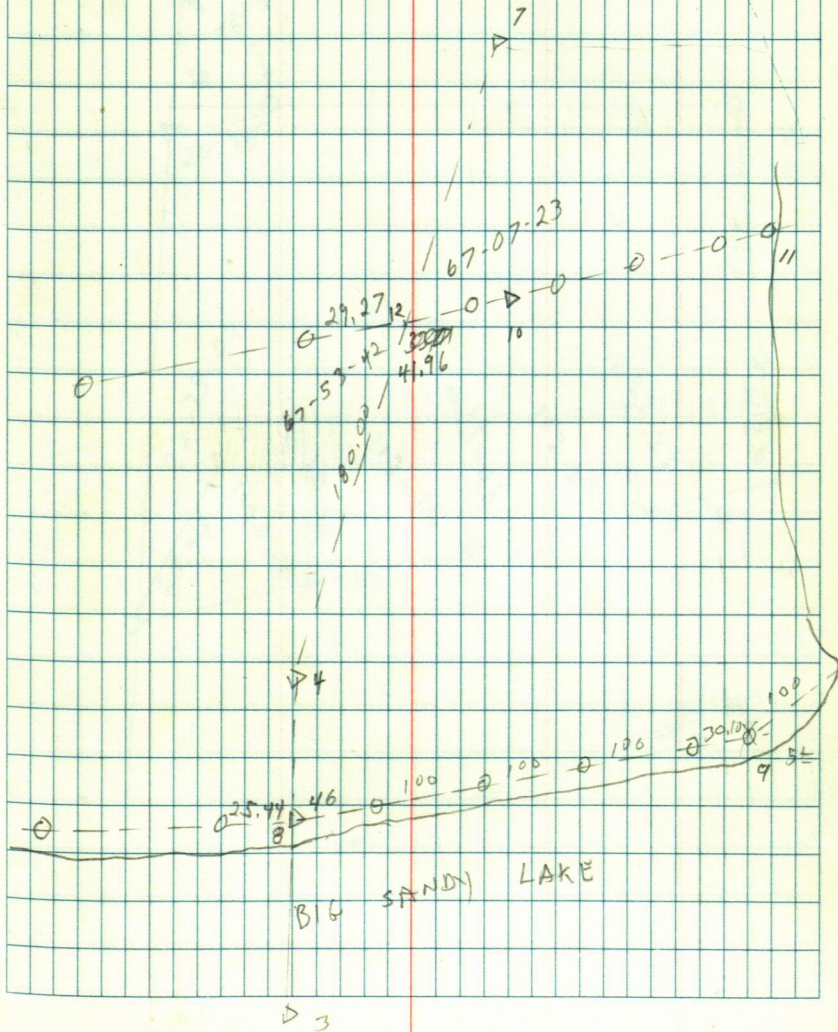
98-2250	49.85 15.174	49.284
93-08	286.26 87.251	285.829

TC 11 BS 10

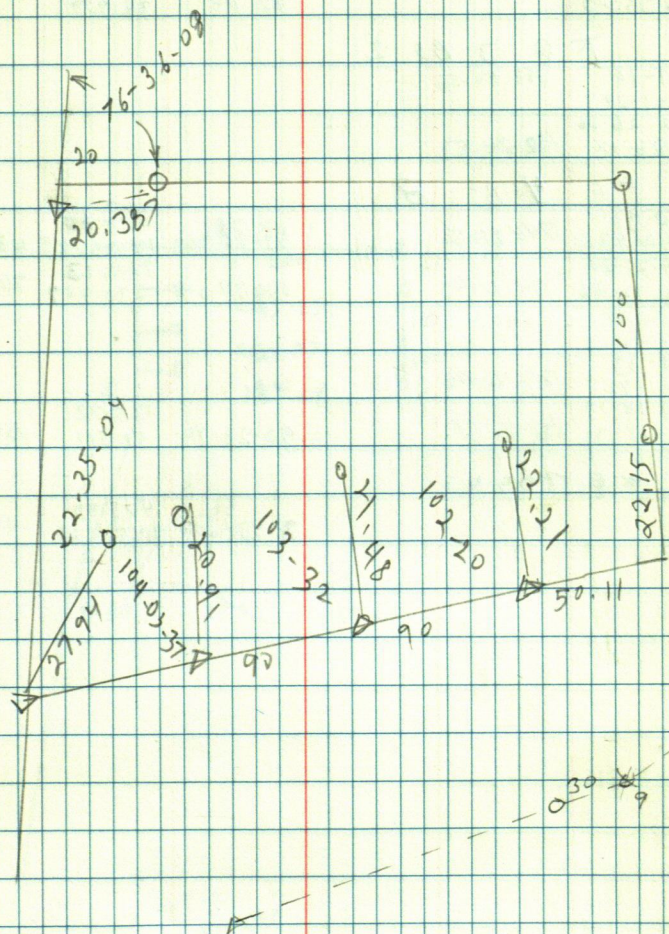
0-0-15

82-10-53      82-10-38

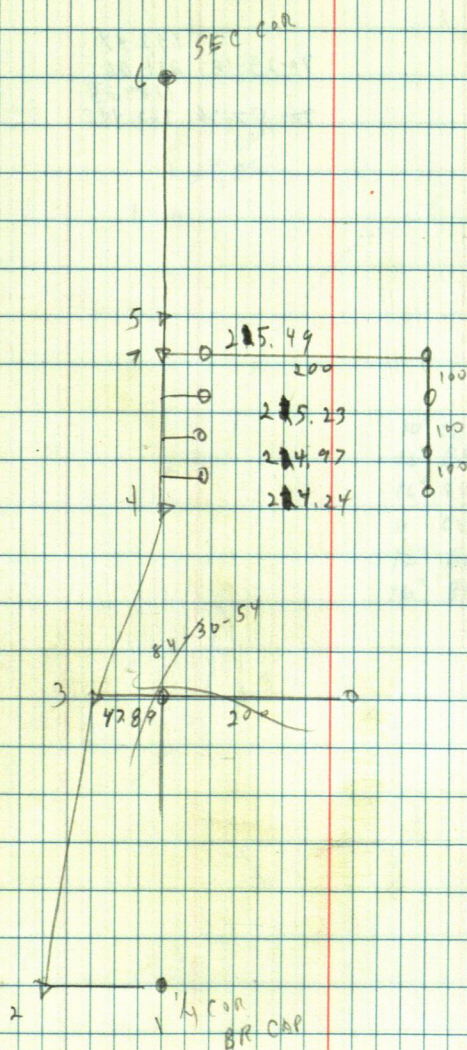
44













HERMAN PETERSON

A @ 2 AS 1

0-3-58	692.44
180-4-17	211.06
177-0-07	1189.28
3 357-0-22	90-07.26 362.445
0-2-32	
183-6-34	

47

NW COR  
SEC

692  
1189  
1881

BT'S TO W 1/4  
DON COULTER

10"	CEDAR	N 27 W	29.15
10"	BALSA	N 72 W	13.8
16"	CEDAR	S 26 W	50.9
11	CEDAR	S 6 E	42.0
12	BALSA	N 50 E	11.85
16"	BIRCH	N 20 E	22.7

