

Richardson Rd. - Levels  
Frank Routh Rd.

142

668 A

Sta.	3' out N.	Stk. N.	Ditch N.	Berm N.	£
0+00	93.69	93.94	Flow line	Top of curb	94.30
0+22	tile Culvert	92.73	92.05	93.67	94.42
1+0	94.70	94.86	93.46	94.60	95.04
2+0	94.45	94.61	94.17	95.66	96.24
3+0	95.23	95.35	95.08	96.33	96.62
4+0	96.66	96.61	96.17	97.12	97.41
5+0	98.19	98.05	97.20	97.96	98.33
6+0	99.90	99.64	98.61	98.98	99.43
7+0	100.73	100.60	99.95	100.53	100.95
8+0	101.43	101.63	101.10	101.84	102.19
9+0	103.13	103.08	102.52	103.40	103.62
10+0	104.88	104.95	104.32	105.12	105.39
11+0	107.55	107.54	106.48	107.21	107.45
12+0	108.09	108.10	106.92	107.86	108.02
13+0	107.23	107.19	106.54	108.07	108.11
14+0	108.59	108.70	107.62	108.17	108.29
15+0	109.17	109.20	108.78	109.46	109.94
16+0	109.57	109.62	109.54	110.44	110.96
17+0	110.24	110.58	109.79	111.04	111.43
18+0	109.94	109.95	109.30	110.68	111.06
19+0	108.40	108.73	107.95	109.32	109.56
20+0	108.03	108.25	108.29	109.31	109.54
21+0	108.59	108.89	108.69	109.43	109.55

Berms	Ditch	Stks.	3' out S
29	71.60	94.45	94.41
29	93.76	92.63	93.21
25	94.33	93.73	94.86
24	95.69	94.50	94.97
24	96.32	95.12	95.62
24	96.99	96.24	97.21
25	97.74	97.20	98.54
25	99.05	98.47	99.69
23	100.65	99.75	100.65
24	101.62	100.90	102.02
24	103.31	102.74	103.93
23	105.12	104.40	105.48
24	107.31	106.85	108.05
26	107.80	106.85	107.37
24	107.82	106.70	106.98
23	108.05	107.62	108.58
23	109.70	109.06	109.54
23	110.47	109.85	110.39
23	111.02	110.69	111.15
23	110.78	109.90	111.11
23	109.18	107.99	108.20
23	109.27	107.59	107.85
23	109.60	107.77	108.38

B.M.  
 on S/E corner  
 of sidewalk of  
 Wesley Richardson  
 E.I. 100.00

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© 109.54

	3'aut N	Stkn	Nett with	Berm h	Q	Berm S	Nett	Stks.	3'aut S	
22+0	110.40	110.45	109.47 <sup>6.5</sup>	110.23 <sup>11.5</sup>	110.41	110.22 <sup>22</sup>	108.79 <sup>28</sup>	109.61	109.32	⊙ 117.71
23+0	111.44	111.39	110.53 <sup>7.5</sup>	111.54 <sup>11.5</sup>	111.72	111.50 <sup>23</sup>	110.00 <sup>28</sup>	111.33	111.20	
24+0	112.75	113.11	111.23 <sup>6</sup>	113.00 <sup>12</sup>	113.25	113.02 <sup>23.5</sup>	111.90 <sup>29</sup>	112.92	112.83	
25+0	114.67	114.75	112.69 <sup>6.5</sup>	114.42 <sup>11.5</sup>	114.83	114.40 <sup>24</sup>	113.85 <sup>29</sup>	114.92	114.82	
26+0	116.60	116.80	114.56 <sup>7</sup>	116.31 <sup>12</sup>	116.45	116.28 <sup>23.5</sup>	115.16 <sup>29</sup>	116.60	116.42	
27+0	117.83	118.03	116.52 <sup>7</sup>	118.04 <sup>12</sup>	118.51	118.04 <sup>25</sup>	117.52 <sup>24</sup>	118.31	118.33	
28+0	117.33	117.32	116.50 <sup>6</sup>	118.21 <sup>12</sup>	118.50	118.10 <sup>23.5</sup>	116.53 <sup>30</sup>	116.91	116.93	
28+80	<sup>Ux</sup> Zila Culvert	117.19	116.32 <sup>7 low line</sup>	117.44 <sup>207 of culvert</sup>	118.53	116.81 <sup>7 low line</sup>	115.85 <sup>7 low line</sup>	115.80		
29+0	117.36	117.37	116.70 <sup>5.5</sup>	118.38 <sup>12</sup>	118.58	118.50 <sup>24.5</sup>	116.95 <sup>30</sup>	117.12	116.88	
30+0	118.41	118.40	118.55 <sup>5.5</sup>	118.95 <sup>12</sup>	119.38	119.03 <sup>23.5</sup>	117.77 <sup>29</sup>	118.15	118.19	
31+0	121.76	120.79	118.80 <sup>5.5</sup>	120.39 <sup>12</sup>	120.54	120.30 <sup>24</sup>	119.50 <sup>28</sup>	121.16	121.53	
32+0	122.48	122.34	120.51 <sup>6</sup>	122.10 <sup>12.5</sup>	122.28	121.89 <sup>24</sup>	120.75 <sup>25</sup>	121.70	121.30	
33+0	122.62	122.78	121.35 <sup>6</sup>	122.65 <sup>11.5</sup>	122.73	122.60 <sup>24.5</sup>	121.66 <sup>30.5</sup>	121.76	121.80	⊙ 123.60
34+0	123.26	123.44	122.10 <sup>5.5</sup>	123.58 <sup>13</sup>	123.75	123.40 <sup>23.5</sup>	122.35 <sup>29.5</sup>	123.33	123.48	
35+0	125.55	125.86	124.08 <sup>6</sup>	125.55 <sup>12.5</sup>	125.75	125.41 <sup>23.5</sup>	124.75 <sup>28.5</sup>	125.75	125.90	
36+0	126.80	126.82	125.61 <sup>5.5</sup>	126.70 <sup>12</sup>	126.97	126.75 <sup>24</sup>	125.71 <sup>28</sup>	126.15	126.15	
37+0	125.32	125.62	124.74 <sup>5</sup>	126.46 <sup>12</sup>	126.62	126.42 <sup>24</sup>	124.94 <sup>29.5</sup>	124.90	124.85	
37+07	<sup>Vit tile</sup>	125.35	124.63 <sup>4.5</sup>	125.60 <sup>9</sup>	126.72	125.05 <sup>20.7</sup>	124.16 <sup>7 low line</sup>	125.14		
38+0	126.35	126.45	125.84 <sup>5.5</sup>	126.52 <sup>10.5</sup>	127.11	126.93 <sup>22</sup>	125.75 <sup>28.5</sup>	126.46	126.45	
39+0	130.82	130.67	129.37 <sup>6</sup>	130.12 <sup>11.5</sup>	130.33	130.08 <sup>24</sup>	129.66 <sup>27.5</sup>	131.55	131.68	
40+0	130.65	130.66	129.97 <sup>6</sup>	131.01 <sup>10.5</sup>	131.21	131.06 <sup>22</sup>	130.26 <sup>27.5</sup>	130.55	130.53	
41+0	129.98	130.00	129.37 <sup>6</sup>	130.20 <sup>10.5</sup>	130.34	129.28 <sup>22.5</sup>	129.81 <sup>25</sup>	129.90	129.85	
42+0	129.40	129.60	128.50 <sup>5</sup>	128.99 <sup>11</sup>	129.07	128.90 <sup>22</sup>	128.37 <sup>29</sup>	129.25	129.29	
43+0	127.85	127.73	126.73 <sup>10.5</sup>	127.60 <sup>10.5</sup>	127.79	127.61 <sup>24</sup>	126.55 <sup>30</sup>	127.60	127.82	⊙ 128.02

