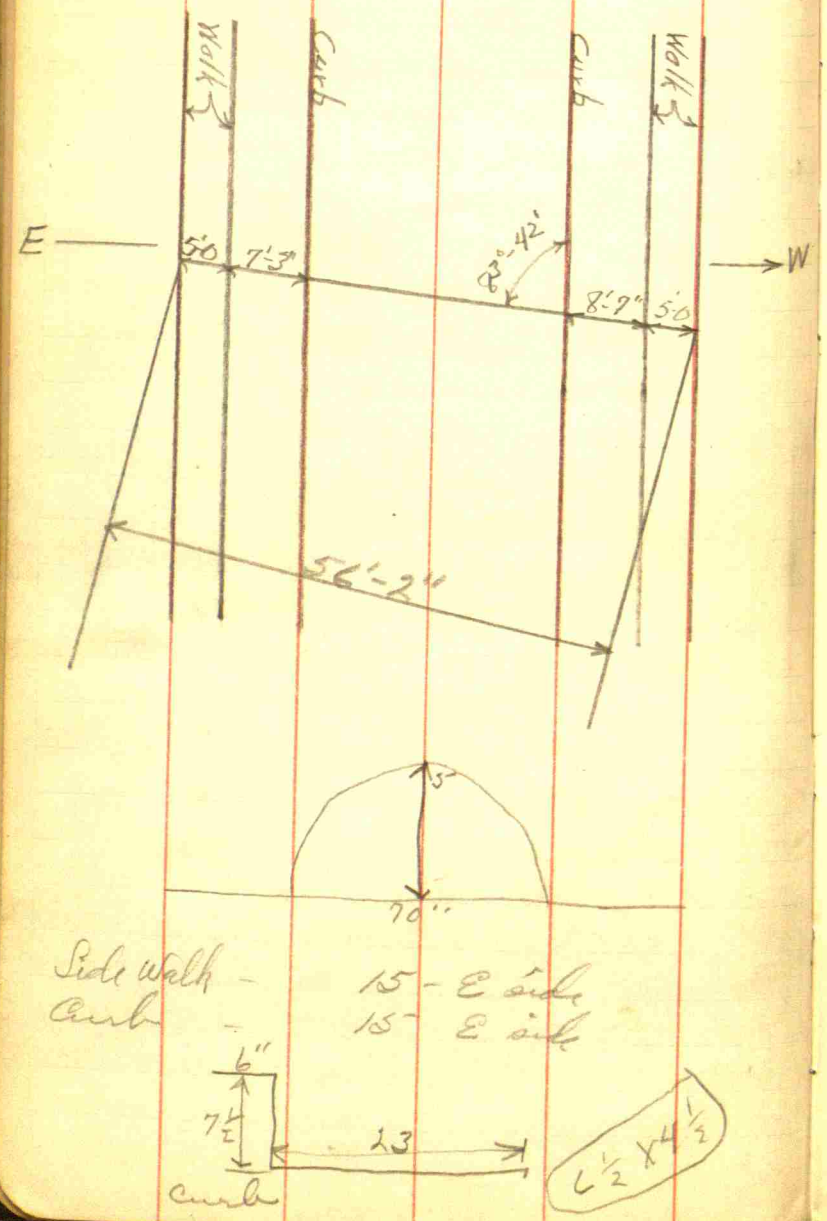
2

California St. Bridge



3

Levels on Calif. St. Bridge

Sta.	B.S.	H.I.	F.S.	Elev.
	3.76 - 103.76			100 Top Side sw'lk, W. Side South of tree.
T.W.S. W. side			4.06	99.70
F.L. W side			10.50	93.26
T. Curb W. side			4.75	99.01
Bot. Curb W. side			5.30	98.46
E. Street			4.58	99.18
Bot. Curb E. side			5 (4.63	99.13 98.13
Top curb E. side			5.06	98.70
Top S.W. E side 4½" above Top Walk			4.81	98.95 37 98.58
Fl. E. side			11.9 11.12	91.86 92.64
100' Downstream			12.36	91.40
100' Upstream			9.2	94.56

Levels on Road Ditch draining to Bayless Ditch

Sta	BS	HI	FS	Elev
BM	1.77	131.30		129.53
0+00				
1+00				
2+00				
3+00				
4+00				
⊙			4.07	127.23
⊼	4.90	132.13		
5+00				
6+00				
7+00				
8+00				
9+00				

West End South Bridge Rail

℄R	5	10 Barrell	10	12	15	17.5	18	27	Level
3.78	3.6	3.71	8.15	8.55	9.8	9.8	9.2	5.0	
127.52	127.90	127.59	123.15	122.75	121.50	121.50	122.10	126.30	

℄R	6.5	9.5	13.5	16.5	21	22.5	27.5	29F Level
4.91	4.9	5.2	7.2	9.2	9.6	7.5	6.2	
126.39	126.40	126.10	124.10	122.10	121.90	123.80	125.10	

℄	6	10	14	17	20	23	30F	Level
4.72	4.67	5.3	6.5	9.4	9.2	6.6	5.2	
126.58	126.63	126.00	124.80	121.90	122.10	124.70	126.10	

℄	6	10	12	14	17	18	22	26	28	30F	Level
4.77	4.72	5.1	5.8	7.2	8.1	9.0	8.7	5.7	5.6	5.6	
126.53	126.58	126.20	125.50	124.10	123.20	122.30	122.60	125.60	125.70	125.40	

℄R	7	12	15	18	21	25	31F	Level
4.48	4.4	4.7	5.6	8.6	8.4	5.3	5	
126.82	126.90	126.60	125.70	122.70	122.90	126.00	126.30	

TP 5+21 ~ Road ⊗

℄R	6	13	18	19	22	25	28	29F Level
4.95	4.90	5.7	7.2	9.2	9.4	6.4	5.8	
127.18	127.23	126.43	124.93	122.93	122.73	125.73	126.33	

℄R	6	12	14	16	19	22	25F	Level
5.15	5.1	6.1	7.0	8.9	8.6	6.3	5.4	
126.98	127.03	126.03	125.13	123.23	123.53	125.83	126.73	

6+75 Road surface ⊗

℄R	7	9	13	14	16	17	21	24F	Level
5.02	4.98	5.3	7.3	8.7	8.7	7.6	5.7	5.1	
127.11	127.15	126.83	124.83	123.43	123.43	124.53	126.43	127.03	

℄R	6	9	15	19	21	27F	Level
4.5	4.9	5.8	7.8	8.4	8.2	4.7	
127.63	127.23	126.33	124.33	123.73	123.93	127.43	

8+06 Top Road ⊗

8+40 Top surface

℄R	7	11	16	19	21	28F	Level
3.61	3.5	4.3	6.2	7.8	7.6	4.5	
128.52	128.63	127.83	125.93	124.33	124.53	127.63	

9+73 Top Road

10+13 [illegible] Road

10+72 [illegible]

		132.13			
10+00					
⊙			3.15	128.98	
⊼	5.75	134.73			
11+00					
11+32	Bridge FL		9.70	125.03	
12+00					
13+00					
⊙			4.71	130.02	NE end Retwall of Trail Park
⊼	4.58	134.60			
14+00					
16+00					
18+00					
			4.2		
⊙			4.25	130.35	
⊼	5.14	135.49			
20+00					
22+00					
24+00					

ER	7	12	15	17	19	24	30		Fine
3.32	3.2	3.4	4.6	6.6	7.4	7.4	3.9		
127.81	128.93	128.73	127.53	125.53	124.73	124.73	128.23		

ER	7	10	14	18	18	21	25	32	Level
5.85	5.2	5.6	8.2	8.6	9.7	9.7	7.6	6.8	
129.38	129.53	129.13	126.53	126.13	125.03	125.03	127.13	128.93	

ER	7	13	16	20	22	27	30	32	
5.05	5.1	5.8	7.2	9.3	9.1	8.4	7	6.4	
129.68	129.63	128.93	127.53	125.43	125.63	126.33	127.73	128.53	

ER	8	16	16	21	25	28	34		Level
4.85	5.1	4.85	8.9	8.9	8.3	7	5.7		
129.88	129.63	129.88	125.83	125.83	126.43	127.73	125.73		

ER	8	15	20	23	27	29	33	35	Level
4.25	5.1	5.6	8.5	8.7	8.7	8	5.3	5.0	
129.75	129.50	129.00	126.10	125.90	125.90	126.60	129.30	129.80	

ER	8	17	19	22	25	28	30	32	35	Level
4.65	4.8	5.7	7.7	8.5	8.3	7.6	6.3	5.6	5.6	
127.95	127.80	125.80	126.80	126.10	126.30	129.00	128.30	129.00	129.00	

ER	8	12	21	24	31	35		Fine Level
4.35	4.45	5	8.2	8.1	5.7	5.7		
130.25	130.15	129.60	126.40	126.50	128.90	128.90		

ER	8	13	21	25	32	34		
5.15	5.32	5.17	9.2	9.4	5.7	6.3		Level
130.34	130.17	130.32	126.29	126.09	129.79	129.19		

ER	8	13	17	19	22	26	32	35	Fine
4.75	5.0	5.6	7.3	8.5	8.9	8.8	5.7	6.1	
130.94	130.49	129.89	128.19	126.99	126.59	126.69	129.99	129.39	

ER	8	14	19	27	31	33
4.4	4.9	5.1	8.2	7.9	5.5	5.5
131.09	130.79	130.39	127.29	127.59	129.99	129.99

		135.49			
⊙			4.33	131.16	
T	6.21	137.47			
26+00					
28+00					
30+00					
30+62					
BM			3.98	133.49	Bend return

BP	8	12	14	17	19	25	31	33 Face
5.39	6.05	6.3	7.2	9	9.9	9.7	7.3	7
131.58	131.92	131.17	130.27	128.47	127.57	127.77	129.97	130.47

BP	8	14	19	28	33 Face
4.92	5.1	5.2	9.3	9.4	6.3
132.55	132.37	132.07	128.17	128.07	131.17

BP	8	14	23	30	33 F
4.12	4.3	5	9.2	9.1	7.1
133.35	133.17	132.47	128.27	128.27	130.37

BP	8	14	21	25	28	29	33 F
3.9	4.0	4.7	8.4	9.3	9.2	6.4	5.7
133.57	133.47	132.77	129.07	128.17	128.27	131.07	131.77

Recall Equipment

10

LEVELS ON MALONEY ROAD

Sta	BS	HI	FS		Elev
BM	4.99	115.29			110.30
98+0					
97+0					
96+0					
95+0					
94+0					
93+19 PC					
93+0					
92+50					
⊙			4.24	111.03	
T	4.13	115.16			
BM			4.59	110.57	(110.53)
92+0					
91+68 PC					
91+0					
90+0					
89+0					
88+0					
87+0					
⊙			3.16	112.0	
T	4.38	116.38			
86+0					
85+0					

11

West + South		East + North	
		5.62	109.65
		4.47	110.80
		4.01	111.26
		3.10	112.17
		3.82	111.45
		4.32	110.95
4.82			
4.24			
5.12	110.04		
		4.03	111.13
		3.22	111.94
		3.92	111.24
		3.93	111.23
		3.35	111.81
		3.16	112.00
		6.04	110.34
		6.20	110.18

Sta	BS	HI	FS		
84+00		116.38			
83+0					
82+0					
81+0					
80+37 PT					
⊙			1.86	114.52	
⊼	5.01	119.53			
80+0					
BM			5.02	114.51	(114.49)
79+50					
79+0					
78+80 PC					
78+0					
77+0					
76+0					
75+0					
⊙			5.59	113.94	
⊼	7.63	121.57			
74+0					
73+0					
72+40 PT					
72+0					
71+50					
71+0					

West +	South	East +	North
		5.41	110.97
		4.73	111.65
		4.32	112.06
		2.72	113.66
		1.86	114.52
		5.02	114.51
		4.39	115.14
		4.56	114.97
3.89	115.64		
4.0	115.53		
5.57	113.96		
5.72	113.81		
3.91	115.62		
5.56	116.01		
4.60	116.97		
3.92	117.65		
4.64	116.93		
5.05	116.52		
5.55	116.02		

Sta	BS	HI	FS		
		121.57			
BM					
⊗			5.02	116.55	(116.57)
70+89.5 PC.					
70+0					
69+0					
68+0					
⊙			4.44	119.13	✓
⊼	6.82	123.95			
67+0					
66+0					
65+0					
64+0					
63+0					
62+0					
⊙			3.34	120.61	✓
⊼	4.16	124.77			
61+0					
60+0					
59+0					
58+0					
⊙			4.98	119.79	✓
⊼	4.80	124.59			
57+0					

West +	South	East +	North
5.12	115.85		
		5.90	115.67
		5.29	116.28
		4.44	119.13
		6.01	117.94
		5.59	118.36
		5.18	118.77
		4.0	119.95
		2.77	121.18
		3.34	120.61
		4.88	119.89
		5.57	119.20
		5.41	119.36
		5.18	119.59
		4.29	120.30

Sta	BS	HI	FS		
		124.59			
56+00					
55+0					
⊙					
⊼	4.15	123.18	5.56	119.03	✓
54+0					
53+0					
52+0					
⊙					
⊼	3.78	122.56	4.40	118.78	✓
51+0					
50+0					
49+0					
48+0					
47+0					
46+0					
~~45+0~~					
⊙					
⊼	3.79	122.27	4.08	118.48	✓
45+0					
44+0					
43+0					
42+0					
41+0					

West + South	East + North
4.84	119.75
4.27	120.32
3.74	119.44
3.98	119.20
3.48	119.70
3.06	119.50
4.26	118.30
3.96	118.60
2.25	120.31
3.28	119.28
4.05	118.51
4.03	117.64
5.04	117.23
4.98	117.29
5.34	116.93
4.77	117.50

Sta	BS	HI	FS		
		122.27			
40+0					
⊙			5.28	116.99	
⊼	5.09	122.08			
39+0					
38+0					
37+0					
36+0					
35+0					
⊙			3.26	118.82	
⊼	3.16	121.98			
34+0					
+ 33+0					
32+85. PC					
32+50					
32+0					
31+35 PC					
31+0					
BM					
⊙ 35			5.74	116.24	117.29
⊼	3.46	122.28	3.16	118.82	
⊙ 40					
⊼	5.22	122.21	5.29	116.99	
⊙ 4					
			3.76	118.45	
			4.58	117.63	Stakes

West + South	East + North
5.28	116.99
4.63	117.45
3.69	118.39
2.60	119.48
2.10	119.98
3.26	118.82
4.49	117.49
5.58	116.40
5.91	116.07
6.43	115.55
6.22	115.76
5.80	116.18
4.68	117.30