2

3



DON SCHANNON

4-149-26

T @ A BS B

91-15-48	110.59	110.564
	23.209	
	121.82	221.121
96-07-53	37.130	

T @ C BS A

0-0-45	
120-0-57	110-16-30
110-17-15	
SME 290-17-30	110-16-33

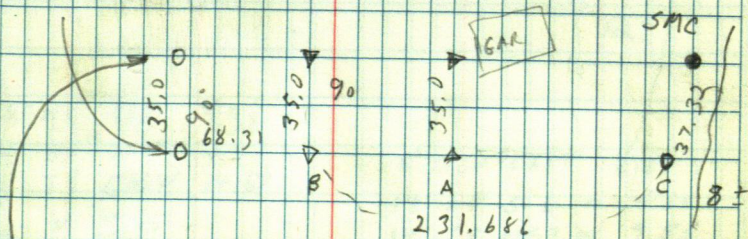
5" NP N40W 15.58

10" NP S85E 7.42

8" NP S50W 11.75

8" SIGN E 3.6

" " N 2.58



BT'S

6" NP S10W 2.15

5" NP S85E 8.95

5" NP N20E 16.60

6" SIGN S 3.4

" " W 3.5

SET 5'x2' BR CAP

BT'S

10" JP NORTH 3.49

SAME BT USED FOR SME

12" WP S55W 16.45

6" NP S17W 36.04

8" SIGN POST EAST 2'

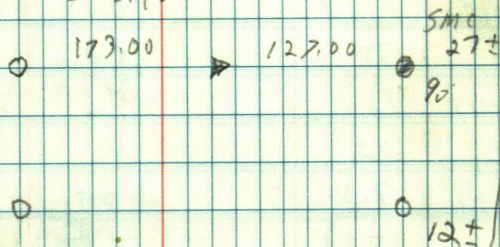


Don SCHANN

100-53-40 129,33 126,999  
39,420

49

BT 9" NP N14 W 30.12  
14" NP S55 E 21.70  
6" NP S80 W 29.42  
8' SW W 3.60 ~~20.00~~  
S 3.40



BT'S  
18" NP EAST 3.38  
14" NP SOUTH 7.97  
6" IP S65 W 14.67  
SW W 3.40  
SE E 6.3

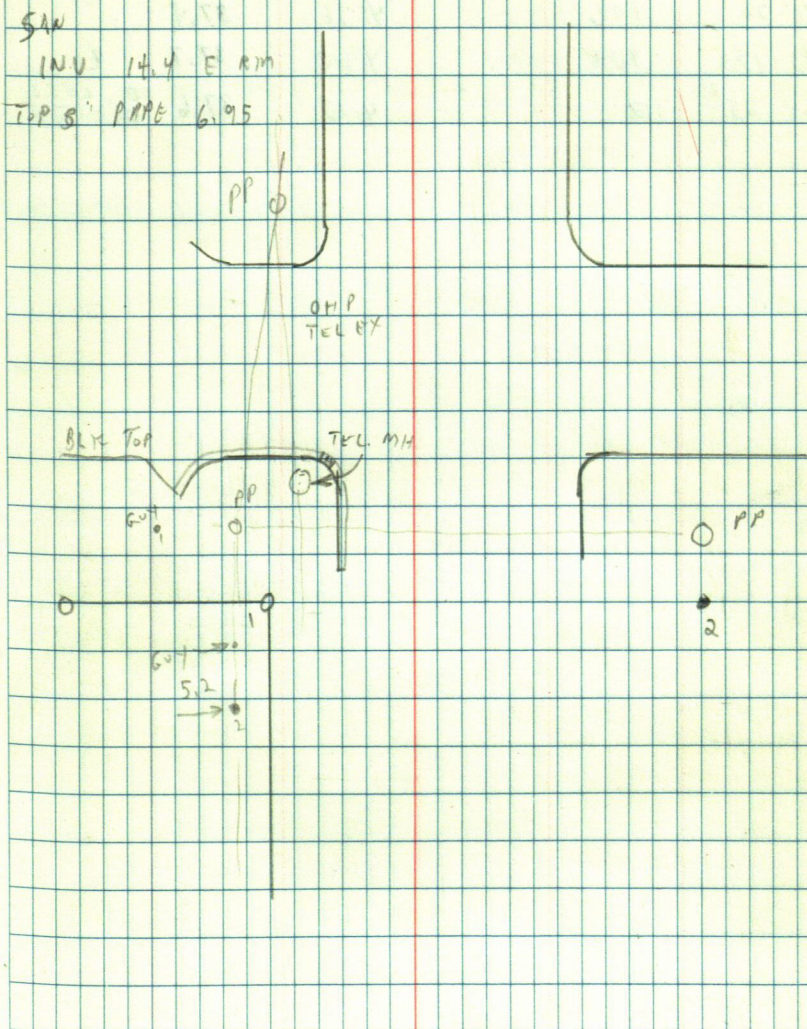
8' SWN EAST 2.80  
14" NP S 6 W 4.85  
14" IP N53 W 9.55  
8" NP N20 E 24.71  
SAME BT FROM SMC



POST OFFICE

TA	1	BS	2	HI = 1391.73
BM TYP NYD	2.82		2.82	1388.91
1 313-23	58		5.6	85.9 E C
2 8-00	21		5.65	86.08 END CURB
3 335-51	22		5.63	86.10 END RAD
4 312-16	25		6.52	85.21 CB
5 286-35	25		5.8	85.97 T C END
6 259-45	24		5.76	85.97 T C END
7 237-44	23		6.15	85.58 END CURB
8 229-	35		6.0	85.7 C/A BLK
9 206-52	16		5.12	86.5 GUY <sup>1</sup> ANC.
10 96-	35		4.1	87.6 GUY <sup>2</sup> ANC.
11 104-40	7.5		5.11	86.6 TEL. PED
12 156-	7.0		5.11	86.6 20" ELM
13 196-14	178		6.38	85.35 RIM M H
14 184-17	127		5.9	85.8 SANIT.
15 195-05	116		6.45	85.3 END LINE 8"
16 201-12	118		6.1	85.6 EDC BLK T
17 206-16	722		6.12	85.6 E
18 227-42	71		6.05	85.6 N EDC
19 221-	64		5.95	85.8 "
20 213	56		6.06	85.6 E
21 287-38	44		5.96	85.8 5 EDC BLK T
22 6-36	36		5.41	86.3 IN LANE MARK
23 4-	56		5.74	86.0 E CURB No.

50





24	47-34	64	7.9	86.8	E EDGE BLK T
25	52-30	57	4.72	87.0	E
26	61-05	50	4.96	86.8	W 60 BLK T
27	78-20	106	4.36	87.4	"
28	73-17	108	4.05	87.7	E
29	68-25	112	4.15	87.6	E EDGE BLK TSP



# PLEASANT LAKE

② 2 BS 1

0-0-0				9392.07
180-00-17	278-58-0	(1392.03)	89-58-02	974.286
278-58-0				2583.73
98-52-21	278-52-04 (OK)	(2583.72)	89-52-0	747.526

④ 4 BS 2

0-0-32				
180-0-20	188-21-40			
188-22-82			332.78	
5 8-22-20	188-22-00	93-39	101.435	332.11
0-0-17				
180-0-	84-47-59			
84-48-16			302.83	
6 264-48-19	84-48-19	93-47-18	92.307	302.174