Sta 6	3' out N.	Stk N.	Ditch N	Berm N	Q	Berm S	Ditch S	Stk S	3' out	
44+0	125.83	125.92	125.35 <sup>5</sup>	126.55 <sup>11</sup>	126.68	126.51 <sup>21.5</sup>	125.56 <sup>27.5</sup>	126.00	126.04	⊙
45+0	124.39	124.60	124.18 <sup>7.1 line</sup>	125.81 <sup>7.4</sup>	125.89	125.63 <sup>22</sup>	124.53 <sup>23</sup>	125.64	125.79	127.12
45+38.5	123.46	123.46	123.41 <sup>9</sup>	124.27 <sup>12.5</sup>	125.86	123.80 <sup>23.5</sup>	122.80 <sup>30</sup>	123.14		
46+0	125.15	125.05	124.46 <sup>6</sup>	125.32 <sup>13</sup>	125.42	125.35 <sup>24</sup>	124.29 <sup>27</sup>	124.14	123.86	
47+0	127.84	127.95	126.83 <sup>5</sup>	126.91 <sup>12</sup>	127.39	127.02 <sup>23</sup>	126.67 <sup>28</sup>	127.80	127.85	B.M.
48+0	126.94	126.92	126.66 <sup>5.1 line</sup>	127.01 <sup>7.4</sup>	127.14	126.99 <sup>23</sup>	126.04 <sup>28</sup>	126.33	126.45	on big rock on North side of road
48+66		126.46	125.13 <sup>5.1 line</sup>	126.10 <sup>7.4</sup>	127.05	125.50 <sup>23</sup>	124.87 <sup>28</sup>	125.28		
49+0	126.89	126.83	125.85 <sup>6</sup>	126.87 <sup>11.5</sup>	127.01	126.87 <sup>23.5</sup>	125.91 <sup>30</sup>	125.77	125.84	
50+0	126.75	126.91	126.16 <sup>6.5</sup>	126.97 <sup>12</sup>	127.12	126.96 <sup>23</sup>	126.12 <sup>29</sup>	126.44	126.33	Sta 48+32
51+0	125.91	126.03	125.11 <sup>7.2 line</sup>	125.52 <sup>7.4</sup>	125.80	125.49 <sup>23</sup>	124.66 <sup>28</sup>	125.91	126.06	
51+84	122.56	122.56	122.30 <sup>5.5</sup>	124.40 <sup>7.4</sup>	125.00	123.67 <sup>21</sup>	121.51 <sup>29</sup>	120.38	120.36	EI. 127.32
52+0	123.49	123.86	123.39 <sup>6.5</sup>	124.95 <sup>10.5</sup>	125.12	124.84 <sup>21</sup>	123.35 <sup>29</sup>	123.58	122.64	
53+0	127.08	127.25	126.09 <sup>7.0</sup>	126.89 <sup>12</sup>	127.20	126.95 <sup>26</sup>	125.50 <sup>30</sup>	127.30	127.81	
54+0	129.12	129.51	127.94 <sup>7.0</sup>	129.24 <sup>12</sup>	129.57	129.33 <sup>22</sup>	128.97 <sup>27</sup>	129.20	129.73	
55+0	131.18	131.19	129.65 <sup>7.5</sup>	131.00 <sup>13</sup>	131.32	130.94 <sup>24</sup>	130.09 <sup>30</sup>	130.35	130.05	B.M. on South
56+0	130.75	131.24	129.85 <sup>7.5</sup>	131.31 <sup>14</sup>	131.37	131.21 <sup>25</sup>	130.27 <sup>30</sup>	130.47	130.36	of headwall
57+0	132.05	132.13	130.70 <sup>7.0</sup>	131.72 <sup>14</sup>	131.88	131.45 <sup>25</sup>	131.39 <sup>30</sup>	131.44	131.52	Sta. 51+84
58+0	136.77	130.92	130.27 <sup>7.5</sup>	131.49 <sup>14</sup>	131.57	131.60 <sup>25</sup>	130.76 <sup>30</sup>	130.72	130.51	EI. 123.65
59+0	131.06	131.24	130.60 <sup>8.0</sup>	131.35 <sup>15</sup>	131.90	131.66 <sup>26</sup>	130.73 <sup>30</sup>	131.13	130.95	
60+0	132.07	132.18	131.35 <sup>8.0</sup>	132.94 <sup>15</sup>	132.65	132.35 <sup>26</sup>	131.64 <sup>30</sup>	132.68	132.05	
61+0	132.27	132.37	131.54 <sup>7.0</sup>	132.54 <sup>15.5</sup>	132.85	132.61 <sup>26</sup>	132.62 <sup>32</sup>	132.78	132.89	⊙ 132.75
62+0	131.52	131.59	130.57 <sup>7</sup>	131.58 <sup>16</sup>	131.93	131.51 <sup>27</sup>	130.81 <sup>30</sup>	131.25	131.10	B.M. on conc. 5' x 40' S.E.C. 3'
63+0	130.42	130.41	129.78 <sup>6.5</sup>	130.71 <sup>13</sup>	130.97	130.77 <sup>24</sup>	129.64 <sup>24.5</sup>	130.21	130.19	FT Richardson Sta. 64+31 E.I. 128.1
64+0	130.53	130.39	129.75 <sup>7</sup>	129.97 <sup>13.5</sup>	130.17	130.04 <sup>24</sup>	129.19 <sup>27</sup>	129.75	129.58	
65+0	127.84	127.87	126.99 <sup>6.5</sup>	127.32 <sup>13</sup>	127.50	127.65 <sup>24</sup>	126.83 <sup>25</sup>	128.17	128.10	

Sta	3' out	Stk N	Ditch N	Berm N	ℓ	Berm S	Ditch S	Stk S	3' out S	
66+0	125.26	125.35	124.44 <sup>6.0</sup>	125.02 <sup>12</sup>	125.40	125.12 <sup>23</sup>	124.20 <sup>27.5</sup>	125.93	125.54	
67+0	123.28	123.09	120.81 <sup>5.5</sup>	121.41 <sup>12.5</sup>	121.66	121.43 <sup>24</sup>	120.40 <sup>27</sup>	122.09	122.00	125.08
68+0	119.66	119.69	118.39 <sup>6.5</sup>	119.12 <sup>13</sup>	119.23	119.00 <sup>24</sup>	117.83 <sup>27.5</sup>	119.17	119.95	
69+0	118.21	118.01	114.86 <sup>5.5</sup>	116.12 <sup>12.5</sup>	116.42	115.98 <sup>24</sup>	115.76 <sup>27</sup>	116.66	116.75	
70+0	113.45	113.39	111.72 <sup>5.5</sup>	111.44 <sup>13</sup>	111.73	111.48 <sup>23</sup>	111.08 <sup>28</sup>	113.15	113.12	114.60
71+0	108.59	108.25	108.04 <sup>5.0</sup>	108.59 <sup>12</sup>	108.61	108.69 <sup>22</sup>	107.55 <sup>24</sup>	108.40	108.11	
71+78		104.02	FL 702.20		107.70	Pat 5107.25	FL 102.89-103.29			B.M.
72+0	105.40	105.38	105.24 <sup>7.5</sup>	107.80 <sup>15</sup>	107.80	107.70 <sup>25</sup>	106.44 <sup>30</sup>	105.85	105.55	W. END
73+0	111.03	110.56	108.79 <sup>5.5</sup>	108.60 <sup>13</sup>	108.44	108.28 <sup>26</sup>	108.22 <sup>30</sup>	108.98	108.72	H. Rail
74+0	113.92	113.93	113.98-112.22 <sup>12</sup>	112.56 <sup>13</sup>	112.65	112.57 <sup>24.5</sup>	112.01-113.26 <sup>29.5</sup>	113.47	113.52	Conc. Culvert
75+0	114.80	115.05	113.30 <sup>6.5</sup>	114.71 <sup>13</sup>	114.91	114.71 <sup>23.5</sup>	113.66 <sup>28</sup>	114.14	114.00	Sta 71+78
76+0	114.50	114.55	113.07 <sup>6.5</sup>	113.70 <sup>12.5</sup>	114.27	113.73 <sup>23.5</sup>	112.96 <sup>29.5</sup>	114.12	114.59	EL. 108.50
77+0	113.12	112.90	110.21 <sup>7.0</sup>	111.32 <sup>12.5</sup>	111.55	110.26 <sup>24</sup>	110.21 <sup>27</sup>	111.83-112.23-112.30 <sup>30.5</sup>		112.00
78+0	109.40	109.22	108.98 <sup>6.0</sup>	108.22 <sup>13</sup>	108.52	108.70 <sup>23</sup>	108.21 <sup>27.5</sup>	108.17	108.27	
79+0	106.24	106.04	103.88 <sup>6.0</sup>	105.15 <sup>11</sup>	105.43	104.85 <sup>23</sup>	104.25 <sup>28.5</sup>	105.74	105.92	
80+0	102.81	103.02	101.14 <sup>6.5</sup>	102.33 <sup>11</sup>	102.61	102.38 <sup>22</sup>	101.16 <sup>28</sup>	102.70-102.85-102.81 <sup>29</sup>		103.93
81+0	99.73	99.94	96.77 <sup>7.5</sup>	97.53 <sup>11.5</sup>	97.70	97.60 <sup>23.5</sup>	97.04 <sup>27.5</sup>	99.05	99.09	B.M.
82+0	91.36	91.89	92.94 <sup>6.5</sup>	94.32 <sup>11.5</sup>	94.50	94.47 <sup>23.5</sup>	93.66 <sup>27.5</sup>	93.08	93.00	H. Side
82+59		88.25	FL 78.52		94.06		93.66 <sup>29.5</sup>	22.26 <sup>FL 5</sup>	88.39	W. END
83+0	91.81	91.24	92.17 <sup>10</sup>	93.29 <sup>15.5</sup>	93.76	93.35 <sup>25.5</sup>	91.74 <sup>29.5</sup>	91.48	91.33	Bridge on Conc.
84+0	98.17	97.29	95.14 <sup>7</sup>	96.17 <sup>13</sup>	96.27	95.96 <sup>24</sup>	94.79 <sup>21.5</sup>	97.41-98.20 <sup>31</sup>	98.35	EL 93.64
85+0	100.99	101.01	99.58 <sup>2</sup>	100.19 <sup>14.5</sup>	100.43	100.14 <sup>20</sup>	99.20 <sup>25.5</sup>	99.87	100.04	97.15
86+0	103.10	102.95	101.25 <sup>6.5</sup>	101.65 <sup>11.5</sup>	101.77	101.56 <sup>23.5</sup>	100.90 <sup>27.5</sup>	101.42	101.10	
87+0	102.55	102.50	101.88 <sup>7</sup>	102.65 <sup>11</sup>	102.72	102.41 <sup>23.5</sup>	101.80 <sup>28</sup>	101.43	101.00	
88+0	105.34	105.63	104.20 <sup>7.5</sup>	104.07 <sup>11</sup>	104.61	104.32 <sup>24.5</sup>	104.56 <sup>28</sup>	105.65	105.63	