				118.45	
⊼	4.12	122.57			
⊙			3.82	118.75	
⊼	4.90	123.65			
			4.87	119.03	
⊼	5.56	124.59			
			4.80	119.79	
⊼	4.82	124.61			
			3.98	120.63	
⊼	3.14	123.77			
					117.15
			6.58	117.19	
⊼	3.45	120.64			
			3.97	116.67	114.03
			6.64	114.03	113.94
					7
3:19					
				119.29	
⊼	6.92	124.21			
⊙			5.36	118.85	
⊼	3.78	122.63			
⊙			4.36	118.27	
⊼	2.99	121.26			
			1.24	120.2	119.97
	3.69			117.29	
	10.96		10.96	2.73	
	2.73				

Sta	BS	HI	FS	
BM	4.51	121.08		116.57
TO+89.8 PC				
70+0				
69+0				
68+0				
67+0				
66+0				
⌀				
T	7.92	126.26	7.74	118.34
65+0				
64+0				
63+0				
62+0				
61+0				
60+0				
⌀				
T	5.21	124.42	7.05	119.21
59+0				
58+0				
57+0				
56+0				
55+0				
⌀				
T	2.24	122.57	4.09	120.33

West + South	East + North
5.48	115.60
5.45	115.63
4.87	116.21
3.98	117.10
3.19	117.89
2.74	118.34
7.51	118.75
6.32	119.94
5.14	121.13
5.67	120.59
6.35	119.91
7.05	119.21
5.09	119.33
4.88	119.54
4.16	120.26
4.69	119.73
4.09	120.33

Sta	BS	HI	FS	
		122.57		
54+0				
53+0				
52+0				
51+0				
50+0				
49+0				
⊙			3.98	118.59
⊼	4.44	123.03		
48+0				
47+0				
46+0				
45+0				
44+0				
⊙			5.74	117.29
⊼	4.35	121.64		
43+0				
42+0				
41+0				
40+0				
⊙			3.56	118.08
⊼	5.78	123.86		
39+0				
38+0				

West + South	East + North
	3.30 119.27
	3.38 119.19
	2.87 119.70
	3.09 119.48
	4.28 118.29
	3.98 118.59
	2.74 120.29
	3.91 119.12
	4.54 118.49
	5.38 117.65
	5.74 117.29
	4.31 117.33
	4.68 116.96
	4.15 117.49
	4.62 117.02
	6.22 117.64
	5.32 118.54

3+0	BS	HI	FS		
		123.86			
37+0					
36+0					
35+0					
34+0					
0			6.18	117.68	
T	4.0	121.68			
33+0					
32+85					
32+50					
32+0					
31+35					
31+0					
BM			5.25	116.43	

West + South	East + North
	4.23 119.63
	3.72 120.14
	4.85 119.01
	6.18 117.68
	5.1 116.58
	5.42 116.26
	6.16 115.52
	5.75 115.93
	5.26 116.42
	4.2 117.48

				Elev	119.97
⊤	4.60	124.57			
⊙			7.62	116.95	
⊤	8.71	125.66			
⊙			4.72	120.94	
⊤	2.20	123.14			
⊙			12.24	110.80	
⊤	.77	111.57			
⊙			6.31	105.26	
⊤	6.98	112.24			
⊙			7.62	104.62	
⊤	3.19	107.81			
T.R.IS			1.45	106.36	
T Euclis			4.53	103.28	
T R W1			1 30	106.51	
T cut W2			4.37	103.44	

					11729	BM Sta 32+30
T	6.80	124.09				
⊙			5.35	118.74		
T	4.31	123.05				
⊙			5.53	117.52		
T	6.76	124.28				
⊙			5.09	119.19		
T	5.40	124.59				
			.11	124.48	Post + Nails 123.98 53+75	
⊙			4.07	120.52		
T	4.98	125.50				
⊙			4.73	120.77		
T	4.12	124.89				
⊙			6.72	118.17		
T	3.34	121.51				
71+ BM			3.87	117.64	116.57	

BM					119.99
⊼	4.32	124.29			
⊙			1.61	122.68	
⊼	6.02	128.70			
16+66					
17+0					
16+60					
16+0					
15+0					
14+81					
14+27					
14+0					
13+73					
⊙			4.55	124.15	
⊼	.45	124.60			
13+00					
12+00					
10+12					
10+0					
9+53					
⊙			11.61	112.99	
⊼	1.73	114.72			
11+15					
11+0					
9+0					

West + South

4.41	124.29
5.94	122.76
4.30	124.40
4.02	124.68
5.67	123.03
5.51	123.19
4.58	124.12
4.31	124.39
4.55	124.15
2.33	122.27
10.10	114.50
11.61	112.99
10.91	113.69
11.90	112.70
9.70	105.02
8.13	106.59
2.74	111.98

		114.72		
8+80				
8+03				
0			3.46	111.26
T	6.49	117.95		
8+0				
7+24				
7+23				
7+0				
6+40				
6+0				
5+0				
4+0				
3+0				
0			7.13	110.62
T	.96	111.58		
2+0				
1+0				
0+0				
Send Road Sta			5.22	106.36

West + South

2.70	112.02
3.46	111.26
6.51	111.24
9.0	108.75
8.75	109.00
7.84	109.91
6.51	111.24
5.29	112.46
4.50	113.25
5.70	112.05
7.13	110.62
4.21	107.37
9.09	102.49
10.91	100.67

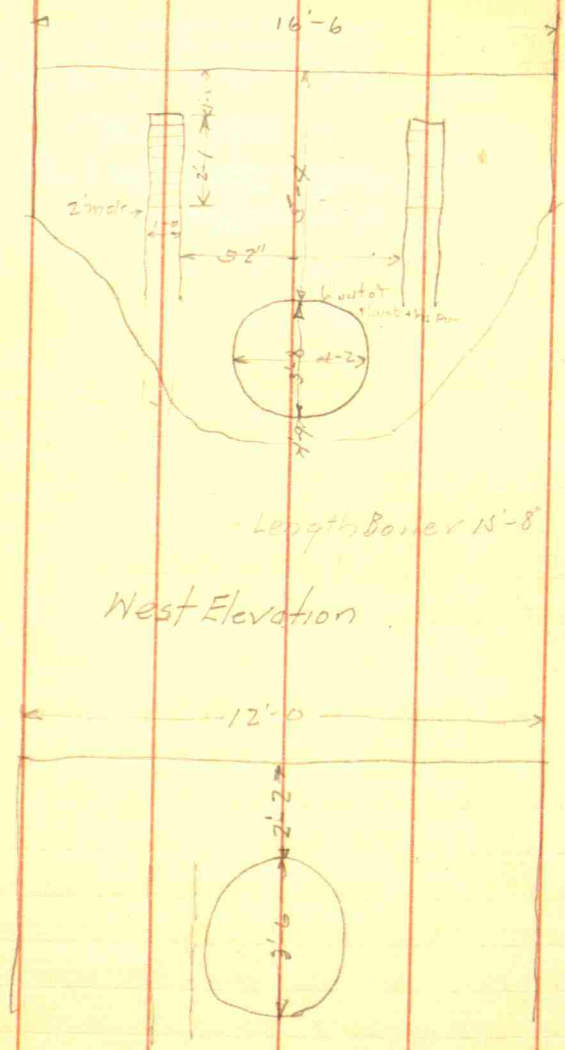
	BS	HI	FS		
BM					119.97
T	6.03	126.00			
18+0					
PT 18+14					
19+0					
20+0					
⊙			10.53	115.47	
T	7.08	122.55			
21+0					
22+0					
23+0					
24+0					
⊙			5.05	117.50	
T	5.12	122.62			
25+0					
26+0					
27+0					
28+0					
29+0					
⊙			3.63	119.09	
T	5.26	124.35			
29+73.					
30+0					
30+50					
BM			7.12	117.23	

Stake S. Side

3.97	122.03
3.54	122.46
4.14	121.86
8.20	117.80
8.81	113.14
3.91	118.64
4.56	117.99
3.53	119.02
4.57	118.15
4.60	118.12
4.22	118.50
2.82	119.90
3.50	119.22
5.46	118.89
5.41	118.94
5.89	118.46

38

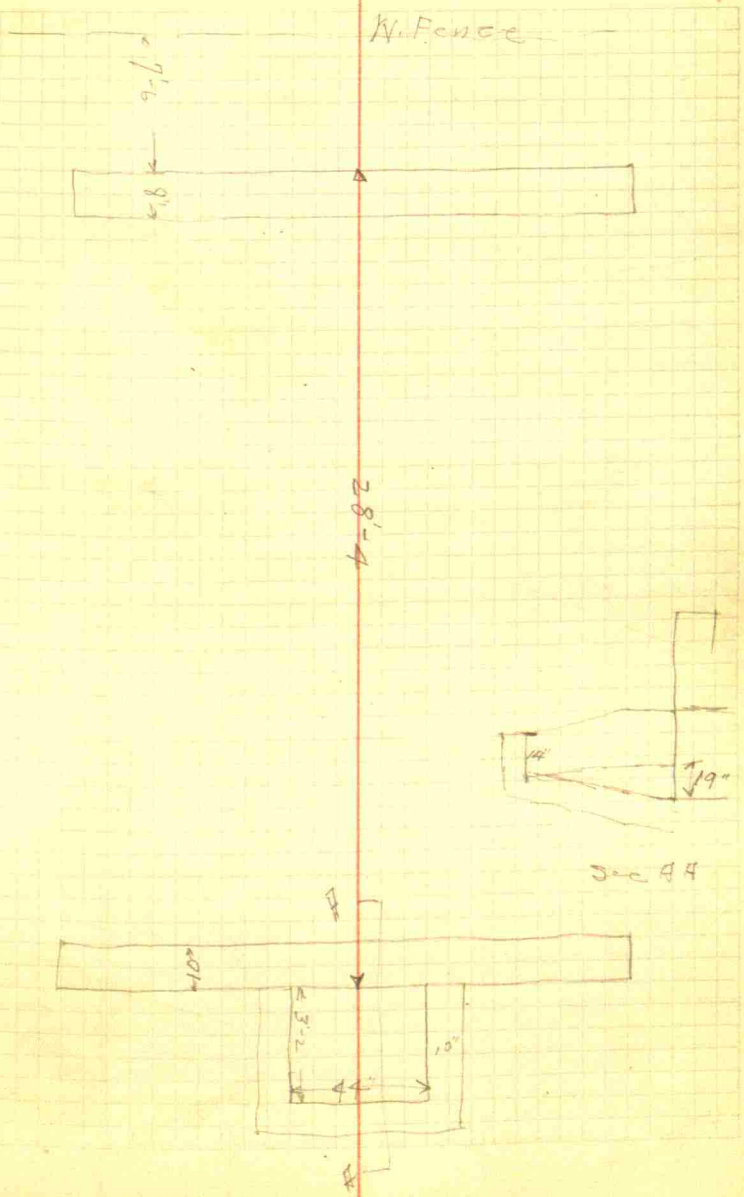
Arbuckle Bridge



West Elevation

39

N. Fence



BM					100
T	5.90	105.90			
FL, E End			11.2	94.70	
E side Box			9.91	95.99	
S. in Ditch			9.45	96.45	
E Wall Box			8.63	97.27	
N. in Ditch			9.25	96.65	
℄ Road			5.60	100.30	
Top W Hdwl			6.32	99.58	
FL W End Boiler			15.33	90.57	
FL W End Grate			17.10	88.90	

Center E. Hdw Top

STOUT-RICHARDSON DITCH

Sta	BS	HI	FS	Elev
BM	2.11	102.11 ✓		100
0+00				
⊙			2.23	99.88 ✓
⊼	2.34	102.22 ✓		
1+00				
2+00				
⊙			8.92	93.29 ✓
⊼	5.39	98.68 ✓		
3+00				
4+00				
5+00				
6+00				
⊙			4.31	94.37 ✓
⊼	4.07	98.44 ✓		
7+00				
⊙			4.45	93.99 ✓
8+00				
⊼	4.19	98.18 ✓		
9+00				
10+00				
⊙			4.14	94.04 ✓
⊼	4.85	98.89 ✓		

8-22-37

12.02 12.01

FRANKLIN-LIBERTY Twps

On Concrete at NE Shoe of Bridge over Mud Creek about 100' south of mouth of Ditch

Stake		Stream	
3.27	98.84	16.60	85.51
5.39	96.83	15.74	86.37
9.01	93.21	15.17	87.05
4.42	94.26	10.99	87.69
4.52	94.16	10.60	88.08
4.83	93.85	10.04	88.64
4.31	94.37	10.15	88.53
4.14	94.30	10.05	88 39
4.45	93 99	10.05	88.39
4.30	93.88	9.54	88 64
4.14	94.04	9.20	88.98

44

Sta	BS	HI	FS		Elev
		98.89			
11+00					
12+00					
13+00					
14+00					
⊙			4.38	94.51 ✓	
⊼	4.78	99.29 ✓			
15+00					
16+00					
17+00					
BM					
			.74	98.55 ✓	
⊼	1.58	100.13 ✓			
18+00					
19+00					
20+00					
21+00					
22+00					
23+00					
⊙			3.78	96.35 ✓	
⊼	4.20	100.55 ✓			
24+00					
25+00					
26+00					
27+00					

45

Stake		Stream	
4.47	94.42	9.10	89.79
		9.93	88.86
4.54	94.35	9.15	89.74
4.38	94.51	9.12	89.77
4.23	95.06	9.60	89.69
4.89	94.40	9.14	90.15
4.30	94.99	8.66	90.63

Center West Rail 1st Road Crossing Ditch N+S

5.01	95.12	9.91	90.22
		10.58	89.55
4.57	95.56	9.43	90.70
4.36	95.77	9.48	90.65
4.13	96.00	9.00	91.13
3.78	96.35	9.14	90.99
4.33	96.22	9.21	91.34
4.29	96.26	9.25	91.30
5.21	95.34	8.94	91.61
4.33	96.22	8.68	91.87

Sta	BS	HI	FS		El.
		100.55			
28+00					
29+00					
30+00					
⊙			3.38	97.17 ✓	
⊼	5.45	102.62 ✓			
31+00					
32+00					
33+00					
34+00					
35+00					
36+00					
37+00					
⊙			4.38	98.24 ✓	
⊼	4.44	102.68 ✓			
38+00					
39+00					
40+00					
41+00					
42+00					
43+00					
⊙			7.58	95.10 ✓	
⊼	7.36	102.46 ✓			
44+00					

Stake		Stream	
3.74	96.81	8.66	91.89
3.84	96.71	8.65	91.90
3.38	97.17	8.56	91.99
5.13	97.49	10.48	92.14
5.39	97.23	10.32	92.30
4.06	98.56	10.11	92.51
4.36	98.26	9.95	92.67
3.82	98.80	9.98	92.64
4.57	98.05	9.76	92.86
4.38	98.24	9.84	92.78
3.95	98.73	9.35	93.33
4.42	98.26	9.61	93.07
4.64	98.04	9.32	93.36
4.57	98.11	8.87	93 81
4.13	98.55	9.12	93.56
4.09	98.59	9.00	93.68
3.80	98.66	8.53	93 93