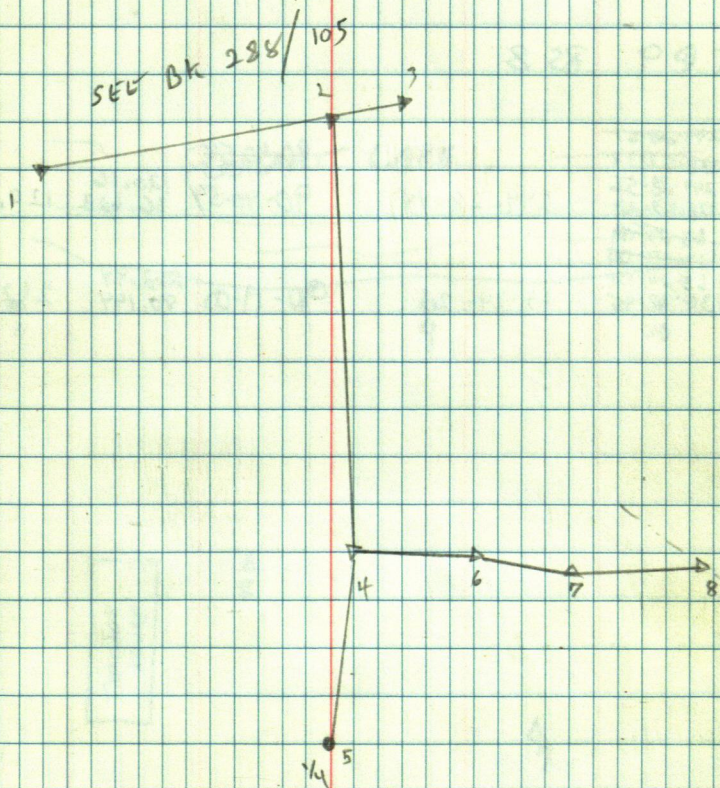
I @ 6 BS 4

0-0-0	173-04-54
180-00-06	<del>173-04-54</del>
173-04-54	
7 353-05-26	173-05-20
1-0-5	
186-55-30	186-55-25

I @ 7 BS 6

0-0-3			299.90	
180-0-5	198-42-23	91-34-26	91.413	299.791
198-42-26			394.52	
8 18-42-34	198-42-30	90-24-37	120.249	394.507

52





# PLEASANT LAKE - JOHN MARTIN

108 BS 7

9	252-45-34 145-31-12	252-45-36	88-06-39	365.47 111.396	365.271
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109 BS 8

10	<del>244-28-57</del> <del>128-57-18</del> 244-28-56 128-57-28	244-28-44	<del>90-40-54</del> 90-40-54	120.16 36.623	120.148
11	<del>65-24-09</del> <del>130-19-00</del> 65-24-10 130-48-45	65-24-23	90-19-00	262.94 80.144	262.934

AUG 16, 1989

B. EDIE - D. FARNHAM - J. WATSON

53

PLEASANT LAKE

11

9

10

TRAIL HOUSE

8

7



STA BS HI FS  
CROSS SECTION CHRISTIAN PT Rd  
BM #1 4.20 100.00 SPT IN S'PI

104.20

0+00 0.15 3.1 4.6 6.2 7.8 9.4 11.1 12.8 14.5  
8.1 200 150 100 50 0 50 100 150 200 250 300

BM #1 0.23 100.00

100.23

0+00 12.1 15.2 33.8  
250 300 350 400 450 500 550 600 650 700 750 800 850 900 950 1000

0+24 1.6 3.2 4.8 6.4 8.1 9.8 11.5 13.2 14.5  
100 200 300 400 500 600 700 800 900 1000

0+39 2.4 10.3 11.9 13.8 15.8 17.1 14.9  
50 100 150 200 250 300 350 400 450 500 550 600 650 700 750 800 850 900 950 1000

BM #1 4.89 100.00

104.89

00+24 1.3 2.8 4.7  
250 300 350 400 450 500 550 600 650 700 750 800 850 900 950 1000

00+39 5.8 7.0 8.5 9.6 11.2  
250 300 350 400 450 500 550 600 650 700 750 800 850 900 950 1000

BM #1 7.23 100.00

107.23

0+100 0 1.7 3.5 6.6 7.3 4.0 3.2 5.7 7.2  
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300

TP 11.96 6.6 100.62 1+00

112.58

STA BS HI FS  
TP 7.10 3.38 109.20 2+00

HI = 112.30

2+00 20.4 15.0 11.7 6.5 3.7 2.5 0.8 4.7 4.0 4.0 4.0  
114 69 74 20 0 28 45 64 74 82 96

2+61.83 21.0 21.0 17.0 17.5 15.6 9.6 8.1 4.9 3.3 2.1 2.5 2.7 0  
95 80 71 63 50 17 11 21 27 49 62 77 89

TP 13.76 7.39 104.91 2+61.83

HI = 118.67

3+00 10.5 9.4 8.4 8.9 7.9 9.1 8.2 7.9 6.2 6.3 7.0 6.5 7.1 5.7 3.6 3.9 0  
81 59 44 31 20 15 12 3 6 15 20 31 41 44 52 67 108

4+00 15.2 7 2.5 3.1 2.0 0.3 2.7 2.5 1.4  
7 18 31 33 39 61 87 109

TP 4.76 0.87 117.80 4+00

HI = 122.56

4+00 8.6 8.7 7.4 6.2  
135 52 28 5

5+00 11.6 9.2 9.4 6.3 5.8 3.7 0.3 1.3 0.6 1.0  
97 42 22 11 5 8 10 28 47 53

TP 5.13 3.12 119.44 5+00

HI = 124.57

5+00 0 4.5 10.1  
59 70 102

TP 7.26 3.87 120.70 6+00

HI = 127.96



STA	BS	HI	FS	TP Elev
6+00	21.4 101	239 17.5 16.5 7.9 76 53 36	5.1 2.3 76 28	—
TP	13.34		7.26	120.70 6+00
		134.04		
6+00			5.0 8.0 7.1 7.6 10.4 43 59 65 77 99	
TP	7.57		13.34	120.70 6+00
		128.27		
7+00	18.1 700	7.5 5.9 46		
TP	10.05		5.4	122.87 7+00
		132.92		
7+00		<del>8.5</del> 5.2 5.2 4.6 5.0 3.4 3.9 26 38 47 59 70 83 102		
			5.0 3.4 3.9 70 83 102	
8+00		6.4 4.6 1.6 3.4 2.9 3.4 1.7 0 2 15 28 35 47 59 65 81		
TP	7.35		6.35	126.57 8+00
	16.4 105	133.92 63 19		
8+00				
9+00	4.1 9.4 12.0 7.3 5.3 4.0 3.5 3.9 105 74 48 19 18 35 47			
TP	6.08		4.81	129.11 9+00
		135.19		
9+00			5.5 4.1 61 73 97	

STA	BS	HI	FS	
TP	7.77		3.33	131.89 BM #2
		139.66		
10+00		5.4 4.6 6.4 5.8 6.4 3.2 2.7 28 36 49 61 71 98		
TP	4.51		4.70	134.96 10+00
		139.47		
10+00	13.5 13.1 10.6 104 80 50		<del>10.6</del> <del>13.1</del>	139.47
TP	3.61		0.0	11+00
		143.08		
11+00	14.5 9.6 5.2 4.3 3.9 7.0 6.6 7.3 3.5 4.0 100 67 27 26 12 23 36 47 60 83			
TP	6.13		5.40	137.68 11+33.59
		143.81		
12+00	7.4 6.3 6.9 5.8 6.1 5.9 7.0 9.6 11.6 16.9 92 57 6 2 3 13 25 36 60 93			
TP	2.93		2.23	141.58 13+00
		144.51		
13+00	13.6 12.4 2.9 3.6 3.6 7.5 4.4 8.0 17 17 8 14 46 86 111			
TP	14.03		2.93	141.58 13+00
		155.61		
13+00	7.9 10.9 14.7 13.6 13.4 87 39 30 19 7			