Sta	3' with N	Stk N	Ditch N	Berry N	℄
89+0	100.28	100.00	97.74	98.69	99.04
90+0	94.98	95.25	94.32	95.60	95.71
90+31		91.92	TOP 92.80		95.53
Tile on S. side of road inside					
91+0	96.64	96.80	95.00	96.12	96.33
92+0	100.86	100.76	97.96	99.16	99.35
93+0	99.08	99.33	98.82	99.75	99.70
94+0	99.20	99.26	99.07	100.00	100.10
93+35		96.33	5 <sup>Top of tile</sup> 97.81	99.70	99.97
95+0	101.45	101.34	100.31	100.78	100.94
96+0	103.93	103.96	102.54	103.29	103.60
97+0	102.49	102.79	101.31	102.12	102.33
98+0	100.30	101.16	99.87	100.32	100.86
99+0	99.33	99.00	97.46	98.54	99.25
100+0	98.55	98.16	97.37	97.81	98.11
101+0	97.26	96.89	96.74	97.54	97.58
102+0	96.82	96.79	96.17	96.88	97.25
103+0	97.77	97.42	95.67	97.07	97.21
103+59		96.20	94.21	97.39	97.39
Flow line 71					
104+0	95.87	95.89	95.90	97.08	97.50
105+0	98.53	98.19	96.75	97.84	98.09
106+0	99.97	99.80	98.19	99.18	99.34
107+0	100.99	100.85	99.21	100.15	100.55

Berry S	Ditch S	Stk S	3' out	
97.76	98.46	100.50	101.30	101.25
95.75	94.45	94.20	94.11	⊙
	TOP 92.77	90.90		98.17
ditch	TOP OF TILE -	EL 92.42	-14" V.T.	
95.80	95.03	95.76	95.91	B.M.
98.56	98.11	99.49	99.47	Sta 92.23
99.65	98.05	98.38	97.86	Top. Step
99.33	98.75	98.70	98.46	Conc. walk
	TOP N.	98.63		EL 100.70
99.80	98.15	98.63		⊙ 101.79
100.53	99.59	99.97	99.50	
103.09	102.46	103.43	102.66	
102.05	100.90	101.75	101.87	
100.31	99.55	100.10	99.21	
98.79	97.66	98.76	97.56	
97.87	97.05	96.93	95.78	
97.30	96.85	96.47	96.12	⊙ 97.76
97.04	96.37	95.47	94.80	
96.97	95.91	96.17	96.20	
97.17	96.21	92.69		
of tile S.				
97.31	95.95	96.14	96.00	
97.79	96.92	98.23	98.00	⊙ 99.23
99.09	98.10	98.65	98.61	
100.20	99.05	99.38	99.30	



Sta	Grade	Stk	cut to	fill to
			sub. 2d	sub. 1d
1	94.67	95.06	0'-4"	
2	95.57	94.88		0'-8½"
3	96.51	95.66		0'-10"
4	97.43	96.95		0'-5½"
5	98.35	98.36		
6	99.64	100.26	0'-7½"	
7	100.93	100.82		0'-1"
8	102.22	101.82		0'-5"
9	103.51	103.42		0'-1"
10	104.80	105.16	0'-4"	
11	106.09	107.84	1'-9"	
12	107.38	108.29	0'-11"	
13	107.89	107.43		0'-5¾"
14	108.40	108.73	0'-4"	
15	108.91	109.32	0'-5"	
16	109.42	109.79	0'-4½"	
17	109.93	110.09	0'-2"	
18	110.23	109.90		0'-4"
19	110.53	108.67		1'-10"
20	110.83	108.28		1'-6½"
21	111.13	108.95		2'-2"
22	111.43	110.46		0'-11"
23	111.73	111.55		0'-2"
24	112.67	113.04	0'-4"	
25	113.61	114.87	1'-2½"	

15

B.M. S.E. Corner  
of side walk  
Wesley Richardson  
El. 100.00

0 100.60

0 100.57



1 John T. Richardson Road

8059 Cu yds Exc @ 35¢  
304 Cu yds Conc @ 14.00  
5550# steel @ 04¢  
34 unit Trans 8' span 4.00  
252' x 10" Armeo 1.25  
128' x 12" Armeo 1.50  
110' x 15" Armeo 1.75  
58' x 18" Armeo 2.50  
56' x 24" Armeo 3.50  
3337 Tm Stone 3.00 (21 Tms)  
2621 Yds Gravel 2.40 (17 Yds)  
25'

velocity

L 17

2813.65 ✓  
4214.00  
222.00  
136.00  
315.00  
192.00  
192.50  
145.00  
196.00  
10011.00  
6290.40  
\$ 24727.55 ✓

Est 27500<sup>00</sup> - Bonds

Sta	Stk.	Sub. Hd	Sub. Hd	Sub. Hd
26	114.55	115.66	1'-1 1/2"	
27	115.49	118.03	2'-6 1/2"	
28	116.78	117.65	0'-10 1/2"	
29	118.07	117.45	0'-7 1/2"	
30	119.36	118.43	0'-11"	
31	120.42	121.28	0'-10"	
32	121.48	122.78	1'-3 3/4"	
33	122.54	122.72	0'-2"	
34	123.60	123.40	0'-2 1/2"	
35	124.66	125.62	0'-11 1/2"	
36	125.72	126.94	1'-2 3/4"	
37	126.78	125.69	1'-1"	
38	127.84	126.52	1'-4"	
39	128.90	130.54	1'-8"	
40	129.96	130.80	0'-10"	
41	129.99	130.09	0'-1 1/4"	
42	128.99	129.64	0'-8"	
43	127.99	127.94	0'-0 1/2"	
44	126.99	126.03	0'-11 1/2"	
45	125.99	124.62	1'-4"	
46	125.99	125.21	0'-9"	
47	126.06	127.93	1'-10 1/2"	
48	126.13	127.13	1'-0"	
49	126.20	127.05	0'-10"	
50	126.27	127.18	0'-11"	

12719 132 19  
19  
13  
0 118.39

0 125.15  
B.M. 125.15  
Fence Post  
El. 131.68

→ B.M. El. 127.32  
Big Rock  
check.

Sta	mm	Stk	cut to	fill to
51	126.35	126.35		S.D.
52	126.42	124.09		2'-4"
53	126.66	127.52	0'-10"	
54	127.99	129.38	1'-4 $\frac{1}{2}$ "	
55	129.50	131.42	1'-11"	
56	130.85	131.05	0'-2 $\frac{1}{2}$ "	
57	131.21	132.32	1'-1 $\frac{1}{2}$ "	
58	131.41	131.06		0'-4"
59	131.61	131.25		0'-4"
60	131.81	132.27	0'-5 $\frac{1}{2}$ "	
61	132.01	132.38	0'-4 $\frac{1}{2}$ "	
62	131.34	131.75	0'-5"	
63	130.67	130.97	0'-1 $\frac{1}{2}$ "	
64	129.73	130.88	1'-1 $\frac{3}{4}$ "	
65	127.15	128.01	0'-10"	
66	124.30	125.27	0'-11 $\frac{1}{2}$ "	
67	121.45	123.27	1'-10"	
68	118.60	119.79	1'-2"	
69	115.75	118.65	2'-9 $\frac{1}{2}$ "	
70	112.90	113.52	0'-7 $\frac{3}{4}$ "	
71	110.40	108.78		1'-7 $\frac{3}{4}$ "
72	110.05	105.59		4'-6"
73	110.19	111.28	1'-1"	
74	111.17	113.95	2'-9 $\frac{1}{2}$ "	
75	112.29	115.19	2'-11"	

→ B.M.