Sta	BS	HI	FS	
		102.46		
45+00				
46+00				
47+00				
48+00				
49+00				
50+00				
51+00				
⊙				
⊼	3.37	104.05 ✓	1.78	100.68 ✓
52+00				
53+00				
54+00				
55+00				
56+00				
57+00				
58+00				
⊙				
⊼	4.74	105.92 ✓	2.87	101.18 ✓
59+00				
60+00				
61+00				
⊙				
⊼	4.76	106.19 ✓	4.49	101.43 ✓

stake		stream	
3.96	98.50	8.61	93.85
3.66	98.80	8.56	93.90
2.98	99.48	8.56	93.90
3.03	99.43	8.35	94.11
3.12	99.33	8.73	93.71
2.50	99.96	8.73	93.71
1.78	100.68	8.70	93.76
3.16	100.89	9.60	94.45
2.62	101.43	9.70	94.35
3.22	100.83	9.86	94.19
3.57	100.48	9.53	94.52
3.66	100.39	9.26	94.79
3.27	100.78	9.17	94.88
2.87	101.18	8.95	95.10
4.24	101.68	10.76	95.16
5.45	100.47	10.22	95.70
4.50	101.42	10.21	95.71

Sta	BS	HI	FS		
		106.19			
62+00					
63+00					
64+00					
⊙			4.60	101.59	✓
⊤	4.80	106.39	✓		
65+00					
66+00					
⊙			3.38	103.01	✓
⊤	2.34	105.35	✓		
67+00					
68+00					
69+00					
70+00					
71+00					
⊙			3.98	101 37	✓
⊤	4.54	105.91	✓		
72+00					
73+00					
74+00					
75+00					
76+00					
⊙			3.80	102.11	✓
⊤	4.97	107 08	✓		

Stake		Stream	
4.57	101.62	10.35	95.84
4.78	101.41	10 44	96.75
4.60	101.59	9.83	9636
4.48	101.91	10.00	96.39
4.47	101.92	9.90	9649
		9.01	96.34
4.78	101.77	9 47	95 88
3.72	101.63	9.10	96.25
3.74	101.61	9 20	96.15
3.98	101.37	8.66	96.69
4.51	101.40	9.00	96.91
4.10	101.81	9.06	96.86
4.59	101.32	8.95	96.96
4.90	101.01	8.60	97.31
3.80	102.11	8.64	97 27

Sta	BS	HI	FS		
		107.08			
77+00					
78+00					
79+00					
80+00					
⊙			4.34	102.74	✓
⊼	3.46	106.20 ✓			
81+00					
82+00					
⊙			3.23	102.97	✓
⊼	5.20	108.17 ✓			
82+00					
83+00					
84+00					
⊙			3.09	105.08 ✓	Flat Bridge
⊼	3.44	108.52 ✓			
85+00					
86+00					
87+00					
88+00					
89+00					
⊙			3.63	104.89 ✓	
⊼	3.86	108.75 ✓			
90+00					

Sta		Stream	
4.56	102.52	9.45	97.63
4.91	102.17	9.46	97.62
4.55	102.53	9.40	97.68
4.34	102.74	9.05	98.03
3.45	102.75	8.43	97.77
3.28	102.97		
		10.15	98.02
5.17	103.00	9.68	98.49
5.92	102.25	10.04	98.13
4.88	103.64	10.10	98.42
3.44	105.08	9.60	98.92
3.96	104.56	10.25	98.27
3.22	105.30	9.35	99.17
3.63	104.89	9.42	99.10
3.90	104.85	9.40	99.35

Sta	BS	HI 108.75	FS		
91+00					
92+00					
93+00					
94+00					
95+00					
⊙			3.52	105.23	✓
⊼	4.31	109.64 ✓			
96+00					
97+00					
98+00					
99+00					
100+00					
101+00					
102+00					
103+00					
104+00					
⊙			5.39	104.25 ✓	
⊼	7.45	111.70 ✓			
105+00					
106+00					
107+00					
108+00					
109+00					

Stake		Station	
9+00	104.75	9.15	99.60
3.39	105.36	8.92	99.83
		8.52	100.23
5.28	103.37	8.06	100.69
3.52	105.23	7.90	100.85
8+53	105.11	8.52	101.12
5.09	104.55	7.80	101.84
4.63	105.01	8.50	101.14
4.08	105.56	8.16	101.48
3.90	105.74	7.88	101.76
4.59	105.05	7.68	101.96
3.83	105.76	7.50	102.14
2.78	106.86	7.60	102.04
4.50	105.14	6.85	103.09
4.79	106.91	9.40	102.30
4.36	107.34	9.15	102.55
4.32	107.58	9.24	102.46
3.74	107.96	9.16	102.54
3.52	108.18	9.15	102.55

Sta	BS	HI	FS		
		111.70			
110+00					
111+00					
112+00					
113+00					
BM			2.39	109.31 ✓	
T	4.56	113.87 ✓			
114+00					
115+00					
116+00					
117+00					
118+00					
⊙			4.16	109.71 ✓	
T	4.29	114.00 ✓			
119+00					
120+00					
⊙			4.79	109.21 ✓	
T	5.61	114.82 ✓			
121+00					
122+00					
⊙			4.45	110.37 ✓	
T	4.92	115.29 ✓			
123+00					
124+00					

Stake		Stake	
3.55	108.15	8.90	102.80
3.55	108.15	8.53	103.15
2.98	108.72	8.31	103.39
2.25	109.45	8.10	103.60
Top Curb South End East Rail		sta 118+25	
4.78	109.09	9.65	104.22
4.53	109.34	9.55	104.32
5.27	108.60	9.26	104.61
4.93	108.94	9.21	104.66
4.16	109.71	8.61	105.26
3.49	110.51	8.08	105.92
4.79	109.21	8.19	105.81
5.31	109.51	8.94	105.88
4.45	110.37	8.50	106.32
4.57	110.72	8.82	106.47
3.98	111.31	8.64	106.65

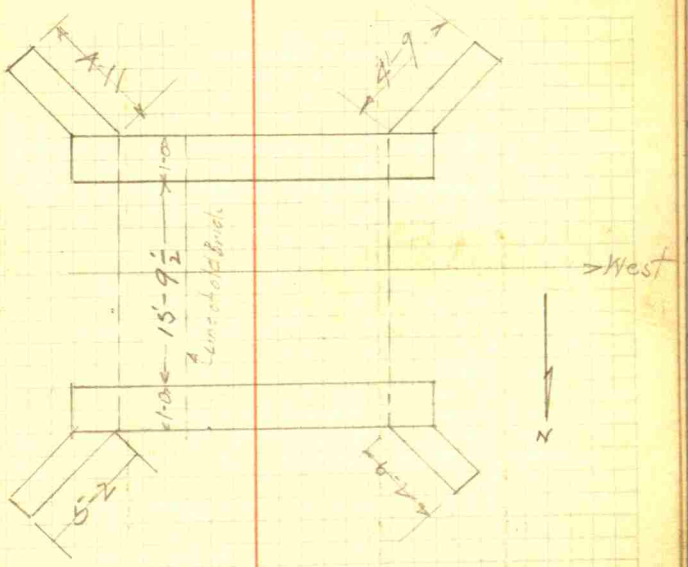
Sta	BS	HI	FS		
		115.29			
125+00					
126+00					
⊙			3.50	111.79 ✓	
⊼	4.18	115.97 ✓			
127+00					
128+00					
129+00					
130+00					
⊙			3.48	112.49 ✓	
⊼	3.79	116.28 ✓			
131+00					
132+00					
133+00					
134+00					
⊙			2.38	113.90 ✓	
⊼	5.32	119.22 ✓			
135+00					
136+00					
137+00					
138+00					
⊙			3.13	116.09 ✓	
⊼	4.36	120.45 ✓			
139+00					

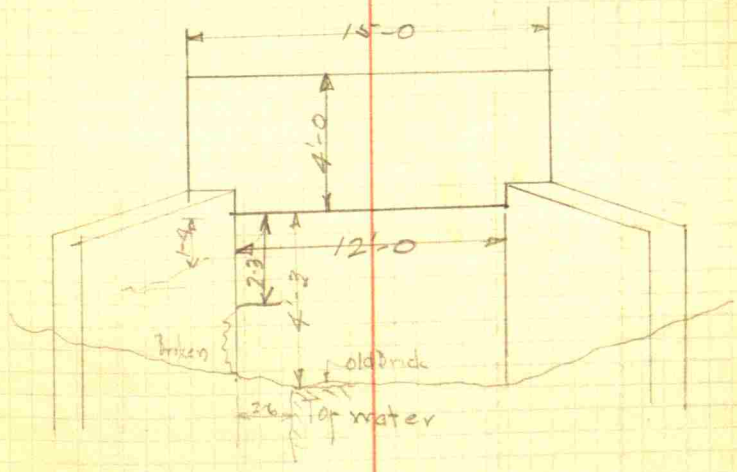
Stake		Stream	
3.69	111.60	8.53	106.76
3.50	111.79	8.38	106.91
4.26	111.21	8.53	107.44
4.38	111.59	8.04	107.93
3.18	112.79	8.20	107.77
3.48	112.49	7.61	108.36
2.74	113.54	8.05	108.23
2.45	113.83	7.82	108.46
2.56	113.72	7.61	108.67
2.38	113.90	7.15	109.13
		9.96	109.26
4.22	114.99	9.45	109.74
4.11	115.11	9.60	109.62
3.13	116.09	9.60	109.62
4.71	115.74	10.18	110.27

Sta	BS	HI	FS		
		120.45			
140+00					
⊙			3.61	116.84	✓
⊼	4.75	121.59 ✓			
141+00					
142+00					
143+00					
144+00					
⊙			3.23	118.36	✓
⊼	4.14	122.50 ✓			
145+00					
146+00					
147+00					
148+00					
⊙			4.05	118.45	✓
⊼	5.73	124.18 ✓			
149+00					
150+00					
151+00					
152+00					
+50					
BM#1	1.50	101.50			100
			16.46	85.04	

stake		stream	
3.61	116.84	10.18	110.27
5.16	116.43	10.45	110.64
4.55	117.04	10.69	110.90
3.83	117.76	10.35	111.24
3.23	118.36	10.22	111 37
3.98	118.52	10.72	111 .78
4.21	118 29	10.13	112.37
3.78	118.72	9.78	112.72
4.05	118.45	9.30	113.20
4.72	119.46	10.55	113.63
4.47	119 71	10.02	114.14
3.78	120 40	9.42	114.76
4.81	119 37	8.55	115.63
2.70	121. 48	7.80	116.38