STATION	BS	HI	FS	
17+00				
		152.31		
TP	5.36		10.06	146.95 17+00
17+00				
		157.01		
TP	10.06		9.02	146.95 17+00
16+00				
		155.97		
TP	4.95		11.06	151.02 15+00
15+00				
		162.08		
TP	11.06		4.59	151.02 15+00
14+00				
		155.61		

$$\begin{array}{r} \text{SHED} \\ 5.1 \\ 10 \end{array} \quad \begin{array}{r} \text{SHED} \\ 6.0 \\ 23 \end{array} \quad \begin{array}{r} 6.4 \\ 26 \end{array} \quad \begin{array}{r} 17.0 \\ 45 \end{array} \quad \downarrow$$

$$\begin{array}{r} \text{SHED} \\ 6.7 \\ 72 \end{array} \quad \begin{array}{r} 5.2 \\ 14 \end{array} \quad \begin{array}{r} 0.1 \\ 3 \end{array} \quad \begin{array}{r} 10.1 \\ 0 \end{array} \quad \downarrow$$

$$\begin{array}{r} 3.4 \\ 102 \end{array} \quad \begin{array}{r} 4.0 \\ 82 \end{array} \quad \begin{array}{r} 5.5 \\ 10 \end{array} \quad \begin{array}{r} \text{SHED} \\ 7.1 \\ 5 \end{array} \quad \begin{array}{r} 6.9 \\ 5 \end{array} \quad \begin{array}{r} \text{SHED} \\ 6.8 \\ 7 \end{array} \quad \begin{array}{r} \text{SHED} \\ 7.7 \\ 19 \end{array} \quad \begin{array}{r} 8.2 \\ 32 \end{array} \quad \begin{array}{r} 15.0 \\ 74 \end{array} \quad \downarrow$$

$$\begin{array}{r} 5.8 \\ 101 \end{array} \quad \begin{array}{r} 6.0 \\ 69 \end{array} \quad \begin{array}{r} 6.3 \\ 22 \end{array} \quad \begin{array}{r} \text{SHED} \\ 11.2 \\ 8 \end{array} \quad \begin{array}{r} 11.1 \\ 5 \end{array} \quad \begin{array}{r} \text{SHED} \\ 11.0 \\ 7 \end{array} \quad \begin{array}{r} \text{SHED} \\ 11.6 \\ 18 \end{array} \quad \begin{array}{r} 9.4 \\ 25 \end{array} \quad \begin{array}{r} 15.7 \\ 66 \end{array} \quad \downarrow$$

$$\begin{array}{r} 2.0 \\ 82 \end{array} \quad \begin{array}{r} 2.5 \\ 25 \end{array} \quad \begin{array}{r} \text{SHED} \\ 6.2 \\ 15 \end{array} \quad \begin{array}{r} \text{SHED} \\ 6.2 \\ 3 \end{array} \quad \begin{array}{r} 6.3 \\ 5 \end{array} \quad \begin{array}{r} \text{SHED} \\ 7.1 \\ 10 \end{array} \quad \begin{array}{r} 3.5 \\ 20 \end{array} \quad \begin{array}{r} 3.8 \\ 39 \end{array} \quad \downarrow$$



STATION

BS

HI

FS

142.75

BM#3 7.54

135.21

19+00

BM#3 1.91

7.17

135.22 (135.21)

BM#3

19+00

142.39

TP 8.42

11.22 133.97 19+00

18+00

145.19

TP 4.19

7.59 141.00 18+00

18+00

148.59

TP 7.59

11.31 141.00 18+00

152.31

57

$$\begin{array}{r} \text{L} \\ - \frac{3.7}{15} \frac{4.6}{30} \frac{4.4}{47} \frac{23.5}{79} \downarrow \end{array}$$

34.8' RT. STA 18+93

R.R. SPIKE IN 16" NORWAY PINE

$$\begin{array}{r} \text{SHD} \\ \frac{5.3}{102} \frac{3.8}{88} \frac{6.2}{14} \frac{9.0}{8} \end{array}$$

HUB ON L

$$\begin{array}{r} \text{L} \\ - \frac{4.0}{14} \frac{5.3}{27} \frac{3.7}{36} \frac{13.7}{69} \downarrow \end{array}$$

RE-ROD ON L

$$\begin{array}{r} \text{SHD} \\ \frac{3.1}{92} \frac{2.3}{48} \frac{4.7}{51} \frac{7.6}{0} \end{array}$$

RE-ROD ON L



STA	BS	HI	FS
21+00		118.07	
TP	4.56		113.51 21+00

20+00 STEEP BANK RIGHT OF C TO R.R. GRADE

TP	3.62	124.89	20+00
----	------	--------	-------

20+00 STEEP BANK LEFT OF C

TP	7.96	10.66 4.30	124.88 20+00
----	------	---------------	--------------

19+46 STEEP BANK RIGHT OF C TO R.R. GRADE

BM#3	0.33	11135.54
------	------	----------

19+46 STEEP BANK LEFT OF C

58

0	8.8	8.1	5.1	5.0	4.6	5.5	6.3	17.9
98	64	10	0	7	19	32	42	89

SHLD

HUB ON C

4.9	5.6	1.2	12.7
16	29	39	60

SHLD

5.9	2.9	8.6
108	10	0

SHLD

HUB ON C

6.8	17.2	3.5	17.5
16	30	42	62

SHLD

83	4.2	13.0
71	13	0

SHLD



STA BS HI FS

25+00

103.77

23+00 6.97

24+00

101.56

23+00 4.76

23+00

102.78

TP 5.98 13.09 96.80 23+00

22+00

109.89

TP 4.34 9.48 105.55 22+00

115.03

TP 1.52 4.56 113.51 21+00

59

SHLD  $\frac{10.5}{105}$   $\frac{9.6}{83}$   $\frac{4.5}{17}$   $\frac{4.6}{7}$   $\frac{5.4}{4}$   $\frac{5.4}{0}$   $\frac{4.9}{9}$   $\frac{5.9}{21}$   $\frac{3.9}{29}$   $\frac{3.8}{70}$

SHLD  $\frac{8.5}{106}$   $\frac{8.2}{66}$   $\frac{5.5}{12}$   $\frac{5.1}{6}$   $\frac{4.9}{0}$   $\frac{4.6}{8}$   $\frac{5.3}{18}$   $\frac{4.0}{23}$   $\frac{3.9}{77}$   $\frac{4.1}{102}$

SHLD  $\frac{7.1}{103}$   $\frac{6.8}{75}$   $\frac{6.5}{34}$   $\frac{6.3}{37}$   $\frac{7.3}{25}$   $\frac{6.5}{0}$   $\frac{5.3}{6}$   $\frac{4.9}{19}$   $\frac{5.6}{30}$   $\frac{10.9}{47}$   $\frac{9.2}{97}$

HUB ON  $\frac{1}{2}$

SHLD  $\frac{8.1}{97}$   $\frac{8.4}{61}$   $\frac{4.0}{9}$   $\frac{5.0}{0}$   $\frac{6.5}{12}$   $\frac{5.9}{23}$   $\frac{6.5}{36}$   $\frac{3.2}{44}$   $\frac{3.7}{64}$   $\frac{11.7}{90}$