→ B.M. 131.21  
check 1349

012510

012394

→ B.M. 108.50

check 10857

0113.37

Sta	Trade	Stk.	Sub-Ed	Sub-Ed
76	112.90	114.55	1'-8"	
77	110.57	113.30	2'-9"	
78	107.61	109.68	2'-1"	
79	104.71	106.84	2'-1 1/2"	
80	101.81	102.94	1'-1 1/2"	
81	98.99	99.95	0'-11 1/2"	
82	96.32	91.36	4'-11 1/2"	
83	96.18	92.40	3'-9"	
84	97.43	98.36	0'-11 1/2"	
85	98.85	101.17	2'-4"	
86	100.27	103.56	3'-3 1/2"	
87	101.69	102.89	1'-2 3/4"	
88	102.20	106.98	4'-2"	
89	100.11	100.35	0'-3"	
90	97.48	95.40	2'-1"	
91	97.32	96.98	0'-4"	
92	98.10	101.09	3'-0"	
93	99.09	99.43	0'-4"	
94	100.08	99.67	0'-5"	
95	100.90	101.55	0'-8"	
96	100.75	104.15	3'-5"	
97	100.43	102.70	2'-3 1/4"	
98	100.11	100.88	0'-9"	
99	99.48	99.56	0'-1"	
100	98.85	98.72	0'-1 1/2"	

115.79  
 93.64  
 21.55

93 13 23

0105.76

B.M. el. 93.64

check 93.54

096.97

0100.45

el. 100.70

7 B.M. check 100.62  
~~7 B.M.~~

	Current	Old	Diff
101	98.22	97.59	0'-8"
102	97.5	97.05	0'-6 1/2"
103	97.71	97.90	0'-2"
104	97.83	96.20	1'-8"
105	97.95	98.74	0'-9 1/2"
106	98.22	100.16	2'-11 1/2"
107	99.45	100.92	1'-5 1/2"
108	100.83	102.76	1'-11"
109	102.21	105.00	2'-9 1/2"
110	103.59	104.41	0'-10"
111	104.95	125.53	1'-2"
112	103.88	104.69	0'-10"
113	102.62	102.73	0'-1 1/2"
114	100.35	100.90	0'-6 1/2"
115	97.91	98.35	0'-5"
116	95.47	96.17	0'-8 3/4"
117	97.75	93.06	1'-3 3/4"
118	86.75	85.26	1'-5 1/2"
119			

97.22

086.01

22.81.68  
B.M. check 81.59  
119 + 26



Sta	Grade	Stk	¢	Cut	Fill
45+0	12599	12523	12517		
46+0	12599	12785	12735		
47+0	12626	12714	12705		
48+0	12613	12672	12674		
49+0	12628	12706	12713		
50+0	12627	12601	12565		
51+0	12635	12386	12500		
52+0	12641	12713	12715		
53+0	12666	12925	12947		
54+0	12799	13129	13180		
55+0	12950	13090	13148		
56+0	13085	13214	13195		
57+0	13121	13085	13158		
58+0	13141	13116	13186		
59+0	13161	13209	13270		
60+0	13181	13246	13258		
61+0	13201	13161	13205		
62+0	13134	13067	13098		
63+0	13067	13074	13025		
64+0	12973	12792	12756		
65+0	12715	12547	12535		
66+0	12430	12316	12170		
67+0	12145	12078	11934		
68+0	11860	11826	11657		
69+0	11575	11356	11166		
70+0	11290	10865	10866		

Sta	Grade	Stk	¢	Cut	Fill
71+0	11040	10560	10785		
72+0	11005	11123	10866		
73+0	11019	11368	11271		
74+0	11117	11489	11500		
75+0	11229	11463	11431		
76+0	11290	11325	11157		
77+0	11057	10967	10844		
78+0	10761	10675	10553		
79+0	10471	10301	10262		
80+0	10181	9981	9760		
81+0	9891	9161	9448		
82+0	9632	9242	9365		
83+0	9618	9637	9826		
84+0	9743		10057		
85+0	9885	10348	10180		
86+0	10027	10292	10288		
87+0	10169	10632	10464		
88+0	10220	10033	9911		

29  
 012523  
 012679  
 013263  
 012224  
 011166

PL for Bridges  
 Sta 71+0  
 Sta 72+0  
 Sta 73+0  
 Sta 74+0  
 Sta 75+0  
 Sta 76+0  
 Sta 77+0  
 Sta 78+0  
 Sta 79+0  
 Sta 80+0  
 Sta 81+0  
 Sta 82+0  
 Sta 83+0  
 Sta 84+0  
 Sta 85+0  
 Sta 86+0  
 Sta 87+0  
 Sta 88+0

10686  
 9730

PL of Bridges Sta 89  
 Sta 90  
 Sta 91  
 Sta 92  
 Sta 93  
 Sta 94  
 Sta 95  
 Sta 96  
 Sta 97  
 Sta 98  
 Sta 99  
 Sta 100

9941

Sta	Grade	Stk	El	Cut	Fill
89+0	10011	9546	9547		
90+0	9748	9706	9635		
91+0	9723	10107	9924		
92+0	9810	9947	9968		
93+0	9909	9975	10000		
94+0	10008	10044	10089		
95+0	10090	10402	10346		
96+0	10075	10292	10231		
97+0	10043	10074	10058		
98+0	10011	9945	9910		
99+0	9948	9809	9868		
100+0	9885	9736	9738		
101+0	9822	9686	9733		
102+0	9759	9777	9704		
103+0	9771	9609	9743		
104+0	9783	9837	9794		
105+0	9795	9984	9919		
106+0	9822	10078	10041		
107+0	9945	10271	10184		
108+0	10083	10491	10440		
109+0	10221	10430	10497		
110+0	10359	10598	10524		
111+0	10435	10497	10487		
112+0	10388	10263	10286		
113+0	10262	10090	10074		
114+0	10035	9889	9795		

Sta	Grade	Stk	El	Cut	Fill
115+0	9791	9651	9635		
116+0	9546	9298	9294		
117+0	9175	8594	8667		
118+0	8675	8150	8157		
119+0	8175				

B.M. No. 1 S.E. Corner of sidewalk  
El. 100.00

B.M. No. 2 on Big Rock on  
North side of Road Sta 48+32  
El. 127.32

B.M. No. 3 South headwall  
Sta. 51+48 El. 123.65

B.M. No. 4 on concrete step S.E.  
Cor. J. T. Richardson's Sta 64+31  
El. 131.21

B.M. No. 5 on West end 71 Road Con.  
Culvert Sta 71+78  
El. 108.50

B.M. No. 5 on West side West end  
Bridge on concrete Sta 82+59  
El. 93.64



B.M. No. 6 on top step  
concrete walk Sta 92+23  
El. 100.70

B.M. No. 7 on N end of  
east headwall Sta 119+26  
El. 81.68

0103.13

092.87.

33

B.M. No 6 on top step  
concrete walk Sta 92+23  
El 100.70

B.M. No 7 on N. End

Sta.	Gd.	Tile Stk 800.00 83.84	Routh Rd. n. side Cut.	S. side Stk	South Cut.
4+20	93.75	96.85		95.70	
4+0	93.80	96.80		96.40	
3+0	94.08	97.35		97.73	
2+0	94.36	97.35		97.60	
1+0	94.64	97.49		97.80	
0+0	94.92				
0-1	95.20	98.95		99.05	
0-2	95.49	99.64		99.60	
0-3	95.75	100.78		100.93	

Sta.	Gd.	Tile Stk	North Salem Rd. W. side Cut.	E. side Stk	E. side Cut.
0+0	94.92				
1+0	95.75	98.59		99.28	
2+0	96.58	98.93		98.66	
3+0	97.41	101.06		100.37	
4+0	98.24	102.45		102.56	
5+0	99.07	103.33		103.22	

W. ditch:  
101.95  
101.75

103.86) top of tile southern N.S. Road  
El. 91.94

91.94

$$\begin{array}{r} 96.85 \\ 93.75 \\ \hline 93843.10 \\ 92.00 \\ \hline 1.84 \end{array}$$

103.33

99.07

4.26

$$\begin{array}{r} 99.07 \\ 4492 \\ \hline 4.15 \end{array}$$

101.95

99.07

2.88

10333

101.95

1.38

$$\begin{array}{r} 3 \quad 10200 \\ 12 \overline{) 45.0} \\ \underline{36} \end{array}$$

94.92

4.16

99.08

94.92

83

95.75

83

96.58

83

97.41

83

98.24

83

99.07

58

From Sta. 4+20 - S. to tile.  
El. - Fl. of Tile E side North Salem Tn.

Sta. Gd. Cut.

58

Sta 4+20 East.