First Bridge West of New Winchester Road on New Haysville Road



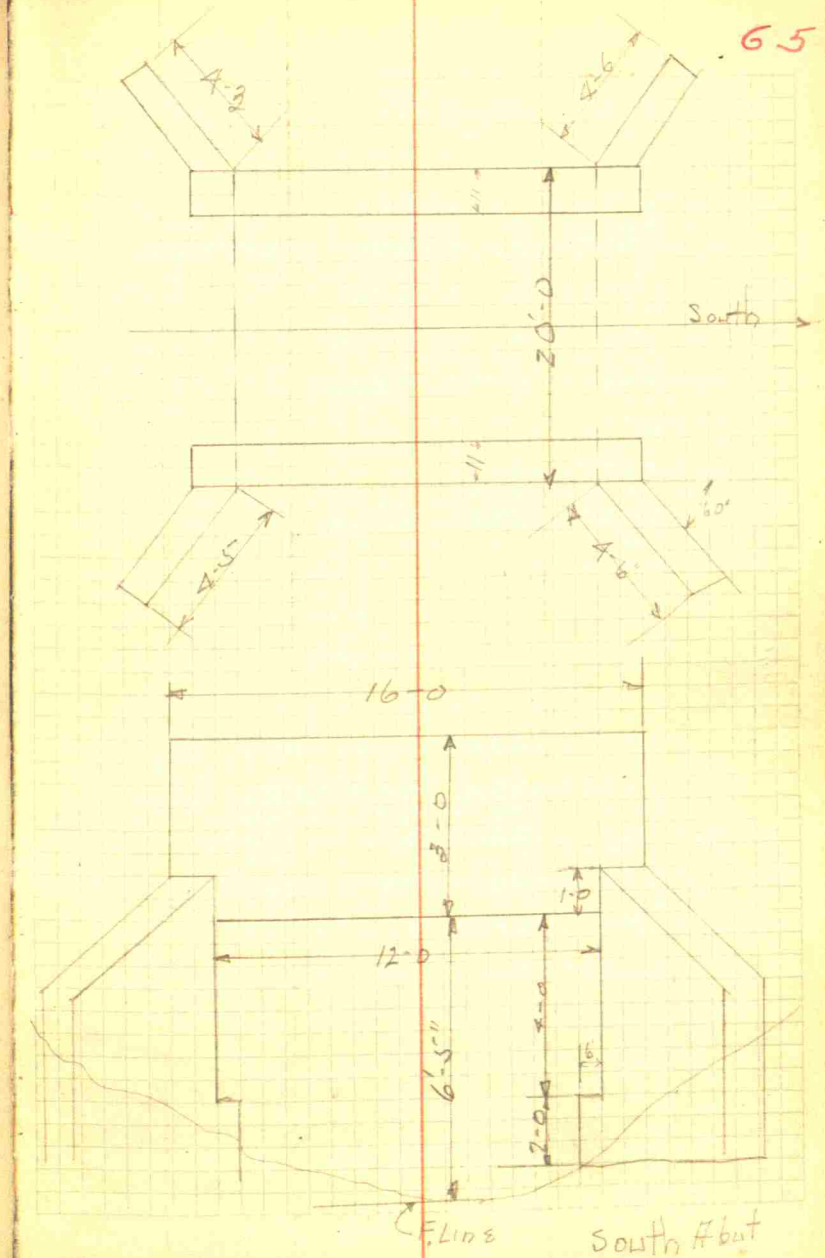


Under Pin East wall only

64

First Bridge South of steel Bridge on Jamestown Road

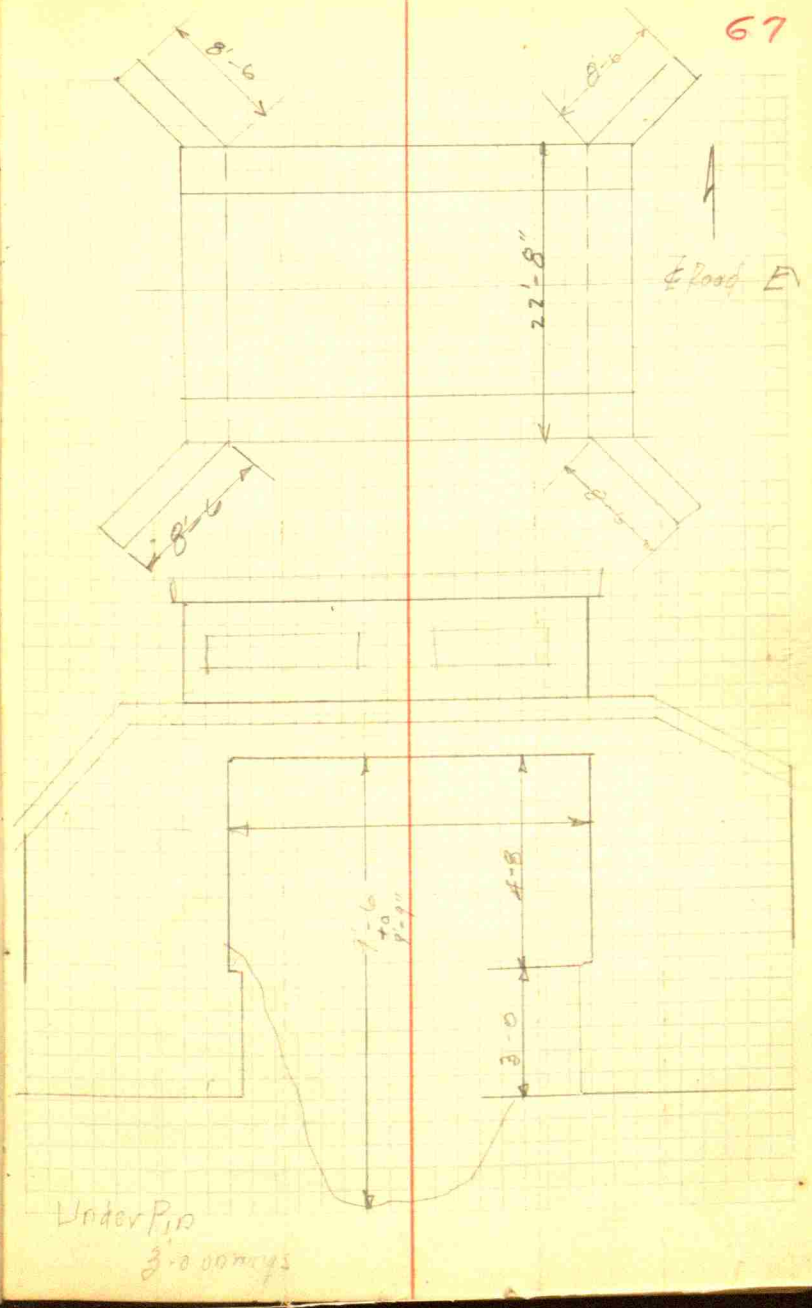
65



66

Mc Coll #2

67



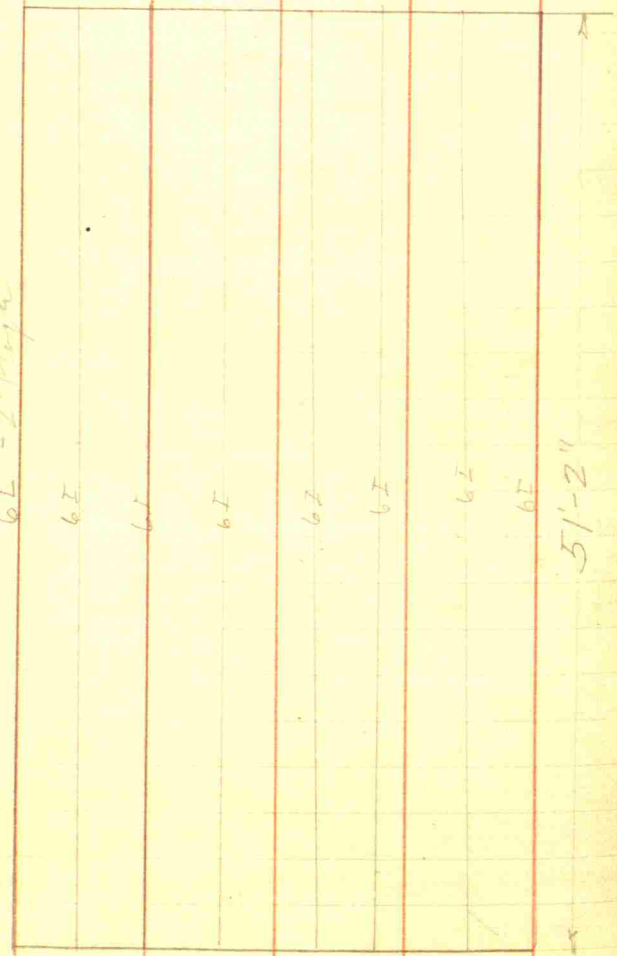
Steel Bridge on County Line

15-6¼ out to out 6E on outside

16'-Timber

Height-6'-9"

4-Panels

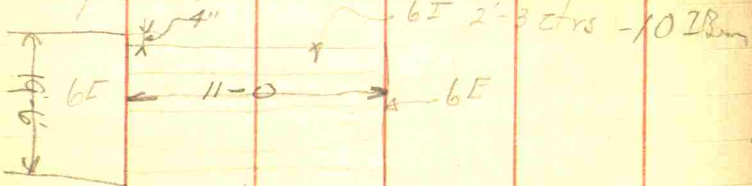


Mud Sill Not Exceed 10"w x 10"h

Top of I Beams - 8" from Bottom of Mud Sill

Conc Bridge South of Hazelwood

Span 8'-0



Hand Rails 24'-0

Height FL to Bottom slab 4'-6"

Length - 20'-0

Move Tile Ditch over on East side
coming from North -

King Bridge Fred... Twp

Water Box 4'-0 wide - 3'-0 high

Width of Road 31'-8"

20' - Culvert or 22 for 20 Roadway

HARVEY Bridge 30' long

11'-6 High

Top to Bottom

1 2
30
1 2
10
11 5

9'-10

11'-6

Relocation - Eel River Trap Sec 22+45 - 17+20

BM					100
	9.62	107.62			
⊙			12.00	97.62	
⊼	1.25	98.87			
100' S of ⊼			9.04	89.83	
200' "			9.95	88.92	
300' "			9.55	89.32	
0+00					
⊙			1.25	97.62	
⊼	9.85	107.47			
1+00					
2+00					
⊙			1.06	106.41	
⊼	.66	107.07			
2+50					
3+00					
3+10					
3+50					
4+00					

Nail in Pear tree 50' East sta 2+25

E ℄ W

41 38 31 22 24 16 8 | 5.58 | 6 12 19 21 40
6.48 9.72 9.74 8.92 8.58 7.95 6.17 | | 5.66 6.0 2.04 3.
92.22 91.58 91.13 89.95 90.02 90.92 92.10 | 93.29 | 93.21 92.87 96.83 93.87

33 18 13 8 | 7.83 | 7 16 20 27 up
6.83 5.28 8.61 8.34 | 7.54 8.3 7.41 1.16
100.64 102.19 98.86 99.13 | 99.64 99.93 99.17 100.06 105.87

30 24 | 1.66 | 3 2 19 27 30 32
3.38 2.88 | 1.54 2.8 2 2.72 1.87 .10
104.11 104.57 | 105.81 105.93 104.67 105.47 104.75 105.60 107.37

30 22 12 | 3.81 | 11 15 23 28 38
6.63 6.1 4.8 | 2.82 2.3 2.78 3.86 3.25
100.44 100.97 102.27 | 103.26 104.25 103.17 104.29 103.71 103.32

30 23 20 12 | 8.84 | 18 22 23 24 42
11.0 10.26 10.4 9.72 | 6.6 5.7 4.21 3.64 3.82
96.07 96.62 96.67 97.35 | 98.23 100.39 101.37 102.86 103.32

38 | 9.5 | 21 24 28 43
13.8 | 6.85 5.24 4.6 3.4
93.27 | 97.57 100.22 101.47 102.87 103.67

30 | 7.5 | 24 26 34 40
11.84 | 4.4 4.86 2.9 3.67
95.23 | 99.52 102.67 102.42 103.27 102.46

22 48 21 15 10 9 6 | 4.9 | 7 19 26 30
6.82 8.96 8.84 8.42 21 5.65 4.9 | 4.66 4.78 5.01 4.3
98.25 98.52 98.22 98.65 101.92 | 102.1 102.41 102.29 101.57 102.77
99.97 102.17

		107.07		
4+50				
⊙			3.26	103.81
⊤	10.95	114.76		
5+00				
5+50				
6+00				
6+27				
6+50				
7+00				
7+52				
⊙			7.95	106.81
⊤	2.14	108.95		
100' North			8.7	100.15
200' "			15.1	93.85

E W

30 12 17 15 12 3.9 30
4.25 5.4 4.7 5.15 3.88 103.17 2.95
102.82 106.67 103.37 109.2 103.19 104.12

42 34 24 7.07 30
11.15 12.1 7.12 7.9
103.61 102.66 107.64 107.69 106.86

24 23 21 14 7 4.5 20
7.8 10.25 7.9 5.2 4.4 5.15
109.96 104.26 106.84 109.56 110.36 110.26 109.61

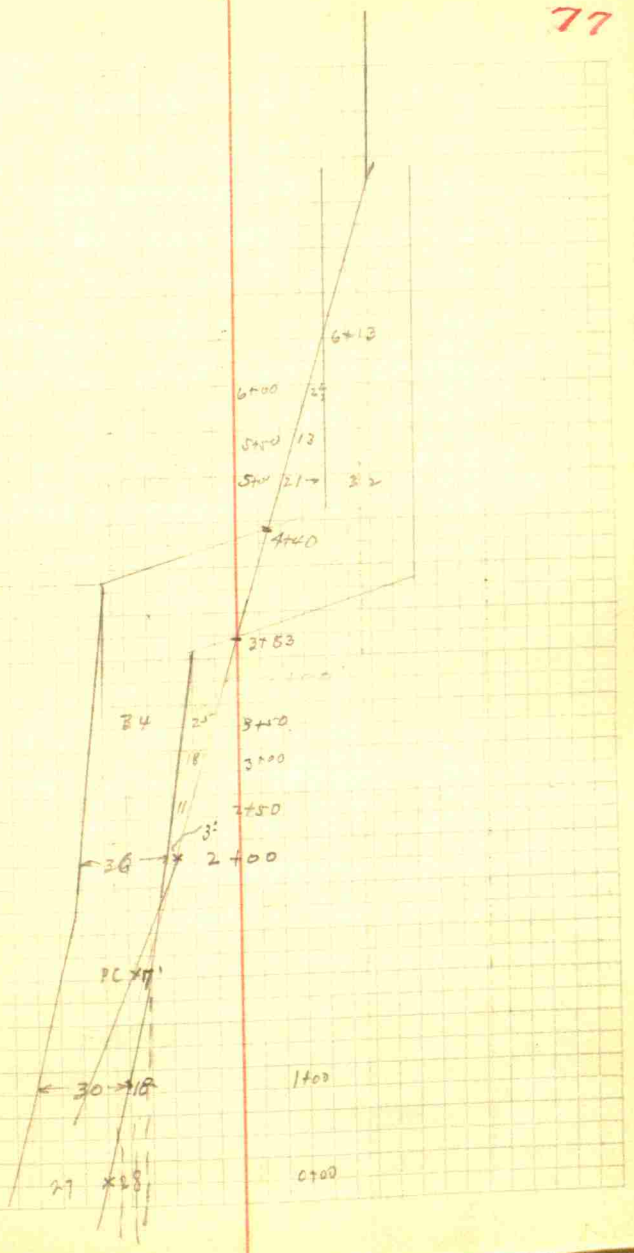
30 8 12 6 4.75 30
8.5 8.65 8.70 5.15 110.01 6.1
106.26 106.71 106.01 109.26 108.66

28 23 14 7 7.1 9 30
7.44 8.25 7.9 8.5 6.05 6.95
107.26 106.51 106.86 106.26 107.66 108.71 107.81

24 18 12 8.9 3 8 30
8.1 8.8 8.4 9.3 8.15 8.0
106.66 105.96 106.26 105.86 105.46 106.61 106.76

West (30 14 11 7 9.65 [illegible] 28
9.20 10 10.5 10 8.45 9.9 10.8 11.4
103.51 104.76 104.36 104.76 105.11 103.21 104.86 108.96 113.66

11 12 8 8 10 8
11.1 11.7 10.5 9.85 10.1 11 10.3
103.66 103.06 104.26 104.91 104.66 103.66 104.46


6+13
6+00
5+50
5+00
4+40
3+83
3+40
3+00
2+50
2+00
1+00
0+00

78

Stakes For Tile Ditch Maloney

Sta	BS	HI	FS	Elev	
				114.07	
	9.00	123.07			
51+00					
50+00					
49+00					
48+00					
47+00					
⊙			4.24	118.83	
⊤	3.20	122.03			
46+00					
45+00					
44+00					
43+00					
⊙			4.10	117.93	Top Maloney
⊤	4.10	122.03			
42+00					
41+00					
40+00					
39+00					
⊼	9.99	124.06		114.07	
53+00	(10.00)	(124.07)			
54+00					
55+00					

79

Road

Elev. Top of 8" Tile

Top Stake			
3.76	119.31		
5.05	118.02		
4.62	118.45		
3.00	120.07		
4.24	118.83		
3.82	118.21		
4.66	117.37		
4.78	117.05		
4.94	117.09		
5.07	116.96		
4.43	117.60		
5.27	116.76		
4.82	117.21		
(5.40) 5.51	118.55	118.67	
(4.15) 4.34	119.72	119.92	
4.19 4.31	119.75	119.88	

FL Ditch		
5.85	117.22	
6.47	116.60	
6.10	116.97	
6.00	117.07	
6.32	116.75	
5.74	116.29	
6.32	115.71	
6.50	115.53	
6.37	115.66	
6.85	115.18	
6.50	115.53	
6.58	115.45	
6.41	115.62	
6.98	117.08	
6.55	117.51	
6.36	117.70	

		124.06 (124.07)			
56+00					
57+00					
℄			4.60 (4.59)	119.46 (119.48)	
℄	4.77 (4.73)	124.23 (124.21)			
58+00					
58+92	on W Hdwl sta 58+				
60+00					
61+00					
62+00					
63+00					
	9.25	123.32			114.07
			4.12	118.20	
	3.99	122.19			
			4.27	117.92	
℄	9.26	123.33			114.07
52+00					
51+00					
50+00					
49+00					
48+00					
47+00					
46+00					
℄			5.03	118.30	
℄	3.52	121.82			

See Page 84

Top stake		TOL Ditch	
5.31 (5.30)	118.75 118.77	6.85	117.21
4.60 (4.59)	119.46 119.48	6.40	117.66
5.05 (5.02)	119.18 119.19	6.52	117.71
4.27	119.96	6.16	118.07
4.28 4.97	119.26 119.93	6.60	117.63
4.85 (4.89)	119.38	6.00	118.23
3.30	120.93 119.32	5.20	119.03
2.82	121.41	5.10	119.13

stake		Ditch	
3.52		5.96	117.37
3.87		6.39	116.94
5.13	118.20	6.87	116.46
4.71	118.62	6.31	117.02
3.17	120.16	6.12	117.21
4.36	118.97	6.35	116.98
5.03	118.3	6.75	116.58