HUB ON  $\frac{1}{2}$



STA	BS	HI	FS	
29+00				
		112.80		
TP	12.19		5.14	100.61 28+00
28+00				
		105.79		
26+00	4.87			
27+00				
		105.71		
26+00	4.83			
26+00				
		109.87		
26+00	8.99			
26+00				
		106.27		
TP	5.35		2.89	100.88 26+00

60

$\begin{array}{r} 5.1 \\ 98 \end{array}$ 
 $\begin{array}{r} 5.3 \\ 62 \end{array}$ 
 $\begin{array}{r} 6.0 \\ 33 \end{array}$ 
 $\begin{array}{r} 6.0 \\ 0 \end{array}$ 
 $\begin{array}{r} 5.8 \\ 32 \end{array}$ 
 $\begin{array}{r} 8.5 \\ 39 \end{array}$ 
 $\begin{array}{r} 7.3 \\ 52 \end{array}$ 
 $\begin{array}{r} 7.5 \\ 65 \end{array}$ 
 $\begin{array}{r} 6.5 \\ 72 \end{array}$ 
 $\begin{array}{r} 6.4 \\ 96 \end{array}$

RE-ROD ON  $\phi$ 

$\begin{array}{r} 10.7 \\ 103 \end{array}$ 
 $\begin{array}{r} 9.5 \\ 82 \end{array}$ 
 $\begin{array}{r} 4.5 \\ 14 \end{array}$ 
 $\begin{array}{r} 5.1 \\ 20 \end{array}$ 
 $\begin{array}{r} 4.9 \\ 12 \end{array}$ 
 $\begin{array}{r} 5.5 \\ 25 \end{array}$ 
 $\begin{array}{r} 4.3 \\ 31 \end{array}$ 
 $\begin{array}{r} 4.0 \\ 124 \end{array}$

$\begin{array}{r} 11.2 \\ 94 \end{array}$ 
 $\begin{array}{r} 6.1 \\ 64 \end{array}$ 
 $\begin{array}{r} 7.5 \\ 52 \end{array}$ 
 $\begin{array}{r} 4.9 \\ 21 \end{array}$ 
 $\begin{array}{r} 5.6 \\ 14 \end{array}$ 
 $\begin{array}{r} 5.1 \\ 0 \end{array}$ 
 $\begin{array}{r} 5.7 \\ 12 \end{array}$ 
 $\begin{array}{r} 3.4 \\ 100 \end{array}$

$\begin{array}{r} 8.8 \\ 7 \end{array}$ 
 $\begin{array}{r} 9.2 \\ 19 \end{array}$ 
 $\begin{array}{r} 4.3 \\ 36 \end{array}$ 
 $\begin{array}{r} 6.1 \\ 70 \end{array}$ 
 $\begin{array}{r} 5.8 \\ 110 \end{array}$

$\begin{array}{r} 12.3 \\ 91 \end{array}$ 
 $\begin{array}{r} 5.7 \\ 33 \end{array}$ 
 $\begin{array}{r} 3.9 \\ 29 \end{array}$ 
 $\begin{array}{r} 3.7 \\ 12 \end{array}$ 
 $\begin{array}{r} 5.5 \\ 5 \end{array}$ 
 $\begin{array}{r} 2.7 \\ 0 \end{array}$ 
 $\begin{array}{r} 2.7 \\ 0 \end{array}$ 
 $\begin{array}{r} 2.7 \\ 0 \end{array}$

RE-ROD ON  $\phi$



STA	BS	HI	FS	
		105.10		
31+00	2.31			
31+00				
		110.87		
TP	8.08		8.37	102.79 31+00
30+55	VALLEY BETWEEN HUBS			
		111.16		
TP	5.35		9.75	105.81 30+00
30+00				
		115.56		
29+00	7.83			
29+50	HILL BETWEEN HUBS			
		116.69		
TP	8.96		5.07	107.73

19.1	18.6	17.9	8.8	2.6	SHED	4	SHED
100	86	52	0	62	4.8	43	5.0
					68	79	90
							74

HUB ON 4

11.7	12.8	13.8	2.4	SHED	4	SHED
101	52	0	68	4.0	5.5	4.2
				73	84	97
						108

HUB ON 4

14.5	10.1	10.5	9.1	6.6	SHED	4
100	55	0	18	40	5.9	7.1
					53	73
						85
						100
						108

16.3	14.0	6.7	4.6	3.7	4.0	SHED	4	SHED
94	66	17	0	14	51	9.0	8.1	8.6
						61	72	84
								89
								5.0

HUB ON 4



STA	BS	HI	FS	
Bm#4			1.765	84.27
		86.04		
35+00	8.53			
35+00				
		82.28		
TP	4.77		11.82	77.51 35+00
34+00				
		89.33		
TP	2.64		12.23	86.69 33+00
33+00				
		98.92		
TP	4.10		10.28	94.82 32+16.31
32+00				

62

R.R. SPIKE IN 24" NORWAY PINE - 36' LEFT OF STATION 34+00

	SHO	¢	SHO						R.R. GRADE
2.2	43	2.7	2.3	2.3	2.9	5.0	5.6	5.6	5.3
100	82	74	58	34	32	17	0	74	107

HUB ON ¢

LEFT SIDE FOLLOWS EXISTING FOREST ROAD	SHO	¢	SHO						R.R. GRADE
3.1	6.9	6.6	6.4	6.3	7.2	6.1	7.9	13.2	12.4
109	49	3	0	8	20	27	37	73	106

HUB ON ¢

	SHO	¢	SHO						
4.5	9.2	11.1	13.1	10.7	10.6	10.3	11.1	10.9	14.1
91	67	28	0	25	29	40	54	64	78

PC HUB ON ¢

	SHO	¢	SHO						
13.3	9.1	8.5	4.8	8.4	8.3	9.6	8.6	12.1	
100	70	0	34	46	59	71	75	90	



STA	BS	MI	FS	
39+00				
		57.68		
TP	2.98		11.07	54.70 38+00
38+00				
		65.77		
TP	0.46		7.62	65.31 37+00
37+00				
		72.93		
TP	1.73		8.27	71.20 36+00
35+29		R.R. GRADE		
36+00				
		79.47		
35+00	1.96			

SMD	Σ	SMD				
5.9	5.2	6.0	13.4	15.2	15.3	15.7
0	12	26	45	57	74	100

HUB ON  $\phi$ 

SMD	Σ	SMD				
20.2	14.4	14.5	11.2	11.0	11.7	18.7
92	72	43	31	20	5	44

HUB ON  $\phi$ 

SMD	Σ	SMD						
4.7	8.2	8.4	10.2	10.3	11.4	8.7	8.4	9.0
100	85	69	60	48	36	22	0	11

HUB ON  $\phi$ 

SMD	Σ	SMD				
1.6	1.7	1.5	2.1	1.4	2.3	2.5
155	89	76	64	57	0	154

SMD	Σ	SMD					
7.0	3.6	4.1	4.2	5.3	4.8	7.4	8.7
100	85	78	66	54	49	10	0



STA	BS	Ht	FS	
42+00				
		71.64		
Bm#5	11.56		0.39	60.08 60.11
41+00				
		60.50		
41+00	4.20			
39+72	TAUSCH DRIVEWAY - RIGHT OF E			
		58.99		
TP	2.69		2.01	56.30 41+00
40+00				
		58.31		
39+00	6.59			
39+00				
		58.44		
TP	6.72		5.96	51.72 39+00