Sta	S. Stk	Cut	N. Stk	Cut	Gd.
8+00	98.80	3.84	99.41	4.45	94.96

23+00	101.80	4.29	101.44	3.93	97.51
-------	--------	------	--------	------	-------

27+00	103.78	4.27	103.62	4.11	99.51
-------	--------	------	--------	------	-------

33+50	117.10	4.59	117.67	5.16	112.51
-------	--------	------	--------	------	--------

34+0 - 48+0 - 1400' x 5" each side

Gd.	S. Stk	Cuts	N. Stk	Cut	N.
34+00	111.80	116.39	4.59	116.45	4.65

42+00	108.60	112.05	3.45	112.82	4.22
-------	--------	--------	------	--------	------

48+00	105.60	109.38	3.78	110.55	4.95
-------	--------	--------	------	--------	------

59+00	97.35	100.88	3.53	99.90	2.55
-------	-------	--------	------	-------	------

64+00	95.35	101.25	5.90	101.47	6.12
-------	-------	--------	------	--------	------

66+20	93.10	97.39	4.29	97.00	3.90
-------	-------	-------	------	-------	------

Gr. Stk.  
S. Side

72+00	96.00	99.20	3.20
-------	-------	-------	------

80+00	100.00	103.65	3.65
-------	--------	--------	------

86+26	101.55	104.97	3.42
-------	--------	--------	------

97.39  
93.10  
4.29

97.00  
93.10  
3.90

① 96.87

116.39  
111.80  
4.59  
① 103.75

① 100.90

① 102.67

① 111.22

① 116.18

① 110.08

① 101.50

100.58  
97.35  
99.40  
97.35  
2.55

117.67  
112.51  
5.16

117.10  
112.51  
4.59

18.51  
99.51  
4.27

112.05  
108.60  
3.45  
99.41  
94.96

112.82  
108.60  
4.22  
94.96  
3.84

116.45  
111.80  
4.65

101.80  
97.51  
4.29  
110.55  
105.60  
4.95

101.44  
97.51  
3.93

109.38  
105.60  
4.11  
101.47  
95.35  
6.12

48+0 to 59+0

1100' x 6" each

59+0 to 66+20 - 720' x 7" each

66+20 - 72+0 - 580' x 8" South

72+0 - 80+0 - 800' x 7" South

80+0 - 86+26 - 600' x 6" South

Check - South

Sta	Gd	Top	Check	Check
0-3	95.75	96.25	96.56	96.21
0-2+75	95.68	96.18	96.30	96.11
0-2+50	95.61	96.11	96.25	96.13
0-2+25	95.55	96.05	96.25	96.14
0-2	95.47	95.97	96.13	96.10
0-1+75	95.41	95.91	96.05	95.93
0-1+50	95.34	95.84	96.01	95.79
0-1+25	95.27	95.77	95.87	95.67
0-1	95.20	95.70	95.78	95.59
0-75	95.13	95.63	95.72	95.52
0-50	95.06	95.56	95.52	95.41
0-25	94.99	95.49	95.28	95.28
0+0	94.92	95.52	95.62	95.28
0+25	94.85	95.45	95.46	95.27
0+50	94.78	95.38	95.47	95.06
0+75	94.71	95.31	95.37	95.13
0+0	94.64	95.24	95.24	94.91
1+25	94.57	95.17	95.03	94.79
1+50	94.50	95.10	94.91	94.73
1+75	94.43	95.03	94.86	94.63
2+0	94.36	94.96	94.81	94.47
2+25	94.29	94.89	94.72	94.43
2+50	94.22	94.82	94.61	94.31
2+75	94.15	94.75	94.56	94.20

⊙ 97.61

6 = 14  
5" - 6"

Sta	Ord.	Check	check
3+0	94.06	94.68	94.28 94.16
3+25	94.01	94.61	94.20 94.08
3+50	93.94	94.54	94.03 94.03
3+75	93.87	94.47	94.07 93.86
4+0	93.80	94.40	93.98 93.84
4+25	93.75	94.35	93.77 93.66
4+50			93.61 93.57
4+75			93.46
5+0			

59

Fl. of 93.01  
 Top of 93.66

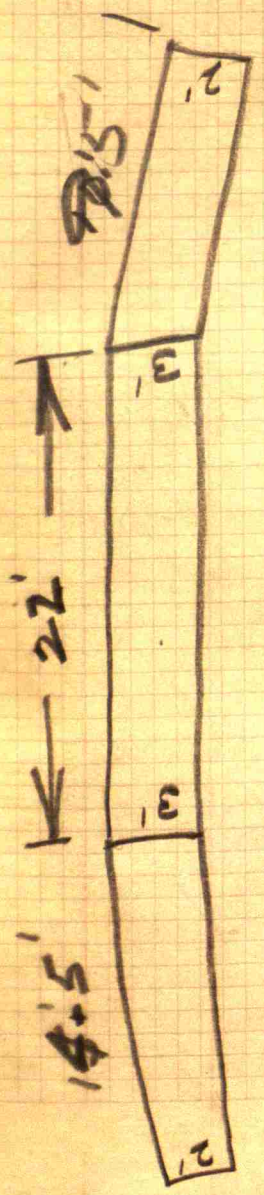
$$\frac{3 \times 3 \times 22}{27 \times 3} = 7.33$$

$$14.5 \times \frac{5}{2} \times \frac{3}{9} = 4.00$$

$$9.5 \times \frac{5}{7} \times \frac{3}{9} = 2.66$$


---


$$14.00$$



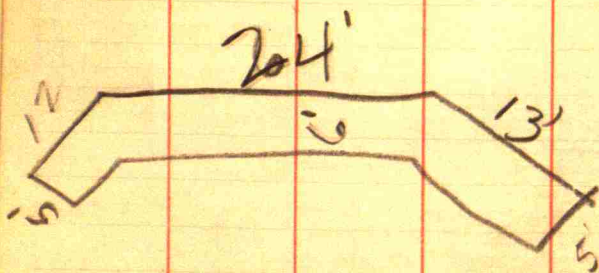
Frank Mouth Road,  
Eel River Twp.

58

9

$$\begin{array}{r} 3'-7'' \\ 88'- \\ \hline 91'-7'' \end{array}$$

$$\begin{array}{r} 24 \\ 16 \\ \hline 144 \\ 24 \\ \hline 384 \end{array}$$



Depth 51''