82

LEVELS ON STAKES Road Ditch

	BS	HI	FS		130.02
BM	4.55	134.57			
11+00					
10+00					
9+00					
⊙			6.58	127.99	
⊼	4.03	132.02			
8+00					
7+00					
6+00					
5+00					
4+00					
⊙			4.58	127.44	
⊼	3.86	131.30			
3+00					
2+00					
1+00					
0+00					
BM			4.72	126.58	

83

East of Boyless Ditch

Grade S. Stake		Cuts			N Stake	Cut
(124)	4.26 / 120.31	6.31 ✓	9.91 / 124.66		6.05 / 128.52	4.52 ✓
(123.5)	4.90 / 129.67	6.17 ✓	10.13 / 124.44		5.44 / 129.13	5.63 ✓
(123.0)	5.24 / 129.33	(6.33) ✓			6.58 / 127.99	4.99 ✓
(122.5)	3.59 / 128.43	5.93 ✓	8.52 / 123.50		4.14 / 127.88	5.38 ✓
(122.10)	4.19 / 127.83	5.73 ✓	8.90 / 123.12		4.69 / 127.33	5.23 ✓
(121.70)	4.35 / 127.67	5.97 ✓	9.24 / 122.78		4.73 / 127.29	5.59 ✓
(121.30)	4.26 / 127.76	6.46 ✓	9.54 / 122.48		4.89 / 127.13	5.83 ✓
(120.90)	4.58 / 127.44	6.54 ✓	9.66 / 122.36		5.08 / 126.94	6.04 ✓
(120.50)	4.10 / 127.20	6.70 ✓	9.20 / 122.10		4.72 / 126.58	6.08 ✓
(120.10)	3.97 / 127.33	7.23 ✓	10.03 / 121.27		4.59 / 126.71	6.61 ✓
(119.70)	4.17 / 127.13	7.43 ✓	9.96 / 121.34		6.05 / 125.25	5.55 ✓
(119.30)	3.58 / 127.77	8.47	10.87 / 120.43		5.18 / 126.12	6.82

	4.47	131.05			126.58
		121.82			
45+00					
44+00					
43+00					
42+00					
41+00					
40+00					
40+33					

127.38

Stolen

4.40	119.42
4.84	116.98
4.80	117.02
4.78	117.04
4.34	117.48
5.10	116.72
1.25	Sand Stone Rock

126.58
4.47
131.05
127.38
3.67

Dtdr

5.85	115.97
6.30	115.52
6.20	115.62
6.56	115.26
6.27	115.55
6.30	115.52
7.25	Top of T.L.
	114.57

Check on Stout Richardson

	BS	HI	FS	
BM				109.31
	4.59	113.90		
114+00				
115+00				
116+00				
117+00				
118+00				
119+00				
+ BM	3.05	112.36		109.31
113+00				
112+00				
111+00				
110+00				
109+00				
108+00				
⊙			4.32	108.04
⊼	3.22	111.26		
107+00				
106+00				
105+00				
104+00				
103+00				
102+00				
⊙			6.18	105.08
⊼	6.31	111.39		

Marsh	SEnd ERail Stake	Ditch	
	4.78 109.12	10.74	100.16
	4.51 109.39	10.40	100.50
	5.26 108.64	10.20	100.70
	4.92 108.98	9.89	101.01
	4.16 109.74	9.58	101.32
		9.65	101.25
	2.90 109.46	9.59	102.77
	3.52 108.84	9.67	102.69
	4.19 108.17	9.85	102.51
	4.15 108.21	10.08	102.28
	4.14 108.22	10.32	102.04
	4.32 108.04	10.32	102.04
	3.74 107.52	9.52	101.74
	3.87 107.39	9.41	101.85
	4.38 106.88	9.53	101.73
	6.10 105.16	9.91	101.35
	4.29 106.97	10.12	101.14
	6.18 105.08	10.51	100.75

	BS	HI	FS	
		111.39		
102+00				
100+00				
99+00				
98+00				
97+00				
⊙			6.75	104.64
⊼	6.07	109.71		
96+00				
95+00				
94+00				
93+00				
92+00				
91+00				
⊙			4.86	104.85
⊼	3.51	108.36		
90+00				
89+00				
88+00				
87+00				
86+00				

Station	
5.62	103.77
5.76	103.63
6.29	102.10
6.75	104.64
4.53	103.18
4.42	102.29
6.25	103.46
4.80	104.91
4.32	105.39
4.86	104.85
3.39	104.97
3.38	104.98
2.92	105.44
3.69	104.67
3.14	105.22

Station	
10.39	101.00
10.94	100.45
11.18	100.21
11.31	100.08
11.48	99.91
10.13	99.58
10.16	99.56
10.30	99.41
10.50	99.21
10.56	99.15
10.78	98.93
9.56	98.81
9.65	98.71
9.82	98.54
10.05	98.31
10.34	98.02

Barnett Ditch -

	BS	HI	FS		Elev
BM					100
T	1.82	101.82			
23+00					
22+00					
21+00					
20+00					
19+00					
⊙			4.82	97.00	
T	4.17	101.17			
18+00					
17+00					
15+00					
14+00					
⊙			4.23	96.94	
T	4.06	101.00			
13+00					
12+00					
11+00					
10+00					
9+00					
8+00					
7+00					
6+00					
⊙			4.49	96.51	
T	4.1	100.61			

Top of stake on End I SE Cor Bridge		F.L. of Ditch
3.44	98.38	6.34 - 95.48
3.74	98.08	7.00 - 94.82 ✓
3.86	97.96	6.40 - 95.42 ✓
4.13	97.69	7.38 - 94.44 ✓
3.97	97.85	7.60 - 94.22 ✓
3.23	97.94	7.60 - 93.57 ✓
3.51	97.66	7.55 - 93.62 ✓
3.88	97.29	7.52 - 93.65 ✓
3.59	97.58	7.40 - 93.77 ✓
3.59	97.41	7.10 - 93.90 ✓
3.96	97.04	7.40 - 93.60 ✓
3.97	97.03	8.10 - 92.90 ✓
3.98	97.02	7.65 - 93.35 ✓
3.72	97.28	8.45 - 92.55 ✓
3.92	97.08	8.30 - 92.70 ✓
4.53	96.47	8.45 - 92.55 ✓
4.49	96.51	8.60 - 92.40 ✓

92

	BS	HI	FS		
		100.61			
BM			3.89		96.72
5+00					
BM					100
	3.00	103.00			
24+00					
25+00					
26+00					
27+00					
28+00					
⊙			3.63	99.37	
T	5.66	105.03			
29+00					
30+00					
31+00					
32+00					
33+00					
34+00					
35+00					
⊙ BM			2.45	102.58	
T	4.10	106.68			
36+00					
37+00					

93

Stake		Ditch	
Sta 4+75	S. Side Ditch	-12" Tree 30' South	
4.76	95.85	7.84	92.77
		10.00	93.0
3.82	99.18	7.55	95.73
3.10	99.80	8.00	95.00
3.71	99.29	8.25	94.85
3.37	99.63	7.90	95.10
4.83	100.20	9.60	95.43
3.71	101.32	9.40	95.63
3.11	101.92	8.86	96.18
3.05	101.98	8.75	96.28
3.71	101.32	8.16	96.87
3.34	101.64	8.25	96.78
		8.30	96.73
Nail in Stump - 34+50			
3.75	102.93	9.50	97.16
5.17	101.51	9.30	97.36

94

	BS	HI	FS		
		106.68			
38+00					
39+00					
40+00					
41+00					
42+00					
43+00					
⊙			5.11	101.57	
⊼	7.12	108.69			
44+00					
45+00					
46+00					
47+00					
48+00					
48+50			8.95	99.74	Tile
49+00					
50+00					
⊙			3.40	105.29	
⊼	4.25	109.54			
51+00					
52+00					
53+00					
54+00					
BM			4.74	104.80	
55+00					
56+00					

95

Station		Ditch	
4.19	102.49	9.45	97.23 ✓
5.65	101.03	8.95	97.73 ✓
4.42	102.26	8.67	98.01 ✓
		8.70	97.98 ✓
3.25	101.43	8.10	98.58 ✓
3.10	101.58	7.80	98.88 ✓
6.10	102.59	10.20	98.49 ✓
4.42	104.27	10.10	98.59 ✓
5.24	103.44	9.40	98.19 ✓
4.50	104.19	9.65	99.04 ✓
5.67	103.02	9.45	99.24 ✓
4.42	104.27	8.60	100.09 ✓
3.40	105.29	9.00	99.69 ✓
4.65	104.89	9.20	100.34 ✓
4.57	104.97	8.80	100.74 ✓
3.46	105.88	8.80	100.74 ✓
5.30	104.24	8.60	100.94 ✓
SE Wingwall Bridge			
4.02	105.52	9.10	100.44 ✓
5.38	104.19	8.20 —	101.34 ✓

	BS	HI	FS		
BM				96.72	
	2.30	99.02			
4+00			4.88 - 101.60		
3+00				13.2	88.40
2+00					
⊙			3.69	95.33	2
⊼	4.37	99.72			
1+00					
0+00					
24+00					
⊙			4.03	95.69	
⊼	2.41	98.10			
25+00					
26+00					
27+00					
⊙			.97	97.13	
⊼	4.50	101.63			
27+94	Mouth Mill 50		9.5	92.13	
28+00					
29+00					
30+00					

10.1
3

Stake		Ditch	
Tree SSide sto 4+75			
3.70	95.32	6.70	92.32
3.15	95.87	6.55	92.47
3.67	95.35	6.60	92.42
3.79	96.43	7.50	92.22
5.25	94.47	8.73	90.99
4.03	95.69	7.85	91.87
.98	97.12	6.75	91.35
1.08	97.02	6.70	91.40
.97	97.13	6.90	91.20
5.95	95.68	10.50	91.13
3.90	97.83	9.95	91.68
		10.40	91.23

	BS	HI	FS		
					Sta 24+00 → 95.69
24+00	5.31	101.00			
23+00					
22+00					
⊙			6.30	94.70	
⊼	6.07	100.67			
21+00					
20+00					
19+00					
⊙			4.76	95.91	
⊼	4.04	99.95			
18+00					
17+00					
16+00					
15+00					
⊙			4.01	95.94	
⊼	2.87	98.81			
BM			3.52	95.28	
14+00					
13+00		5.35	100.63		
12+00				13.37	87.27
11+00				12.35	88.28
10+00					
9+00					
8+00					

4.72
8.65
13.37

Stake		Ditch	
3.45	97.55	9.90	91.10
5.08	95.92	10.30	90.70
5.70	94.97	10.00	90.67
4.91	95.76	10.10	90.57
5.00	95.67	9.70	90.97
4.85	95.10	9.25	90.70
3.67	96.28	4.47	95.48
7.55	92.40	9.51	90.44
3.81	96.14	4.60	95.35
Nail in Post			
3.35	95.96	8.10	89.91
3.64	95.17	9.40	89.41
3.89	94.92		
4.93	93.88	9.55	89.26
4.15	94.66	10.40	88.41
4.84	93.97	9.24	89.56
3.74	95.04	4.30	94.51

Carl Logan
Stuart McCormick

N.C. Brown Ditch -

	BS	HI	FS	Elev	
BM#1					100.
	1.31	101.31			
				87.40	FL. Ditch
0+00			11.05	90.26	FL. Tile
+50					
1+00					
+50					
2+00					
+50					
3+00					
+50					8.16 96.74
4+00				8.11 96.79	
+50					
0			2.35	98.96	
✝	7.75	106.71			
5+00					7.48
+50					7.84
6+00					6.58
+50					7.76
7+00					
BM ✓				✓	Nail Post & Cedar 2+45
+50	3.50	104.90	5.31	101.40	
8+00					
+50					

Union Township - 2-15-33

Top S. Hdwl over outlet Tile S. Side Sta. 0+00

	Stake		Side Ditch of Road	
	4.55	96.76 ✓	5.30	96.01 ✓
	4.16	97.15 ✓	5.44	95.87 ✓
	3.95	97.36 ✓	5.56	95.75 ✓
	3.71	97.60 ✓	5.41	95.90 ✓
	3.61	97.70 ✓	5.20	96.11 ✓
	3.41	97.90 ✓	4.91	96.40 ✓
	3.38	97.93 ✓	4.80	96.51 ✓
6.98 97.92	3.32	97.99 ✓	4.47	96.84 ✓
6.02 98.89	2.35	98.96 ✓	4.01	97.30 ✓
5.03 99.88	6.75	99.96 ✓	8.66	98.05 ✓
4.22 100.69	5.99	100.72 ✓	7.52	99.19 ✓
3.67 101.23	5.41	101.30 ✓	6.92	99.79
3.39 101.51	5.18	101.53 ✓	6.80	99.91 ✓
3.32 101.58	5.12	101.59 ✓	6.53	100.18 ✓
	5.14	101.57 ✓	6.55	100.16 ✓
	5.61	101.10 ✓	7.12	99.59 ✓
	5.48	100.93 ✓	7.28	99.43 ✓

	BS	HI	FS			Stake		Ditch	
		106.71							
9+00						6.25	100.46 ✓	7.56	99.15 ✓
+50						6.12	100.59 ✓	7.51	99.20 ✓
10+00						5.06	101.65 ✓	6.66	100.05 ✓
⊙			5.06	101.65					
⊼	5.77	107.42							
+50						4.90	102.52 ✓	6.45	100.97 ✓
11+00						4.19	103.23 ✓	6.59	100.83 ✓
+50						4.84	102.58 ✓	6.28	101.14 ✓
12+00						5.02	102.40 ✓	6.56	100.86 ✓
+50						5.39	102.03 ✓	6.40	101.02 ✓
13+00						5.49	101.93 ✓	6.49	100.93 ✓
+50						5.52	101.90 ✓	6.70	100.72 ✓
14+00						5.35	102.07 ✓	7.15	100.27 ✓
+50						5.65	101.77 ✓	7.14	100.28 ✓
15+00						6.04	101.38 ✓	7.34	100.08 ✓
+50						6.56	100.86 ✓	7.53	99.89 ✓
⊙			6.56	100.86 ✓					
⊼	3.03	103.89 ✓							
BM 3			3.75	100.14 ✓	Base [illegible] NE Corner [illegible]				
16+00						3.79	100.10 ✓	4.81	99.08 ✓
+50						4.15	99.74 ✓	5.45	98.44 ✓
17+00						4.86	99.03 ✓	5.96	97.93 ✓
+50						5.08	98.81 ✓	6.32	97.57 ✓