64

SMD & SMD

8.5	8.9	7.1	8.6	8.3	8.8	6.7	8.3	8.0	7.5	↑
107	40	30	26	12	0	6	20	54	75	

R.R. SPICE IN 8" OAK TREE

SMD & SMD

1.4	2.5	4.7	3.1	4.5	4.3	4.9	6.6	6.4	5.1
97	63	0	5	8	20	33	48	71	100

6.1 5.8 4.6 3.2  
0 50 100 150

HUB ON E

↑ SMD & SMD

1.2	3.1	5.4	4.9	5.6	4.7	4.9	5.0	6.3	6.3
80	45	0	30	36	47	64	71	81	100

↑ 1.6 6.2 8.5 -  
57 11 6

RE ROD ON E



STA	BS	HI	FS	
45+00				
		89.06		
TP	4.28		7.57 78.78	44+00
44+12	BIERBAUMS DRIVEWAY LEFT OF C/L			
44+00				
		86.35		
TP	3.56		0.15 82.79	43+00
		82.94		
42+47	14.08			
43+00				
43+00				
		85.91		
42+47	17.05			
43+00				
		82.98		
42+47	14.12		2.78 68.86	

65

SHO  $\frac{1}{2}$  SHO  

$$\begin{array}{r} 9.1 \ 7.0 \ 8.0 \ 8.6 \ 8.1 \ 8.3 \ 4.9 \ 1.3 \ 0.1 \ 1.1 \\ 94 \ 52 \ 23 \ 19 \ 9 \ 0 \ 4 \ 50 \ 83 \ 102 \end{array}$$

HUB ON  $\frac{1}{2}$ 

7.7 10.9 9.9  

$$\begin{array}{r} 85 \ 50 \ 0 \end{array}$$

SHO  $\frac{1}{2}$  SHO  

$$\begin{array}{r} 9.7 \ 10.0 \ 7.8 \ 10.3 \ 8.1 \ 7.6 \ 8.7 \ 5.9 \ 7.8 \\ 70 \ 28 \ 18 \ 5 \ 0 \ 3 \ 8 \ 50 \ 82 \end{array} \downarrow$$

HUB ON C/L

5.7 26.27  

$$\begin{array}{r} 96 \ 64 \ 50 \end{array}$$

SHO  $\frac{1}{2}$  SHO  

$$\begin{array}{r} 2.0 \ 8.6 \ 8.4 \ 9.1 \ 0.1 \ 0.6 \ 5.1 \ 11.2 \ 10.9 \\ 46 \ 37 \ 27 \ 17 \ 5 \ 0 \ 27 \ 60 \ 100 \end{array}$$

NAIL ON  $\frac{1}{2}$



Sta BS HI FS  
TP 5.39 86.54 3.99 86.15 50+00

49+00

TP 12.41 85.14 4.80 72.73 48+00

48+00

47+00 5.02 77.53

47+00

TP 7.40 79.91 7.57 72.51 47+00

46+00

TP 5.5 80.08 8.48 74.58 45+00

66

HUB ON  $\phi$

SHD  $\phi$  SHD  
15.9 60 7.1 9.3 10.1 11.0 11.9 11.6 12 15.0  
102 26 0 19 25 36 50 54 80 120

RE-ROD ON  $\phi$

SHD  $\phi$  SHD  
7.4 8.2 2.9 4.0 5.0 7.7 7.8 5.1 4.2 6.1 7.5  
102 83 21 9 7 0 6 19 21 37 82

SHD  $\phi$  SHD  
10.8 11.0 9.2 7.7 7.3 7.1 7.6 6.4 2.5 5.6 7.5  
100 80 11 5 0 6 19 22 47 78 97

RE-ROD ON  $\phi$

$\phi$  SHD  
5.6 5.8 6.4 6.0 5.7 6.4 5.7 6.3 9.5  
101 84 44 12 0 12 4 67 103

RE-ROD ON  $\phi$



	BS		FS	
Bm#2	3.05	111.94	131.89	
TP	3.44	131.54	6.84	128.94
TP	0.75	123.48	8.81	122.73
TP	2.8	116.84	9.44	114.04
TP	9.28	114.24	11.88	104.96
TP	0.98	101.62	13.61	100.63
Bm#1			1.62	99.99



STA	BS	HI	FS		
55+00					
TP	4.96	109.65	1.14	104.69	55+00
54+00					
TP	9.65	105.83	0.8	96.18	53+00
53+00					
52+00					
TP	10.87	96.98	2.09	86.11	51+00
50+00	7.05	88.20		81.15	
51+00					
50+00	11.23	92.38		81.15	
50+00					

68

$$\frac{7.1}{103} \frac{6.6}{71} \frac{5.7}{8} \frac{5.0}{22} \frac{6.7}{78} \frac{7.5}{102}$$

HUB ON  $\phi$ 

$$\frac{132}{110} \frac{9.6}{73} \frac{11.3}{34} \frac{8.6}{8} \frac{6.8}{54} \frac{5.2}{77} \frac{7.6}{100}$$

HUB ON  $\phi$ 

$$\frac{9.9}{111} \frac{11.8}{85.29} \frac{3.7}{8} \frac{1.5}{56} \frac{4.7}{56} \frac{12.1}{92}$$

$$\frac{5.6}{93} \frac{5.8}{59} \frac{6.4}{8} \frac{10.3}{100}$$

HUB ON  $\phi$ 

$$\frac{7.9}{120} \frac{11.9}{65} \frac{9.2}{8} \frac{5.0}{33} \frac{9.2}{77} \frac{10.2}{105}$$

$$\frac{11.0}{98} \frac{10.1}{63} \frac{8.2}{35} \frac{6.2}{8} \frac{5.6}{13} \frac{7.2}{70} \frac{9.3}{80} \frac{9.2}{92} \frac{5.40}{105}$$







SA BS H1 FS

63+00

101.33

62+11.6 10.16

69+00

63+00

99.92

TP 2.75 12.98 91.17 62+11.6

62+00

104.15

TP .08 6.46 104.07 61+00

61+00

110.57

TP 8.0 7.31 102.53 60+00

70

SHED 13.2 7 11.2 24 13.2 36 9.7 45 5.7 102 150

↓ 12.7 11.2 8.6 7.9 5.0 70 47 42 29 17 --- 0

↓ 293 8.2 92 0

BOULDER - 62+11.6 - 25' RIGHT OF C

↑ 22.3 24.3 19.6 12.8 12.6 12.0 12.1 11.0 23.3 19.1 62 27 0 25 31 44 58 66 130 150

HUB ON C

12.8 12.0 8.3 4.5 8.3 8.3 9.2 7.1 8.2 17.2 18.2 15.8 14.9 14.1 94 75 56 40 30 19 7 0 12 40 67 87 120 142

AUB ON C/L



STA BS HI FS  
TP 0.54 59.87 13.50 59.33 66+95

72.83

66+00 0.33 72.50

66+00

73.77

TP 1.27 14.39 72.50 66+00

65+00

86.89

TP 1.81 13.52 85.08 65+00

65+00

98.60

TP 4.30 7.03 94.30 64+00

64+00

71

STA 66+95 FENCE POST 5.7' LEFT OF C

63 SHD C SHD  
100 70 78 82 2.7 2.1 4.2 4.0 3.7 3.5  
50 0 45 77 108 140

HUB ON C

SHD C SHD  
↓ 1.2 11.6 9.7 10.3  
100 70 61 52 37 X X X

HUB ON C

22.8 11.7 11.4 9.5 8.2 15.5  
28 12 0 25 61 95 ↓  
150

HUB ON C

113.85 7.7 3.2 4.2 5.3  
12.6 0 45 64 83 ↓



STA	BS	HI	FS		
TP	6.46	47.41	0.62	40.95	71+00

70+00

		41.57			
TP	8.71		9.78	22.86	70+00

69+00

		42.64			
TP	4.45		8.27	38.19	69+00

		46.46			
TP	0.18		9.75	46.28	68+00

68+00

		56.03			
TP	9.75		13.59	46.28	68+00

67+00

72

RE-ROD ON C

$\uparrow$ 
 $\frac{1.3}{58}$ 
 $\frac{5.6}{50}$ 
 $\frac{5.1}{35}$ 
 $\frac{5.9}{21}$ 
 $\frac{9.5}{0}$ 
 $\frac{10.5}{25}$ 
 $\xrightarrow{\text{SWAMP}}$