34 piling

$$20 \times 17 = 170'$$

$$24 \times 16 = 384'$$

---

$$554'$$

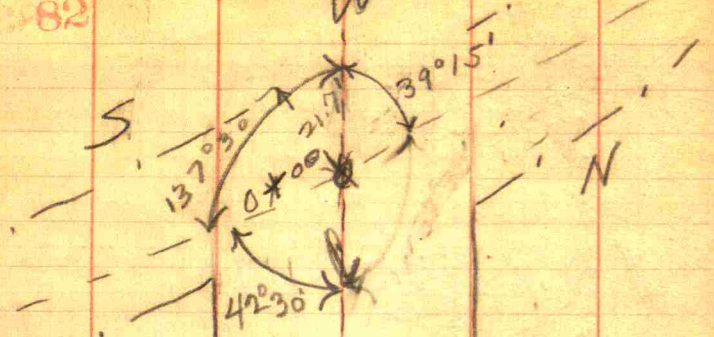
$$64$$

less

---

$$490' \text{ allowed}$$



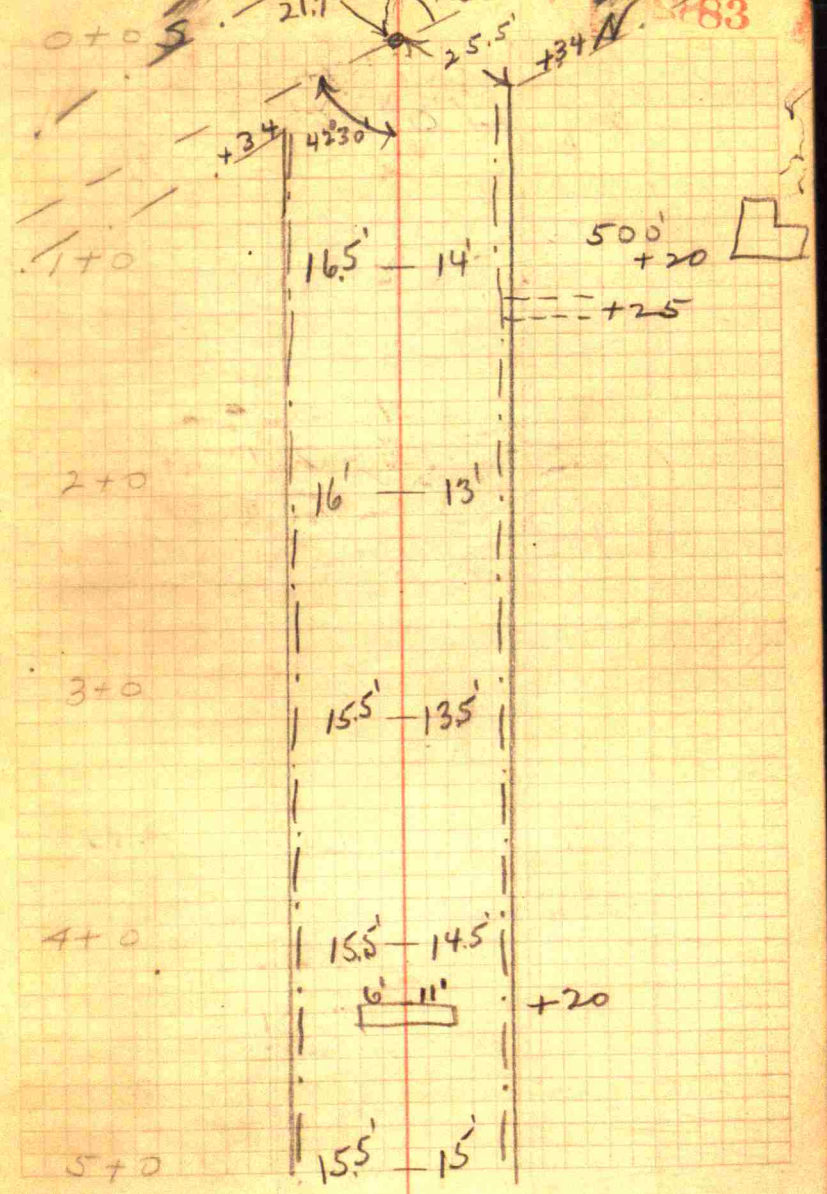


400' X 5" Non W side N. Salem Road  
 500' X 5" Non E side of Salem Road  
 500' X 5" W on both - Point Tom Road

17' Iron Pipe Culvert 4+20

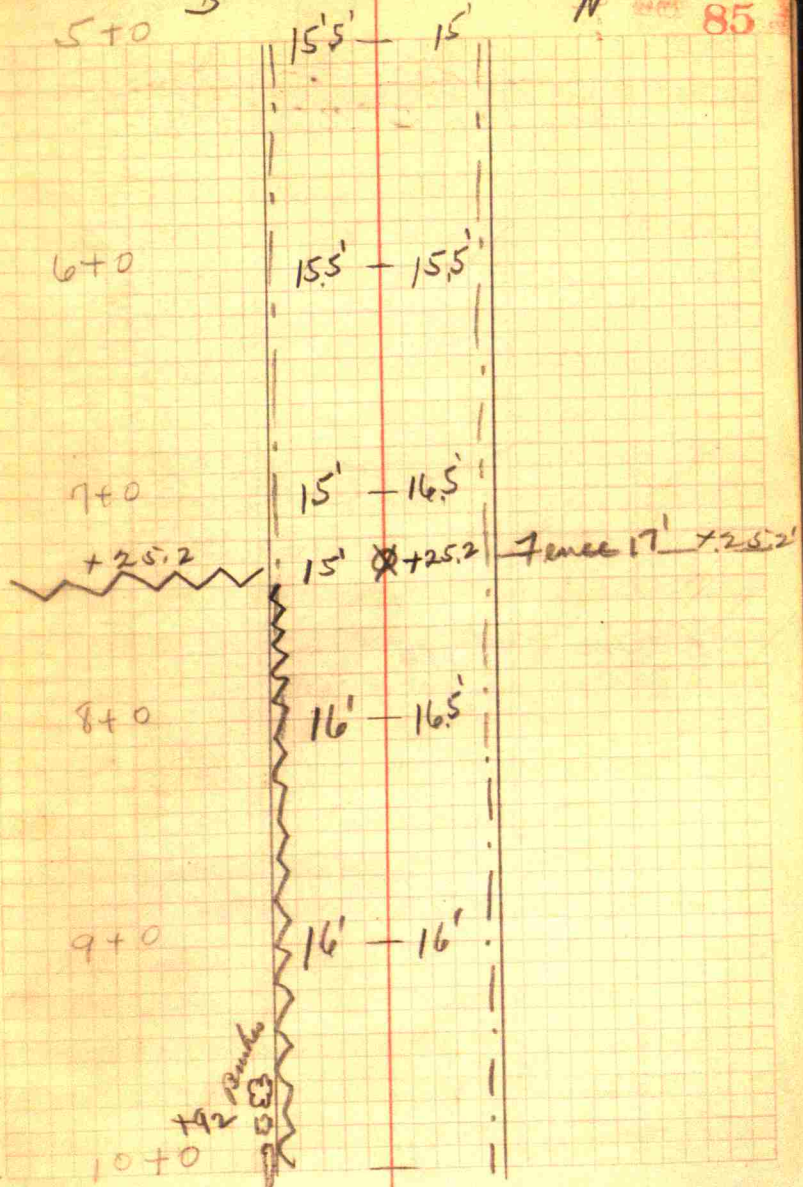
17' x 14"

4+20 - Replace with 26' X 18"

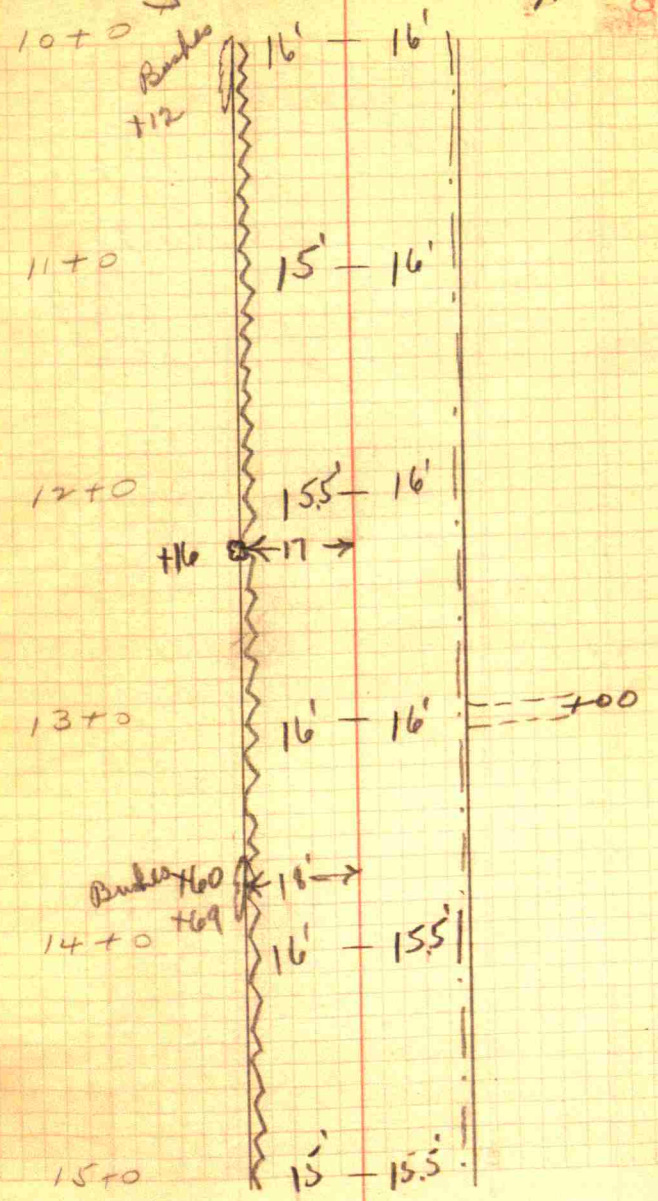


1+0	16.5' - 14'	500' +20
2+0	16' - 13'	+25
3+0	15.5' - 13.5'	
4+0	15.5' - 14.5'	6' 11" +20
5+0	15.5' - 15'	

$\frac{1}{2}$  mi Stone 7+25.2.  
 Def. L  $0^{\circ}26'$



13700 - 18' x 10"