	BS	HI	FS			Stake		Side Ditch at Road	
		103.89							
18+00						5.17	98.72 ✓	6.48	97.41 ✓
+50						5.22	98.67 ✓	6.17	97.72 ✓
19+00						5.18	98.71 ✓	6.28	97.61 ✓
+50						5.42	98.47 ✓	6.39	97.50 ✓
20+00						5.16	98.73 ✓	6.17	97.72 ✓
+50						5.21	98.68 ✓	6.38	97.51 ✓
21+00						5.10	98.79 ✓	6.32	97.57 ✓
⊙			5.10	98.79 ✓					
⊼	4.85	103.64 ✓							
+50						4.84	98.80 ✓	6.09	97.55 ✓
BM A			4.70	98.94 ✓	Bottom Bolt Conc Post N. Side Rd				
22+00						4.83	98.81 ✓	6.06	97.58 ✓
+50						4.97	98.67 ✓	6.03	97.61 ✓
23+00						5.07	98.57 ✓	6.27	97.37 ✓
+50						4.72	98.92 ✓	6.21	97.43 ✓
24+00						4.85	98.79 ✓	6.15	97.49 ✓
+50						4.69	98.95 ✓	6.12	97.52 ✓
25+00						4.59	99.05 ✓	5.61	98.03 ✓
+50						4.42	99.22 ✓	5.26	98.38 ✓
26+00						4.19	99.45 ✓	5.46	98.18 ✓
⊙			4.19	99.45 ✓					
⊼	5.58	105.03 ✓							
+50						5.82	99.21 ✓	7.07	97.96 ✓

	BS	HI	FS	
		105.03		
27+00				
+50				
28+00				
+50				
29+00				
+50				
30+00				
+50				
Ø			4.20	100.83 ✓
℄	3.98	104.81 ✓		
31+00				
+50				
32+00				
BM 5			4.33	100.48
SHeet	Feet	to 32+00		

99.49
90.26
4.33

5.16	99.87 ✓	6.46	98.57 ✓
4.86	100.17 ✓	6.25	98.78 ✓
4.43	100.60 ✓	6.02	99.01 ✓
4.20	100.83 ✓	5.69	99.34 ✓
4.07	100.96 ✓	5.36	99.67 ✓
4.28	100.75 ✓	5.36	99.67 ✓
3.92	101.11 ✓	5.07	99.94 ✓
4.20	100.83 ✓	5.19	99.84 ✓
4.86	99.95 ✓	5.83	98.98 ✓
5.31	99.50 ✓	6.60	98.21 ✓
5.32	99.49 ✓	6.62	98.19 ✓

	BS	HI	FS		
BM 7+25	2.52	103.92			101.40
			10.5	93.42	
BM 7+25	3.45	104.85			101.40
			10.21	94.64	
			10.04	94.81	
BM 7+50					98.94
	3.45	102.39			
			6.37	96.02	
			6.57	95.82	
			7.15	95.24	

Top 8" Tile sta 3+50

93.42
83
92.59

Top 8" Tile sta 11+00

94.64
83
93.81

" " " sta 14+00

94.81
83
93.98

Top 8" Tile sta 23+50

96.02
83
95.19

" " " sta 21+50

95.82
83
94.99

" " " sta 18.00

95.24
83
94.41

6-15-33

N.C. Brown Ditch check

	BS	HI	FS	Stake	Elev
BM#1	2.57	102.57			100
4+00				4.55	98.02 ✓
+50				3.58	98.99 ✓
5+00				2.57	100.0 ✓
⊙			2.57	100.	
⊼	5.97	105.99 ✓			
5+50				5.19	100.80 ✓
6+00				4.64	101.35 ✓
+50				4.38	101.61 ✓
7+00				4.36	101.63 ✓
BM#2			4.54	101.45 ✓	
+50				4.37	101.62 ✓
8+00				4.85	101.14 ✓
+50				5.21	100.78 ✓
9+00				5.46	100.53 ✓
+50				5.33	100.66 ✓
10+00				4.27	101.72 ✓
+50				3.39	102.60 ✓
11+00				2.68	103.31 ✓
⊙			2.68	103.31 ✓	
⊼	4.04	107.35 ✓			
11+50				4.64	102.71 ✓
12+00				4.86	102.49 ✓
+50				5.23	102.12 ✓

	BS	HI	FS	Stake	Elev
		107.36			
13+00				5.36	102.00 ✓
+50				5.38	101.97 ✓
14+00				5.22	102.13 ✓
+50				5.51	101.84 ✓
15+00				5.92	101.43 ✓
+50				6.42	100.93 ✓
BM#3			7.14	100.21 ✓	
16+00				7.22	100.13 ✓
⊙			7.22	100.13 ✓	
⊼	3.65	103.78 ✓			
+50				4.01	99.77 ✓
17+00				4.70	99.08 ✓
+50				4.93	98.85 ✓
18+00				5.03	98.75 ✓
+50				5.06	98.72 ✓
19+00				5.02	98.76 ✓
+50				5.28	98.50 ✓
20+00				5.02	98.76 ✓
+50				5.09	98.69 ✓
21+00				4.96	98.82 ✓
⊙			4.96	98.82 ✓	
⊼	4.82	103.64 ✓			
BM#4			4.65	98.99 ✓	

118

	BS	HI	FS	Stake	Elev
		103.64			
21 +50				4.87	98.77 ✓
22+00				4.92	98.72 ✓
+50				5.01	98.63 ✓
23+00				5.10	98.54 ✓
+50				4.98	98.66 ✓
24+00				4.88	98.76 ✓
+50				4.75	98.89 ✓
25+00				4.65	98.99 ✓
+50				4.34	99.30 ✓
26+00				4.23	99.41 ✓
+50				4.13	99.51 ✓
27+00	Lost				
+50				3.17	100.47 ✓
ⓐ			3.17	100.47 ✓	
Δ	6.84	106.31 ✓			
28+00				5.45	100.86 ✓
+50				5.05	101.26 ✓
29+00				4.92	101.39 ✓
+50				5.13	101.18 ✓
30+00				4.75	101.56 ✓
+50				5.08	101.23 ✓
31+00				5.93	100.38 ✓
+50				6.39	99.92 ✓
32+00				6.39	99.92 ✓
Brg ⁰s ✓			5.39	100.92	

BMA 4.51 103.50

22 +

23

FLT. la

Gra at 32+00

98.90 119

98.99

4.71 98.79

4.67 98.83

93.39

9.66 93.84 —

4.70 9880 —

98.80
4.00
94.80
93.84
.96
.12

.12
.12
98.19 1.48
94.19
93.84
.35

120

Sadler Gravel P/C - Pritchard

					100
	12.38	102.38			
0+00					
0+45					
0+57					
0+82					
1+00					
1+20					
1+37					
1+55					
1+97					
⊙			.60	101.78	
⊤					
	11.59	113.37			
0+45					
0+57					

121

P.T

BM Nail in hickory Tree 1½' - SE

0
9.65
92.73

0	5	17	21	
9.24	9.4	4.2	1.7	
93.14	92.98	98.18	100.68	✓

0	5	17	20	
9.53	9.25	2.2	.45	✓
92.85	93.13	100.18	101.93	

0	4	9	18	
9.25	8.7	5.7	4.	
93.13	93.68	96.68	101.98	✓

0	6	13	22	
8.45	8.13	6.1	.6	
93.93	94.08	96.28	101.78	✓

0	12	24	
8.4	5.8	1.4	
93.98	96.58	100.98	✓

0	4	14	18	
8.25	7.6	3.8	1.9	
94.13	94.78	98.58	101.48	✓

0	5	15	
8.0	8.1	1.7	
94.38	94.28	100.68	✓

0
8.65
93.73

31	36		
6.3	2.1		
105.07	111.27		✓

24	31	36		
9.0	5.0	2.0		
102.37	108.37	111.37		✓

		113.37			
0+82					
1+00					
1+20					
1+37					
1+55					
⊙			1.19	112 .18	
⊤	9.47	121.65			
0+45					
0+57					
0+82					
1+00					
1+20	Top Curb				
1+37					
1+55					
⊙			11.65	110.00	
⊤	3.10	113.10			

34
.4 ✓
112 .97

38 42
3.7 1.8 ✓
110.17 111.87

41
7.3 ✓
104.07

36
2.2 ✓
111.17

38
.8
112.57 ✓

39 41 46
7.8 6.9 10.7 ✓
113.85 114.75 110.95

39 41 49
8.1 8.2 11.7 ✓
113.55 113.45 109.95

41 51
4. 11.
119.65 110.65 ✓

48
12.9
108.75 ✓

40 43 45 53
8.4 7.6 7.6 11.4
113.25 114.05 114.05 110.25 ✓

40 43 45 47 56 58
5.3 3.5 2.2 1.6 9.2 10.3
116.35 118.15 119.45 120.05 112.45 111.35 ✓

		113.10			
0+45					
0+57					
0+82					
1+00					
1+20					
1+37					
1+55					
⊙			11.89	101.21	
⊤	4.19	105.40			
0+45					
0+57					
0+82					
1+00					
1+20					

5.6 / 8.6 / 104.5 — 6.2 / 9.5 / 103.6 ✓

5.6 / 6.3 / 106.8 — 6.3 / 10.4 / 102.7 ✓

6.3 / 9.6 / 105.5 ✓

6.0 / 9.3 / 103.8 ✓

5.3 / 9.2 / 103.9 — 6.1 / 11.8 / 101.3 ✓

6.4 / 9.3 / 103.8 ✓

6.8 / 7.2 / 105.8 — 7.4 / 10.5 / 102.6 ✓

8.6 / 9.6 / 95.8 ✓

7.0 / 5.4 / 100. — 8.2 / 8.6 / 96.8 ✓

7.3 / 9.0 / 96.4 ✓

6.7 / 6.1 / 99.3 — 8.0 / 9.8 / 95.6

8.2 / 9.8 / 95.6

105.40

1+37

1+55

71	83
6.8	9.2 ✓
98.6	96.2

91
9.0
96.40

Ck on Barnett Ditch

BM					100
⊼	3.94	103.94			
24+00			11.7	92.24	
29+00			10.90	93.04	
34+00			9.90	94.04	
⊙			2.91		101.03
⊼	5.56	106.59			
39+00			11.4	95.19	
42+00			10.7	95.89	
⊙			3.97		102.62
⊼	5.59	108.21			
47+00			11.5	96.71	
49+50			10.6	97.61	
⊙			4.33		103.88
⊼	5.67	109.55			
53+00			11.3	98.25	
BM			4.85		104.70
56+00			10.4	99.15	
			3.40	101.65	Stake 55+00

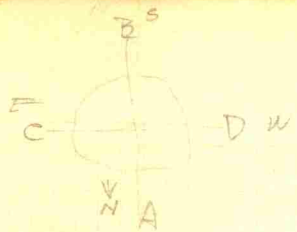
3810V Turbine

7-31-33

Sadler Gravel Pile (Pritchard)

232 Cir

					58
					100
BM					
⊼	3.20	103.20			
C					
A					
⊙			9.48	93.72	
⊼	11.11	104.83			
B					
D					
⊙			.79	104.04	
⊼	11.5	119.54			
D-					
B					
C					
A					



0 / 11 / 19
11.2 / 6.2 / 2.1
92.0 97.0 101.1

0 / 10 / 15
10.2 / 4.5 / 1.4
93.0 98.7 101.8

0 / 12 / 19 / 22 / 27 / 28 / 32
12.2 / 10 / 8.5 / 7.5 / 4.2 / 3.2 / 1.5
92.43 94.83 96.33 97.33 100.53 101.63 104.33

0 / 10 / 18 / 28
13 / 10.2 / 9.1 / 1.1
91.83 94.43 97.73 103.73

41
2.9
115.64

43
4.2
115.34

28 / 40
9.2 / 9.2
110.34 115.24

32
4.2
115.34

7-31-33

	SADDLE	GRADE	GUTTER P.		
BM	5.27		TOP PAVE		100
		105.27			
0+00					
1+13					
1+43					
1+62					
⊙			2.94	102.33	
⊼	11.72	114.11			
1+62					
1+43					
1+13					
0+00					
⊙			11.50	102.61	
⊼	3.88	106.49			
0+00					
1+13					
1+43					
1+62					

97.17 104.27

96.47 104.17

93.77 101.97

92.99 103.59

108.91 102.11

108.61 101.61

110.51 103.71

112.31 105.91 102.51

97.69

95.19

94.09

93.19

8-1-33

BM	Sadler	Gravel P.k (Sullivan Place) Nail in Tree 100' Ext			100
	6.44	106.44			
0+16					
0+22					
0+44					
0+60					
0+76					
0+87					
⊙			.78	105.66	
T	10.66	116.32			
0+87					
0+76					
0+60					
0+44					
0+32					
0+16					

0 / 4 — 12 / 1.9
97.04 104.54 ✓

0 / 9.6 — 7 / 4.3 — 12 / .9
96.84 102.14 105.54 ✓

0 / 9.6 — 19 / 4
96.84 106.04 ✓

0 / 9.1 — 12 / 1.3
97.34 105.14 ✓

01 / .83 — 12 / .6
98.14 105.84 ✓

0 / 9. — 12 / 1.0
97.44 105.44 ✓

24 / 3.6 — 31 / .3 — 43 / 8.2 — 47 / 11.3
112.72 116.02 108.12 105.02 ✓

19 / 6.4 — 27 / 1.0 — 33 / 4.0 — 43 / 11.0
109.92 105.32 112.32 105.32 ✓

18 / 7.4 — 27 / 1.0 — 43 / 12.
108.92 115.32 104.32 ✓

20 / 6.2 — 26 / 2.8 — 40 / 11.6
110.12 113.52 104.72 ✓

20 / 6.0 — 24 / 9.6 — 34 / 11.9
110.32 111.72 104.42 ✓

19 / 7.0 — 28 / 12.9
109.32 103.42 ✓

		116.32			
⊙			10.17	106.15	
⊼	1.53	107.68			
0+87					
0+76					
0+60					
0+44					
0+32					
0+16					

59
10.6
97.08

56
10.6
97.08 ✓

56
10.9 ✓
96.78

51
10.9 ✓
96.18

45
11.2
96.48 ✓

38
11.2
96.38 ✓

92.6

8-1-33

West P.L.

SADLER GRAVEL PILE GULLEY FARM

Top, Conc Post 150'-SW

					100
T	5.08	105.08			
0+20					
0+31					
0+38					
0+51					
0+72					
⊙			.84	104.24	
T	10.18	114.42			
0+73					
0+51					
0+38					
0+31					
0+20					
⊙			10.85	103.57	
T	2.78	106.35			
0+20					

0/ 14
9.9 1.3
95.18 103.78

0/ 14
9.9 1.0
95.18 104.08

0/ 14
9.8 .7
95.28 104.38

0/ 14
9.6 .2
95.48 104.88

0/ 12
9.6 1.0
95.48 104.08

23 35'
2.2 10.6
112.22 103.82

22 27 39
3.4 .7 8.7
111.02 113.72 105.52

26 38
2.5 10.3
111.92 104.12

26 38
2.9 10.
111.52 104.42

26 38
2.8 10.9
111.62 103.52

49
10.4
95.75

140

106.35

0+31

0+38

0+51

0+73

141

50
10
96.35

50
10.5
95.85

54
10.6
95.75

47
10.4
95.95

8/18/23

Hutford Gravel P.I.