HUB ON C

$\uparrow$ 
 $\frac{0.9}{100}$ 
 $\frac{2.2}{68}$ 
 $\frac{4.4}{48}$ 
 $\frac{4.4}{28}$ 
 $\frac{2.4}{15}$ 
 $\frac{4.7}{0}$ 
 $\frac{6.1}{11}$ 
 $\frac{8.3}{17}$ 
 $\frac{9.2}{28}$ 
 $\frac{11.3}{48}$ 
 $\frac{11.0}{70}$ 
 $\rightarrow$

HUB ON C

$\downarrow$ 
 $\frac{10.0}{100}$ 
 $\frac{6.3}{60}$ 
 $\frac{5.3}{35}$ 
 $\frac{10.6}{13}$ 
 $\frac{0}{0}$ 
 $\frac{11.9}{7}$ 
 $\frac{10.6}{20}$ 
 $\frac{10.7}{34}$ 
 $\frac{9.6}{38}$ 
 $\frac{9.3}{68}$ 
 $\frac{5.5}{98}$ 
 $\frac{3.4}{115}$ 
 $\uparrow$

HUB ON C

$\downarrow$ 
 $\frac{8.8}{63}$ 
 $\frac{6.4}{46}$ 
 $\frac{4.4}{41}$ 
 $\frac{6.1}{29}$ 
 $\frac{7.4}{13}$ 
 $\frac{6.2}{8}$ 
 $\frac{5.9}{0}$ 
 $\frac{5.2}{52}$ 
 $\frac{5.8}{107}$ 
 $\frac{6.0}{150}$



STA	BS	HI	FS		
TP	0.62	54.95	3.37	54.33	73+00

73+00

TP	3.37	57.70	11.49	54.33	73+00
----	------	-------	-------	-------	-------

Bm #8	0.06	65.82	4.49	65.76	
-------	------	-------	------	-------	--

\* 72+00

Bm #8	4.49		2.28	65.76 65.87	
-------	------	--	------	----------------	--

TP	13.34	68.15	0.32	54.81	71+57.50
----	-------	-------	------	-------	----------

TP	14.18	55.13	6.46	40.25	71+00
----	-------	-------	------	-------	-------

71+00

73

1.1	1.6	2.5	3.4	6.6	9.2	8.9	8.9	6.2	→
102	80	38	0	38	50	60	70	80	

NAIL ON  $\nabla$

6.5	4.4	6.0	9.2	21.4	20.7	19.2	19.8	18.2
83	43	0	25	38	44	66	85	97

R.I.Z. SPIKE IN POWER POLE AT STA: 72+62 69' LEFT OF  $\nabla$

STA 71+57.50 1 1/2" POWER STUMP 1.3' RIGHT OF  $\nabla$

1.5	2.7	6.9	6.7	6.4	6.2	6.5	7.3	13.7	14.7	→ SWAMP
25	26	15	7	0	5	18	22	31	51	



STA BS HI FS

75+00

54.82

TP 14.12 8.70 40.70 74+00

74+00

49.40

TP 8.70 14.25 40.70 74+00

74

↓  $\frac{6.0}{25}$   $\frac{0.4}{2}$   $\frac{1.2}{8}$   $\frac{6.7}{8}$   $\frac{6.3}{13}$   $\frac{6.3}{20}$   $\frac{7.3}{30}$   $\frac{7.6}{33}$   $\frac{3.4}{39}$   $\frac{0.0}{44}$  →

$\frac{10.5}{100}$   $\frac{10.8}{68}$   $\frac{11.0}{45}$   $\frac{11.1}{32}$   $\frac{9.4}{8}$   $\frac{8.0}{20}$   $\frac{6.1}{24}$   $\frac{5.9}{28}$   $\frac{5.3}{38}$   $\frac{5.2}{48}$   $\frac{5.8}{71}$   $\frac{6.5}{100}$

HUB ON C



XMAS PT RD

IC 0+00 BS G

G) 260-40-16

92-53-18

58.78  
17.918

58.708

F)

161-20-00

80-21-32

41.70  
12.708

41.107

1+00) 161-19-56

100'

F - G = 99.816

STA BS HI FS

BM#8 2.57

65.76

68.33

0+00

1+00

TP 6.31

3.93

64.40

2+00

70.71

2+00

3+00

TP 3.34

7.53

63.18

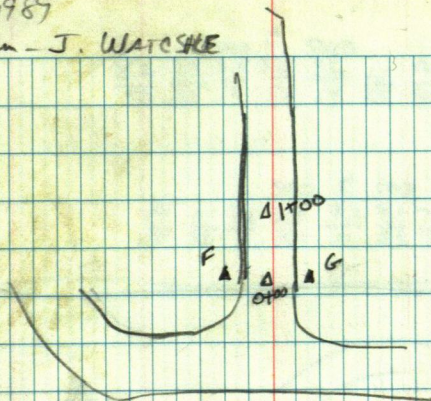
4+00

66.52

SEPT 6, 1989

P. FARMAN - J. WATSON

75



SHD 2 SHD  
3.4 3.8 14.1 12.7 12.0 12.5 13.3 8.6 9.8 8.7  
47 40 15 12 0 10 14 22 40 48

SHD 2 SHD  
5.3 4.0 6.2 5.6 5.1 5.8 3.4 4.0 4.8  
50 30 13 4 0 4 14 32 46

NAIL ON 2

SHD 2 SHD  
3.5 4.5 6.2 6.1 6.2 6.5 4.4 3.0  
47 28 14 7 0 4 16 36 →

SHD 2 SHD  
10.7 5.3 6.1 5.3 5.4 5.5 6.3 7.6  
45 20 18 5 23 0 8 43

NAIL ON 2



4+00

5+00

2 @ 0+00 BSK

k) 92-19-39

1+00) 184-38-58

90-18-34 483.00 482.972  
147.207 100'

STA	BS	HI	FS
Bm # 7	3.89		107.03

110.92

0+00 (STA 1+24)

TP	5.03	1.04	109.88	1+00
----	------	------	--------	------

114.91

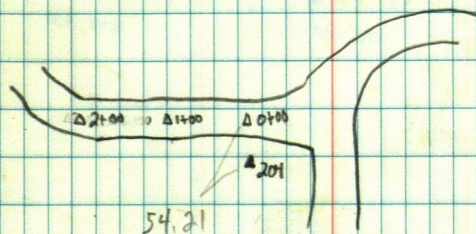
1+00 (2+24)

2+00 (3+24)