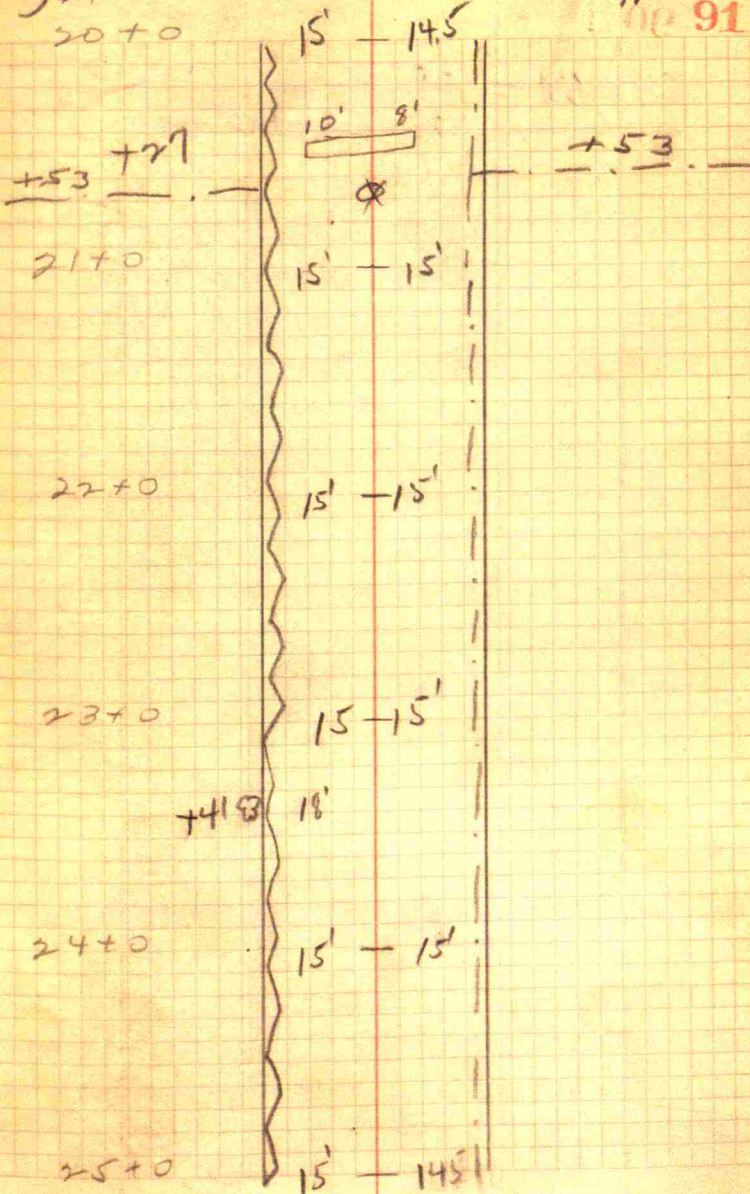
15+0	15'	15.5'
16+0	15'	15.5'
17+0	15'	15.5'
18+0	15'	15'
19+0	15'	14.5'
20+0	15'	14.5'

20+27

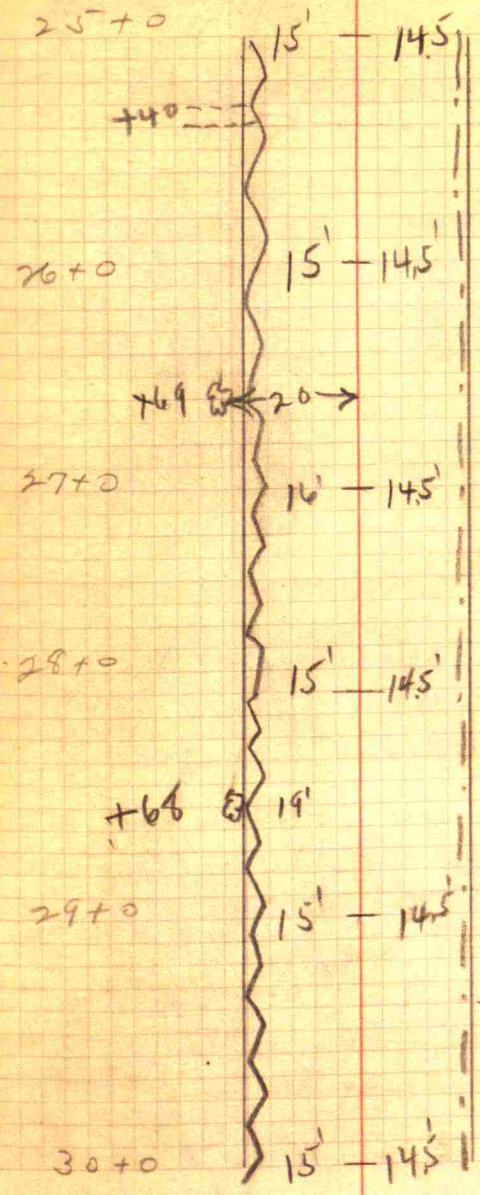
18' x 12"

Armed.

Replace with 26' x 18"

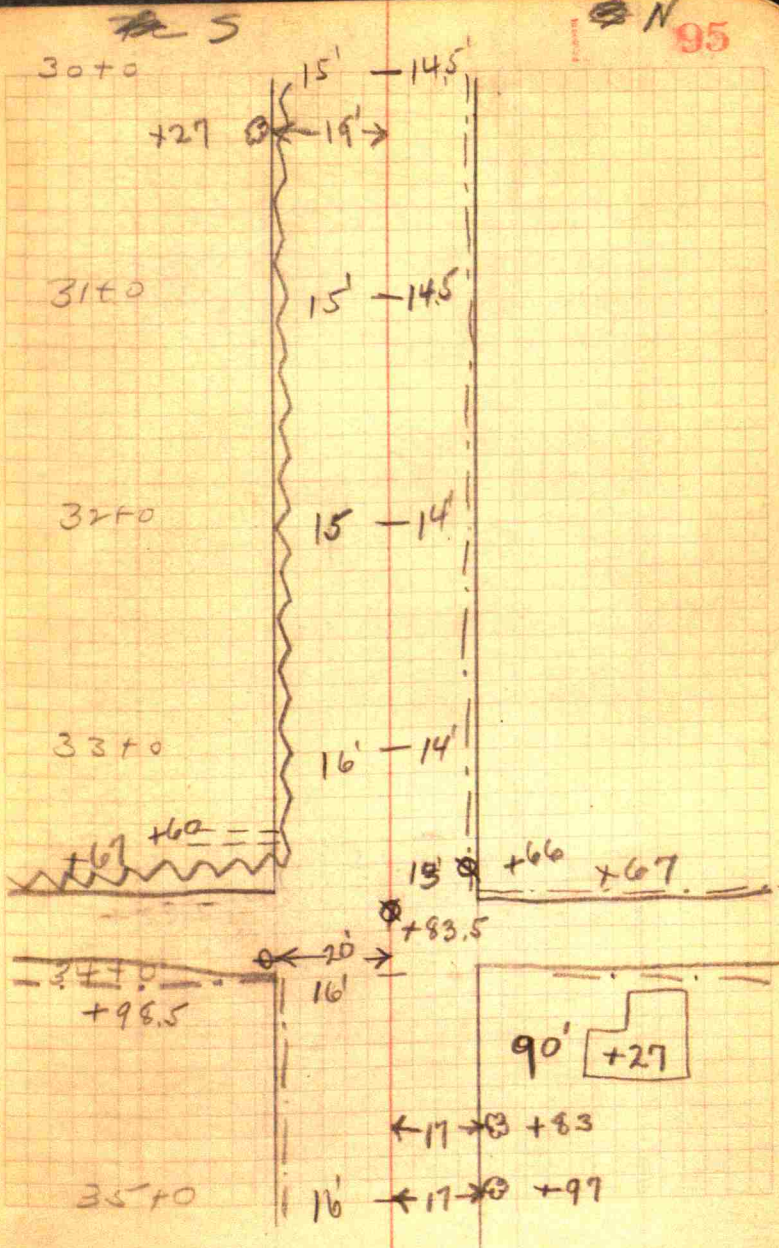
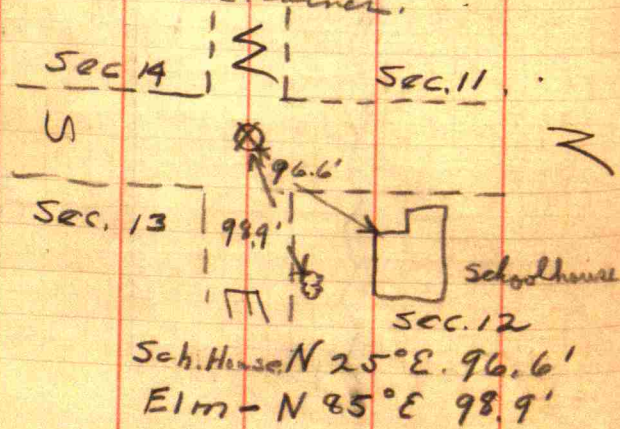
20+53. Should be  $\frac{1}{4}$  mi  
stone - didn't find it.

25+40 - 18' x 12'



Sta. 33+83.5 Def. R.  $0^{\circ}32'$

Sta. 33+83.5 Mi. Stone  
Sec. corner.