BM					stump 100' E of 100
	1.75	101.75'			
0+26					
0+36					
0+45'					
0+52					
0+68					
0+74					
0+81					
0+95'					
1+06					
1+19					
⊙			1.27	100.48	
TT	11.78	112.26			
1+19					
1+06					

O/ 12
10.1 1.4 ✓
91.65 100.35'

O/ 12
10.1 1.7 ✓
90.65' 100.05'

O/ 12
10.6 1.8 ✓
89.45' 100.95'

O/ 12
10.9 2.6 ✓
90.85' 99.15'

O/ 12
10.2 2.1 ✓
91.55' 99.65'

O/ 9 14
10.1 4.6 .2 ✓
101.65' 97.15' 101.55'

O/ 12
10 1.1 ✓
91.75' 100.65'

O/ 12
10.5' 1.8 ✓
91.25' 99.95'

O/ 12
10.7 2.6 ✓
91.05' 99.15'

O/ 9
8.9 3.3 ✓
92.85' 99.45'

26 28 30 42
1.7 2.9 3.2 11.5' ✓
110.56 109.36 109.06 100.76

30 36 48
.10 2.9 11.2 ✓
112.16 109.36 101.06

		112.26			
0+95					
0+81					
0+74					
0+68					
0+52					
0+45					
0+36					
0+26					
⊙			11.77	100.49	
↑	1.75	102.24			
0+26					
0+36					
0+45					
0+52					
0+68					

30 33 45
.4 2.3 2.9 ✓
111.86 109.96 102.36

27 30 36 44
1.4 1.6 4.9 10.5 ✓
110.86 110.66 107.36 101.76

22 28 40
4.3 2.8 11.2 ✓
109.96 109.46 100.96

27 31 35 42
2.4 5.1 6.8 11.1 ✓
109.86 107.16 106.46 101.16

27 41
2.4 12.2 ✓
109.86 100.06

26 27 39
3.5 3.3 11.9 ✓
108.76 108.96 100.36

25 27 39
2.5 2.8 11.4 ✓
109.76 109.46 100.86

26 31 36 42
3.1 5.7 7.3 11.5 ✓
109.16 106.56 104.96 100.76

58
10.9
91.34 ✓

57
12.1
90.14 ✓

56
12
90.24 ✓

54
11.2
90.94 ✓

59
11.7
90.54 ✓

		102.24			
0+74					
0+81					
0+95					
1+06					
1+19					
		RR Survey Pk		Geo Honey	
BM	28	100.28		100	
0+03					
+20.5					
+37					
+40	End				

57
11.7 ✓
90.54

61
10.7
101.54 ✓

60
9.7 ✓
92.54

60
9.6
92.64 ✓

56
10.6 ✓
91.64

9'	4	13	17	E End
6.3	8.0	2.7	6.1	
93.98	97.28	99.38	94.18	
9'	3	13	17	
6.2	3.3	2.3	6.7	
94.08	96.58	96.98	93.58	
10'	3	14.5'	18.5'	
7.8'	3.5'	2.7	7.6	
93.78	96.78	96.58	92.68	

		+ 4 D.I.k			
BM	36	4.5		100	1.2 L of CH Thru NW Cor
	4.65	104.65			
0+09					
0+22					
+~~35~~ 39					
+55					
+79					
+88	End				
		Z.R. Big Elk			
BM	.28	100.28		100	Line Begun Thru
0+03					
+16					
+50					
+66.5					
+79					
+92					
+98 End					

NEnd

0' 7	23	34	
9.2 5.0	5.6	13.5	
95.45 99.65	99.05	91.15	
0' 7'	27	37	
9.3 4.5	5.4	13.1	
95.35 100.15	99.25	91.55	
0' 7'	26.5'	38.5'	
9.5' 4.7	4.9	12.8	
95.15 99.95	99.15	91.35	
0' 8'	26	37.5'	
9.7 4.7	5.0	12.7	
94.95 99.95	99.65	91.95	
0' 7.5'	24	34.5'	
9.6 5.1	6.1	12.8	
95.05 99.55	99.55	91.85	

SEnd

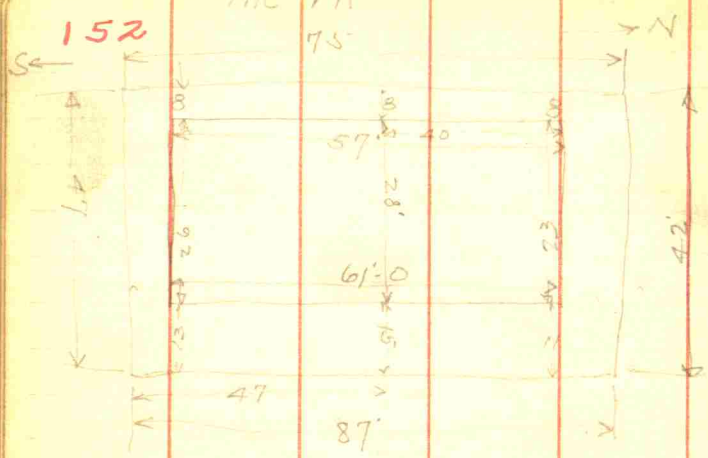
0' 3'	16	24	
9.8 3.4	4.5'	10.9	
97.58 96.65	95.98	89.38	
0' 3'	19.5'	22.5'	
17.1 3.5'	4.5	10.8	
93.18 96.15	95.98	89.48	
0' 3'	20	22	
17.0 3.9	4.5'	10.7	
93.28 96.58	95.98	89.58	
0' 4'	23	31	
9.6 4.1	5.0	11	
92.68 96.18	95.28	89.28	
0' 4	24	28	
8.8 6.0	5.4	11.4	
91.48 95.28	94.38	88.88	
0' 5'	28	35.5'	
8.7 4.5	5.7	11.9	
91.58 95.28	94.58	88.38	

#3 P.I.

BM	38	45		100	TOP Burnt Hwy
	2.76	102.36			
0+00					
+11					
+24 Short					
+24 Long					
+36					
+45					
+50					
+59					
+65					
+77					
+80 End					

0'	2	9'	12	18	22		
6.3	8.2	6.2	7.0	7.4	9.3		
96.46	97.56	96.56	95.76	95.36	93.46		
0'	3	7	10	21	25		
9.8	4.3	3.2	4.8	7.2	9.6		
96.76	98.46	99.46	99.86	95.46	93.16		
0'	4	10	14	23			
5.2	2.9	3.3	6.4	9.5			
97.56	99.86	99.46	99.26	93.26			
0'	4	7	15	24	33		
5.5	3.5	2.6	2.9	5.5	9.4		
97.26	97.26	100.16	99.86	97.26	93.36		
0'	5'	16	22				
4.8	2.1	2.8	9.6				
97.36	100.66	99.96	93.16				
0'	5'	12	13	20	23	30	33
5.1	2.5'	2.5'	3.5'	4.8	6.2	8.4	10
97.66	100.26	100.26	99.86	97.96	96.56	94.36	92.76
0'	5	12	21	23	29	32	
5.2	2.	2.5'	5.5'	6.5'	7.8	9.8	
97.56	99.76	99.26	97.26	96.26	95.96	93.96	
0'	4	12	22	26	29		
5.2	4.5'	3.2	6.4	7.6	8.8		
96.36	97.26	99.56	96.36	95.17	93.96		
0'	5'	14	17	27	23		
6.7	4.6	4.5'	6.2	7.4	8.5'		
96.06	98.16	97.26	96.56	95.26	94.26		
0'	4	11	15	19	22		
7.6	6.6	6.2	5.4	7.6	8.4		
95.16	96.16	97.36	97.36	95.16	94.36		

Pile 1A



NE Cor	B-13.08	T 4.5	H = 8.58
C. E Side	B-13.5	T. 4.7	H = 8.8
SE Cor	B= 14.0	T 5.4	H = 8.6
SW Cor	B-10.9	T 5.	H = 5.9
C. W Side	B-10.2	T 4.4	H = 5.8
NW Cor	B 10.2	T 4.7	H = 5.5

Normal #2 - Pile 794 − 100 = 694

" #1-A " Est 150

" 3 " Est 250 − 100 = 150

Normal RR " 330

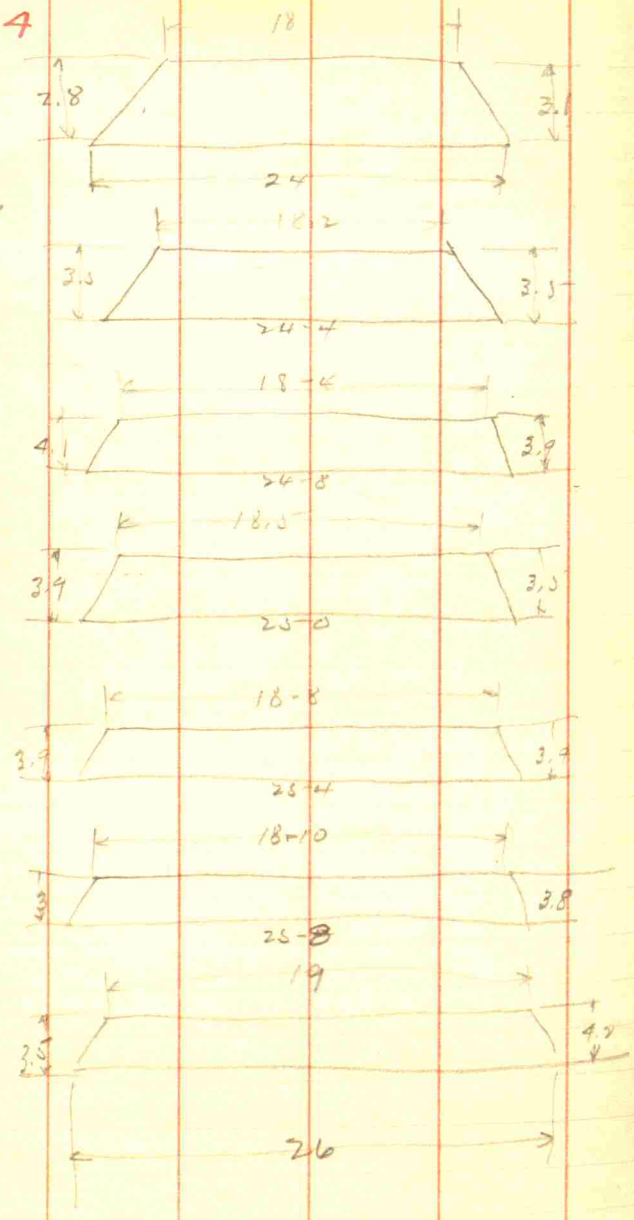
1324

45

6620

3296

5916.80



21.25
3.5
10625
6375
74375

21.75
3.7
15225
6525
70.475

78
78
858

22.25
3.4
89000
66750
75.650

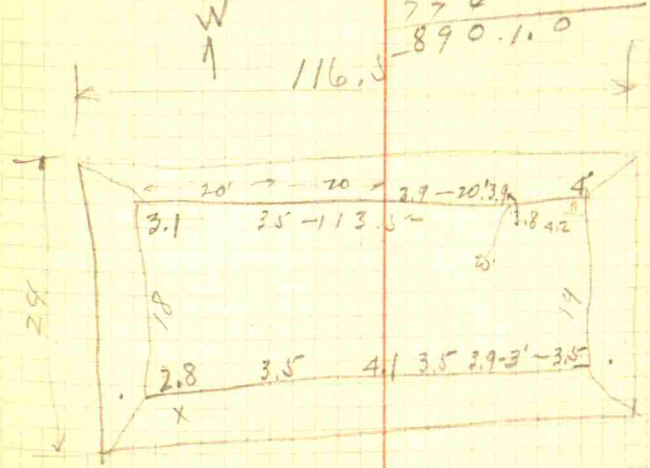
3.85
225
1925
770
770
86625

#1 A = 150

R.R D.K

21 x 3	=	63
21.25 x 3.5	=	74.35
21.5 x 4	=	86.0
21.75 x 3.7	=	70.47
22 x 3.9	=	85.8
22.25 x 3.4	=	75.6
22.5 x 3.85	=	86.6

7541.82
77.4
11.5
3870
774
774
890.10

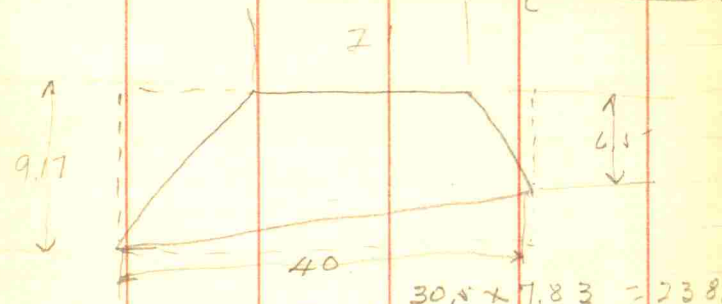


27 / 8901 (330
81
80
81

Cu/yd

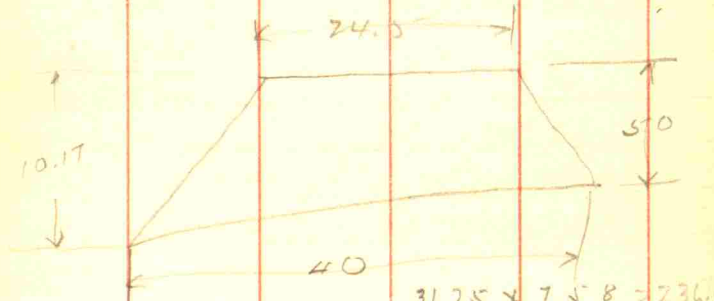
156

2 or {Middle Pier from 1st East}

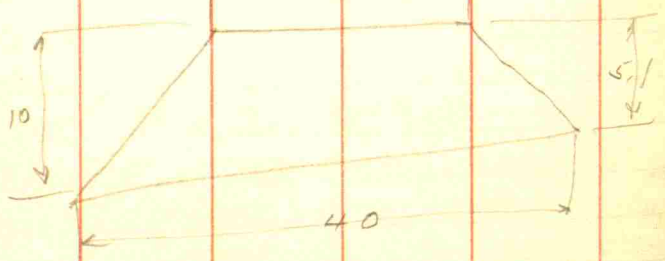


S. End

30.5 x 7.83 = 238.8



31.25 x 7.58 = 236.8



34 x 7.05 = 239.7

#3 Pier 150 Cu yds

157

SE Bot
13.67
Top 4.5
9.17

NW Cor Bot
9.6
4.5
5.1

Mid E Side Bot
14.67
Top 4.50
10.17

Mid W Side Bot
9.5
4.5
5.0

NE Cor Bot
14.5
Top 4.5

SW Cor Bot
11.0
4.5
6.5

31.25
7.58
25000
15625
21875
236.87500

7.83
30.5
3915
2349
238.815

238.8
239.7

7.05
34
2820
2115
239.70

3 | 715.375
238.45

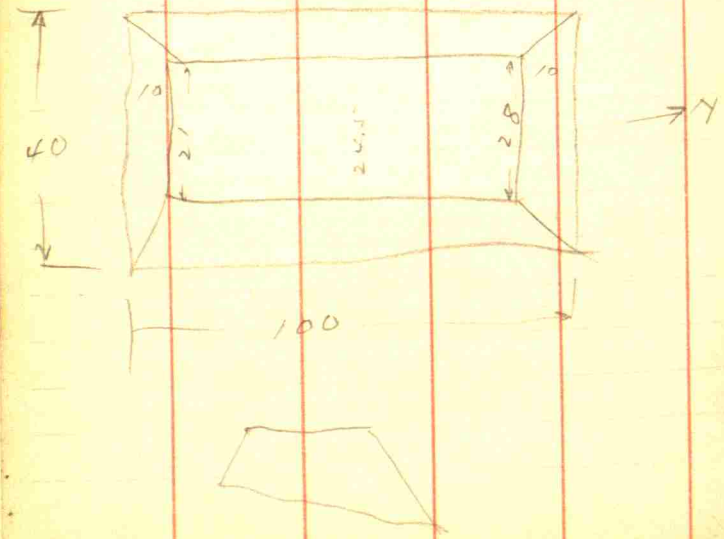
27 | 2144.20 (794.1

PC 6 + 27.2
62.76
PI → 6 + 89.96
1 + 25
PT 8 + 14.96

23
5
115
60
900

PC: 6+27.2
1°-09 6+50
3°39 7+00
6°09 7+50

6 + 27.2
1 25
7 + 52.2



I = 4°-29' D = 4°0"