76

SHAD		SHAD		SHAD		SHAD	
8.2	3.2	3.5	3.2	3.6	1.1	0.0	
50	20	10	0	14	25	40	→

SHAD		SHAD		SHAD		SHAD	
7.9	11.1	9.6	10.0	9.2	9.1	7.2	7.0
55	33	5	0	11	23	31	42



SHAD		SHAD		SHAD		SHAD	
5.1	5.5	5.4	4.7	5.9	5.3	3.3	1.9
53	45	12	0	12	15	20	42

WALK ON

SHAD		SHAD		SHAD		SHAD	
7.9	5.7	4.2	5.2	4.3	4.8	5.1	4.6
50	35	23	20	8	0	4	11

SHAD		SHAD		SHAD		SHAD	
13.8	12.3	4.6	4.0	3.3	3.1	4.0	4.3
54	46	22	15	3	0	7	9



JAY WALDEN

PRLKS

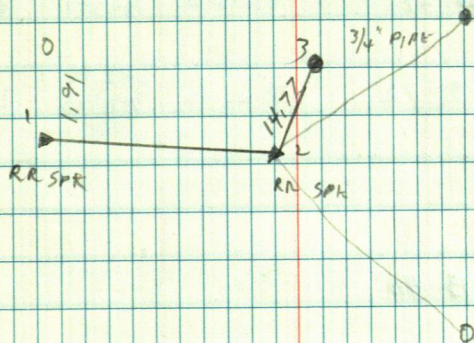
π Q 2 BS 1

80-58-10

94-59-23 246.54  
23.614 280.611

77

LH STABLE





WILLIAM BRYANT

73	BS 2		
180-50-22		90-30-15	<del>604.81</del> 2134.38 650.561 2134.29
7001-40-42	180-50-21	91-36-21	604.81 184.351 604.578
28-31-15			
5 117-02-24	238-31-12	90-25-48	1147.92 349.889 1147.885

IQ 5 BS 3  
211-13-42  
b) 62-27-19 211-13-40

SEPT 13, 1989

E. CURRO - D. FARNAM - J. WATSCHE

78

# HOW TO USE CURVE TABLES

Table 1 contains Tangents and External to a 1" curve. To find the Tangent or External for a given angle, find the angle in the table and read the Tangent or External opposite the given Central Angle by the given Curve.

Table 2 contains the given Central Angle by the given Tangent or External. To find the given Central Angle by the given Tangent or External, find the Tangent or External in the table and read the Central Angle opposite the given Tangent or External.

Table 3 contains the given Central Angle by the given External. To find the given Central Angle by the given External, find the External in the table and read the Central Angle opposite the given External.

Table 4 contains the given angle divided by the radius of a 1" curve will give the Tangent or External.

## EXAMPLE

Find the Tangent and External for a 1" curve with an angle of 20° 20' 20".

Find in Table 1 opposite 20° 20' 20" = 118.87

Tan to 118.87 and 20° 20' 20" = 118.87

118.87 = 118.87

118.87 = 118.87 = 118.87 = 118.87

To convert this to a radius, divide by 0.01745

118.87 / 0.01745 = 6812.15 = 6812.15

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$$\begin{array}{r} 161-19-56 \\ 56 \\ \hline 112 \\ 60 \\ \hline 52 \end{array}$$

$$\begin{array}{r} 19 \\ 19 \\ \hline 38 \end{array}$$

$$\begin{array}{r} 161 \\ 161 \\ \hline 322 \end{array}$$

$$\begin{array}{r} 260 \\ 260 \\ \hline 520 \\ 360 \\ \hline 161 \end{array}$$

$$39-52$$

$$30$$

$$20 \quad 30$$

$$\begin{array}{r} 92 \\ 92 \\ \hline 184 \end{array}$$

$$\begin{array}{r} 39 \\ 39 \\ \hline 78 \end{array}$$

$$184 - 39 - 18$$

$$\begin{array}{r} 238 \\ 238 \\ \hline 476 \\ 360 \\ \hline 116 \end{array}$$

$$140 + 14$$

$$02-30$$

$$\begin{array}{r} 42 \\ 42 \\ \hline 84 \\ 60 \\ \hline 24 \end{array}$$

$$27-24$$



$$\begin{array}{r} 21.5 \\ 2.8 \\ \hline 29.3 \\ 120.8254 \end{array}$$

$$\begin{array}{r} 12.7 \\ 3.6 \\ \hline 16.3 \end{array}$$

$$\begin{array}{r} 1.93 \\ 2.26 \end{array}$$

$$\begin{array}{r} 14.3 \\ 3.6 \\ \hline 17.9 \\ 125.0118 \\ 10.66 \\ 9.30 \\ \hline 1.36 \end{array}$$

$$\begin{array}{r} 12.7 \\ 13.95 \\ 3.10 \\ \hline 17.05 \end{array}$$

$$\begin{array}{r} 148.0972 \\ 70.0035 \\ 106.3710 \\ 433.1400 \end{array}$$

$$\begin{array}{r} 15.0 \\ 7.8 \\ \hline 22.8 \end{array}$$

$$\begin{array}{r} 17.5 \\ 6.4 \\ \hline 23.9 \end{array}$$

$$\begin{array}{r} 42 \\ 79 \\ \hline 110.6547 \end{array}$$

$$\begin{array}{r} 193.9659 \\ 418.9203 \\ 240.9150 \\ 349.1051 \end{array}$$

$$\begin{array}{r} 14.1 \\ 200 \\ \hline 280 \end{array}$$

$$\begin{array}{r} 12.55 \\ 12.03 \\ \hline 1.52 \\ 129.1750 \end{array}$$

$$\begin{array}{r} 16.5 \\ 6.4 \\ \hline 22.9 \end{array}$$

$$\begin{array}{r} 927.6600 \\ 757.6117 \\ \hline 172.0483 \end{array}$$

$$1202.9063$$

$$\begin{array}{r} 14.3 \\ 6.4 \\ \hline 20.7 \end{array}$$

$$122.7537$$

13

$$\begin{array}{r} 16.5 \\ 7.8 \\ \hline 24.3 \end{array}$$

$$\begin{array}{r} 15 \\ 6 \\ \hline 21 \end{array}$$

$$\begin{array}{r} 13.2 \\ 6.4 \\ \hline 19.6 \\ 11.8 \\ 6.4 \\ \hline 18.2 \end{array}$$

$$\begin{array}{r} 14.5 \\ 7.8 \\ \hline 22.3 \end{array}$$

NEED

$$11.92$$

$$132.965$$

$$\begin{array}{r} 14.47 \\ 1.52 \\ \hline 14.99 \end{array}$$

$$\begin{array}{r} 13.4 \\ 3.5 \\ \hline 16.9 \end{array}$$

$$\begin{array}{r} 42.4763 \\ 50.3075 \end{array}$$

$$\begin{array}{r} 9.8 \\ 6.4 \\ \hline 16.2 \end{array}$$

$$\begin{array}{r} 100.0 \\ 57.50 \\ \hline 142.50 \end{array}$$

$$\begin{array}{r} 4 \\ 3.5 \\ \hline 14.9 \\ 120 \end{array}$$

$$86-31-43$$

$$\begin{array}{r} 12.3 \\ 3.5 \\ \hline 15.8 \\ 121.3050 \end{array}$$

$$\begin{array}{r} 12.8 \\ 6.4 \\ \hline 19.2 \\ 80.9500 \\ 80.9300 \end{array}$$

$$\begin{array}{r} 13.4 \\ 6.4 \\ \hline 19.8 \end{array}$$

$$34.74$$

$$221-59-34$$

$$\begin{array}{r} 125.3350 \\ 100 \\ 38 \\ \hline 62 \end{array}$$

$$\begin{array}{r} 147.2600 \\ 147.2550 \\ \hline 50 \end{array}$$