T = 224.3 / 4 = 56 Ten

L = 4.4833 / 4 = 112.08

PC = 1+44
PT = 2+56

.56
2
1.12
60
7.20
10-7

I = 12°-30 D = 10°

Tan 627.6 / 10 = 62.76

L = 12.5 / 10 = 125'

160

530
20
2)510
255
1300
825 00
275

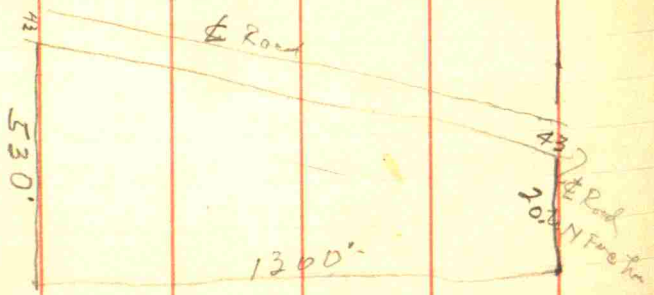
43560) 357 500 (8.206
348 480
9 0200
87 120
2880 00
261 360

16.5
79
148.5
115.5
1203.5

63
573
2)636
318
1300
954 00
318

43560) 413400 (9.467
392040
213600
184240
291600
261360
302400
304920

Mrs J. H. Thomas
Dayton



9.467 dem
8.206
1.261

Natural Trigonometrical Ratios.

Angle.	Sine.	Tan.	Sec.	Cosec.	Cotg.	Cosin.	
0 ° ′	0	0	1.	∝	∝	1.	90
10	.0029	.0029		343.8	343.8	I.	50
20	.0058	.0058		171.9	171.9	.99998	40
30	.0087	.0087		114.6	114.6	.99996	30
40	.0116	.0116	1.0001	85.94	85.94	.99993	20
50	.0145	.0145	1.0001	68.76	68.75	.99989	10
1	.0175	.0175	1.0002	57.30	57.29	.99985	89
10	.0204	.0204	1.0002	49.11	49.10	.99979	50
20	.0233	.0233	1.0003	42.98	42.96	.99973	40
30	.0262	.0262	1.0003	38.20	38.19	.99966	30
40	.0291	.0291	1.0004	34.38	34.37	.99958	20
50	.0320	.0320	1.0005	31.26	31.24	.99949	10
2	.0349	.0349	1.0006	28.65	28.64	.99939	88
10	.0378	.0378	1.0007	26.45	26.43	.99929	50
20	.0407	.0407	1.0008	24.56	24.54	.99917	40
30	.0436	.0437	1.0010	22.93	22.90	.99905	30
40	.0465	.0466	1.0011	21.49	21.47	.99892	20
50	.0494	.0495	1.0012	20.23	20.21	.99878	10
3	.0523	.0524	1.0014	19.11	19.08	.99863	87
10	.0552	.0553	1.0015	18.10	18.07	.99847	50
20	.0581	.0582	1.0017	17.20	17.17	.99831	40
30	.0610	.0612	1.0019	16.38	16.35	.99813	30
40	.0640	.0641	1.0020	15.64	15.60	.99795	20
50	.0669	.0670	1.0022	14.96	14.92	.99776	10
4	.0698	.0699	1.0024	14.34	14.30	.99756	86
10	.0727	.0729	1.0027	13.76	13.73	.99736	50
20	.0756	.0758	1.0029	13.23	13.20	.99714	40
30	.0785	.0787	1.0031	12.75	12.71	.99692	30
40	.0814	.0816	1.0033	12.29	12.25	.99668	20
50	.0843	.0846	1.0036	11.87	11.83	.99644	10
5	.0872	.0875	1.0038	11.47	11.43	.99619	85
10	.0901	.0904	1.0041	11.10	11.06	.99594	50
20	.0929	.0934	1.0043	10.76	10.71	.99567	40
30	.0958	.0963	1.0046	10.43	10.39	.99540	30
40	.0987	.0992	1.0049	10.13	10.08	.99511	20
50	.1016	.1022	1.0052	9.839	9.788	.99482	10
6	.1045	.1051	1.0055	9.567	9.514	.99452	84
10	.1074	.1080	1.0058	9.309	9.255	.99421	50
20	.1103	.1110	1.0061	9.065	9.010	.99390	40
30	.1132	.1139	1.0065	8.834	8.777	.99357	30
40	.1161	.1169	1.0068	8.614	8.556	.99324	20
50	.1190	.1198	1.0072	8.405	8.345	.99290	10
7	.1219	.1228	1.0075	8.206	8.144	.99255	83
10	.1248	.1257	1.0079	8.016	7.953	.99219	50
20	.1276	.1287	1.0082	7.834	7.770	.99182	40
30	.1305	.1317	1.0086	7.661	7.596	.99144	30
40	.1334	.1346	1.0090	7.496	7.429	.99106	20
50	.1363	.1376	1.0094	7.337	7.269	.99067	10
							82
	Cosin.	Cotg.	Cosec.	Sec.	Tan.	Sine.	Angle.

Angle.	Sine.	Tan.	Sec.	Cosec.	Cotg.	Cosin.	
8 ° ′	.1392	.1405	1.0098	7.185	7.115	.99027	82
10	.1421	.1435	1.0102	7.040	6.968	.98986	50
20	.1449	.1465	1.0107	6.900	6.827	.98944	40
30	.1478	.1495	1.0111	6.766	6.691	.98902	30
40	.1507	.1524	1.0115	6.636	6.561	.98858	20
50	.1536	.1554	1.0120	6.512	6.435	.98814	10
9	.1564	.1584	1.0125	6.394	6.314	.98769	81
10	.1593	.1614	1.0129	6.277	6.197	.98723	50
20	.1622	.1644	1.0134	6.166	6.084	.98676	40
30	.1650	.1673	1.0139	6.059	5.976	.98629	30
40	.1679	.1703	1.0144	5.955	5.871	.98580	20
50	.1708	.1733	1.0149	5.855	5.769	.98531	10
10	.1736	.1763	1.0154	5.759	5.671	.98481	80
10	.1765	.1793	1.0160	5.665	5.576	.98430	50
20	.1794	.1823	1.0165	5.575	5.485	.98378	40
30	.1822	.1853	1.0170	5.488	5.396	.98325	30
40	.1851	.1883	1.0176	5.403	5.309	.98272	20
50	.1880	.1914	1.0181	5.320	5.226	.98218	10
11	.1908	.1944	1.0187	5.241	5.145	.98163	79
10	.1937	.1974	1.0193	5.164	5.066	.98107	50
20	.1965	.2004	1.0199	5.089	4.989	.98050	40
30	.1994	.2035	1.0205	5.016	4.915	.97992	30
40	.2022	.2065	1.0211	4.945	4.843	.97934	20
50	.2051	.2095	1.0217	4.877	4.773	.97875	10
12	.2079	.2126	1.0223	4.810	4.705	.97815	78
10	.2108	.2156	1.0230	4.745	4.638	.97754	50
20	.2136	.2186	1.0236	4.682	4.574	.97692	40
30	.2164	.2217	1.0243	4.620	4.511	.97630	30
40	.2193	.2247	1.0249	4.560	4.449	.97566	20
50	.2221	.2278	1.0256	4.502	4.390	.97502	10
13	.2250	.2309	1.0263	4.445	4.331	.97437	77
10	.2278	.2339	1.0270	4.390	4.275	.97371	50
20	.2306	.2370	1.0277	4.336	4.219	.97304	40
30	.2334	.2401	1.0284	4.284	4.165	.97237	30
40	.2363	.2432	1.0291	4.232	4.113	.97169	20
50	.2391	.2462	1.0299	4.182	4.061	.97100	10
14	.2419	.2493	1.0306	4.133	4.011	.97030	76
10	.2447	.2524	1.0314	4.086	3.962	.96959	50
20	.2476	.2555	1.0321	4.039	3.914	.96887	40
30	.2504	.2586	1.0329	3.994	3.867	.96815	30
40	.2532	.2617	1.0337	3.949	3.821	.96742	20
50	.2560	.2648	1.0345	3.906	3.776	.96667	10
15	.2588	.2679	1.0353	3.864	3.732	.96593	75
10	.2616	.2711	1.0361	3.822	3.689	.96517	50
20	.2644	.2742	1.0369	3.782	3.647	.96440	40
30	.2672	.2773	1.0377	3.742	3.606	.96363	30
40	.2700	.2805	1.0386	3.703	3.566	.96285	20
50	.2728	.2836	1.0394	3.665	3.526	.96206	10
							74
	Cosin.	Cotg.	Cosec.	Sec.	Tan.	Sine.	Angle.

#1 - 00 Cement step at Arbuckles
Front Gate - 119.99

#2 - 00 Corner stone at sta - 32+30
117.29

#3 - 00 Corner stone at sta - 71+85.5
116.57

#4 - 00 Corner stone at sta 79+82 -
114.49

#5 - 00 Corner stone at sta. 92+65 - 110.53

#6 - 00 N. Rod of East Rail of Culvert 150' South
of sta. 98+68 - 110.30

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 14 FEET WIDE. SIDE SLOPES 1½ TO 1.

FOR SINGLE TRACK EMBANKMENT.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	7.0	7.2	7.3	7.5	7.6	7.8	7.9	8.1	8.2	8.4	0
1	8.5	8.7	8.8	9.0	9.1	9.3	9.4	9.6	9.7	9.9	1
2	10.0	10.2	10.3	10.5	10.6	10.8	10.9	11.1	11.2	11.4	2
3	11.5	11.7	11.8	12.0	12.1	12.3	12.4	12.6	12.7	12.9	3
4	13.0	13.2	13.3	13.5	13.6	13.8	13.9	14.1	14.2	14.4	4
5	14.5	14.7	14.8	15.0	15.1	15.3	15.4	15.6	15.7	15.9	5
6	16.0	16.2	16.3	16.5	16.6	16.8	16.9	17.1	17.2	17.4	6
7	17.5	17.7	17.8	18.0	18.1	18.3	18.4	18.6	18.7	18.9	7
8	19.0	19.2	19.3	19.5	19.6	19.8	19.9	20.1	20.2	20.4	8
9	20.5	20.7	20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.9	9
10	22.0	22.2	22.3	22.5	22.6	22.8	22.9	23.1	23.2	23.4	10
11	23.5	23.7	23.8	24.0	24.1	24.3	24.4	24.6	24.7	24.9	11
12	25.0	25.2	25.3	25.5	25.6	25.8	25.9	26.1	26.2	26.4	12
13	26.5	26.7	26.8	27.0	27.1	27.3	27.4	27.6	27.7	27.9	13
14	28.0	28.2	28.3	28.5	28.6	28.8	28.9	29.1	29.2	29.4	14
15	29.5	29.7	29.8	30.0	30.1	30.3	30.4	30.6	30.7	30.9	15
16	31.0	31.2	31.3	31.5	31.6	31.8	31.9	32.1	32.2	32.4	16
17	32.5	32.7	32.8	33.0	33.1	33.3	33.4	33.6	33.7	33.9	17
18	34.0	34.2	34.3	34.5	34.6	34.8	34.9	35.1	35.2	35.4	18
19	35.5	35.7	35.8	36.0	36.1	36.3	36.4	36.6	36.7	36.9	19
20	37.0	37.2	37.3	37.5	37.6	37.8	37.9	38.1	38.2	38.4	20
21	38.5	38.7	38.8	39.0	39.1	39.3	39.4	39.6	39.7	39.9	21
22	40.0	40.2	40.3	40.5	40.6	40.8	40.9	41.1	41.2	41.4	22
23	41.5	41.7	41.8	42.0	42.1	42.3	42.4	42.6	42.7	42.9	23
24	43.0	43.2	43.3	43.5	43.6	43.8	43.9	44.1	44.2	44.4	24
25	44.5	44.7	44.8	45.0	45.1	45.3	45.4	45.6	45.7	45.9	25
26	46.0	46.2	46.3	46.5	46.6	46.8	46.9	47.1	47.2	47.4	26
27	47.5	47.7	47.8	48.0	48.1	48.3	48.4	48.6	48.7	48.9	27
28	49.0	49.2	49.3	49.5	49.6	49.8	49.9	50.1	50.2	50.4	28
29	50.5	50.7	50.8	51.0	51.1	51.3	51.4	51.6	51.7	51.9	29
30	52.0	52.2	52.3	52.5	52.6	52.8	52.9	53.1	53.2	53.4	30
31	53.5	53.7	53.8	54.0	54.1	54.3	54.4	54.6	54.7	54.9	31
32	55.0	55.2	55.3	55.5	55.6	55.8	55.9	56.1	56.2	56.4	32
33	56.5	56.7	56.8	57.0	57.1	57.3	57.4	57.6	57.7	57.9	33
34	58.0	58.2	58.3	58.5	58.6	58.8	58.9	59.1	59.2	59.4	34
35	59.5	59.7	59.8	60.0	60.1	60.3	60.4	60.6	60.7	60.9	35
36	61.0	61.2	61.3	61.5	61.6	61.8	61.9	62.1	62.2	62.4	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.