35+0

16'

B

20' B + 40

+ 50

R + 51

36+0

15'

14'

37+0

15'

14'

38+0

16'

14'

39+0

16'

13.5'

13' R + 36

+ 63

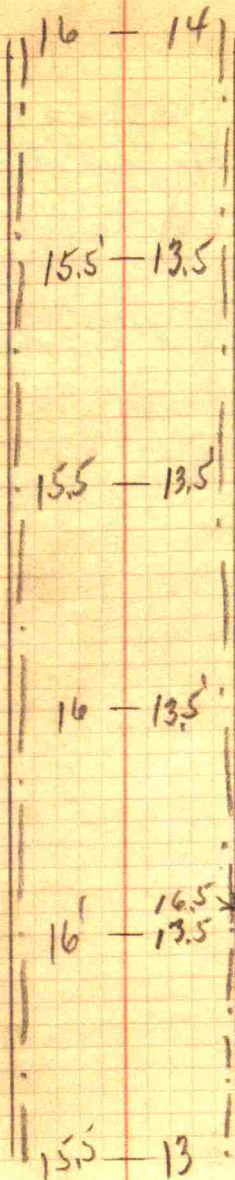
40+0

16'

14'



S  
40+0



41+0

15.5 - 13.5

42+0

15.5 - 13.5

43+0

16 - 13.5

49+0

16 - 16.5  
16 - 13.5

- +71
- ⊗ +95
- ⊗ +12
- ⊗ +21
- ⊗ +25
- ⊗ +35
- ⊗ +44
- ⊗ +55
- ⊗ +69

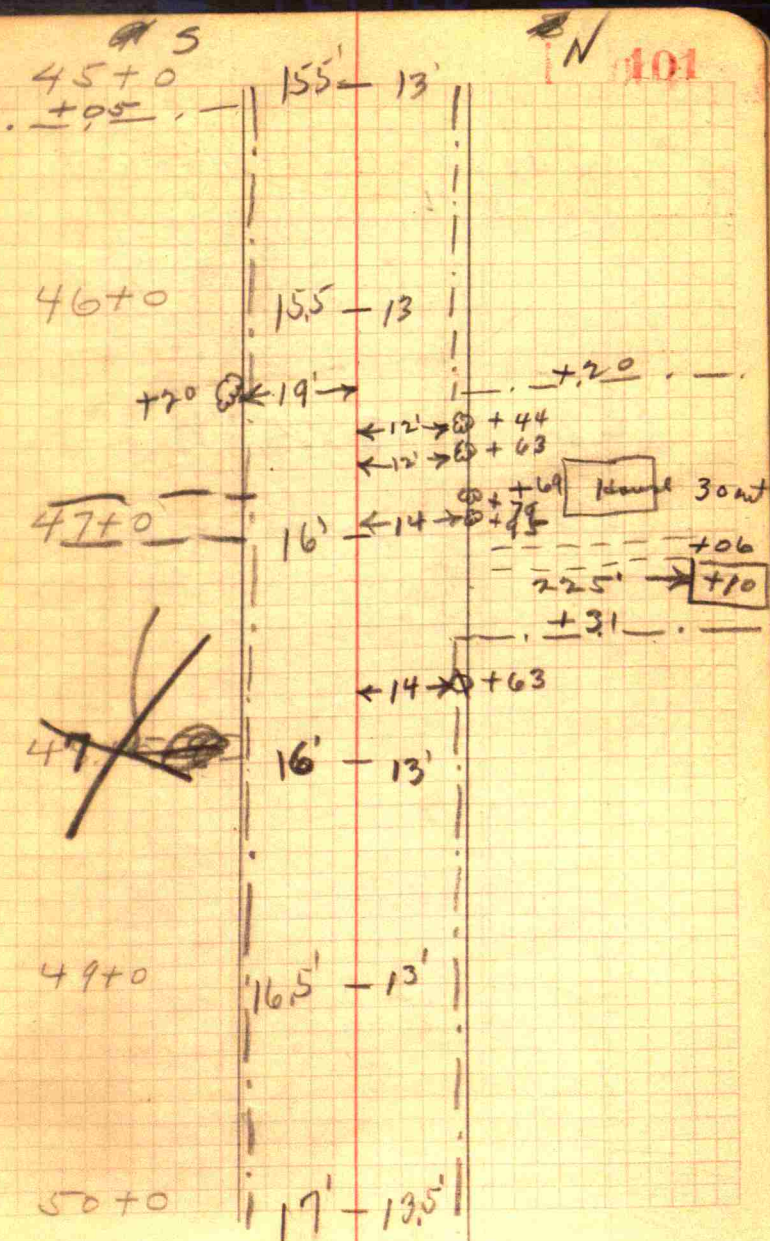
45+0

15.5 - 13

A3+71 - 18' x 12" U

46+20 - 47+31 - 12" inward  
drain tile N. side

47+00 - 18' x 12" S side



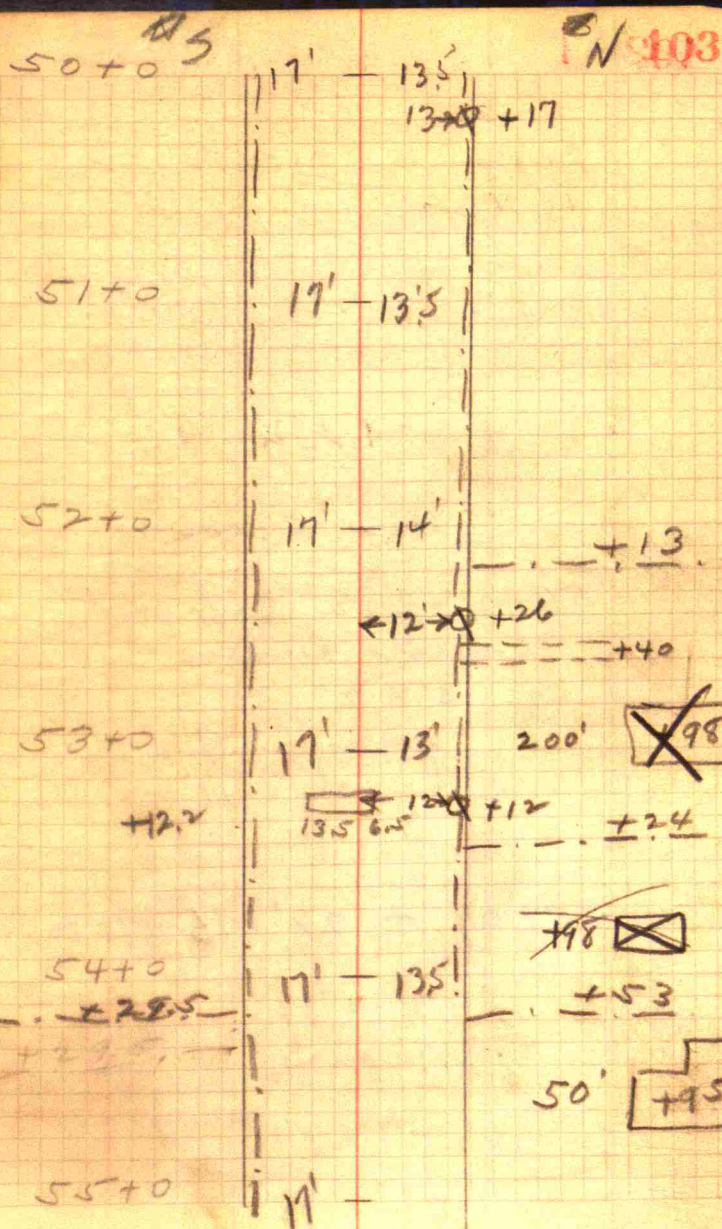
53+12.2 Armco  
20 x 14"

13.5' on S.

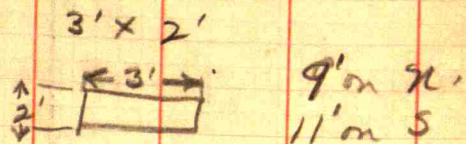
6.5' on N

52+40-28' x 15" N

53+12 - Superplan



59+0 - 20" x 8" tile with  
concrete leaders.



59+09 - 22" x 16" Arma-co

9.3' on N.  
12.7' on S.

59+09 - 26" x 18"

56+0

17'

13' Q+50

+4'

+7'

57+0

16.5'

13.5'

← 12.5' Q+07

← 18' Q+18

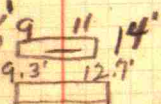
58+0

16'

14'

59+0

15.5'



← 12' Q+26

60+0

15.5'

14'

60+12.5 - 1/2 mi stone

100.5  
12.5  
87.5

Det. Lett. 0°23' -

5  
60+0

61+0

62+0

63+0

64+0

65+0

155' - 14'

15.5' @ 12.5'

15.5' - 15'

15' - 15'

15' - 14'

15' - 14'

N 167

+11

17' 1/2 mi stone

19'  
8+77

14'  
8+56

14'  
8+83

19'  
8+75

66+20 Aruco.  
18' x 36" Aruco.

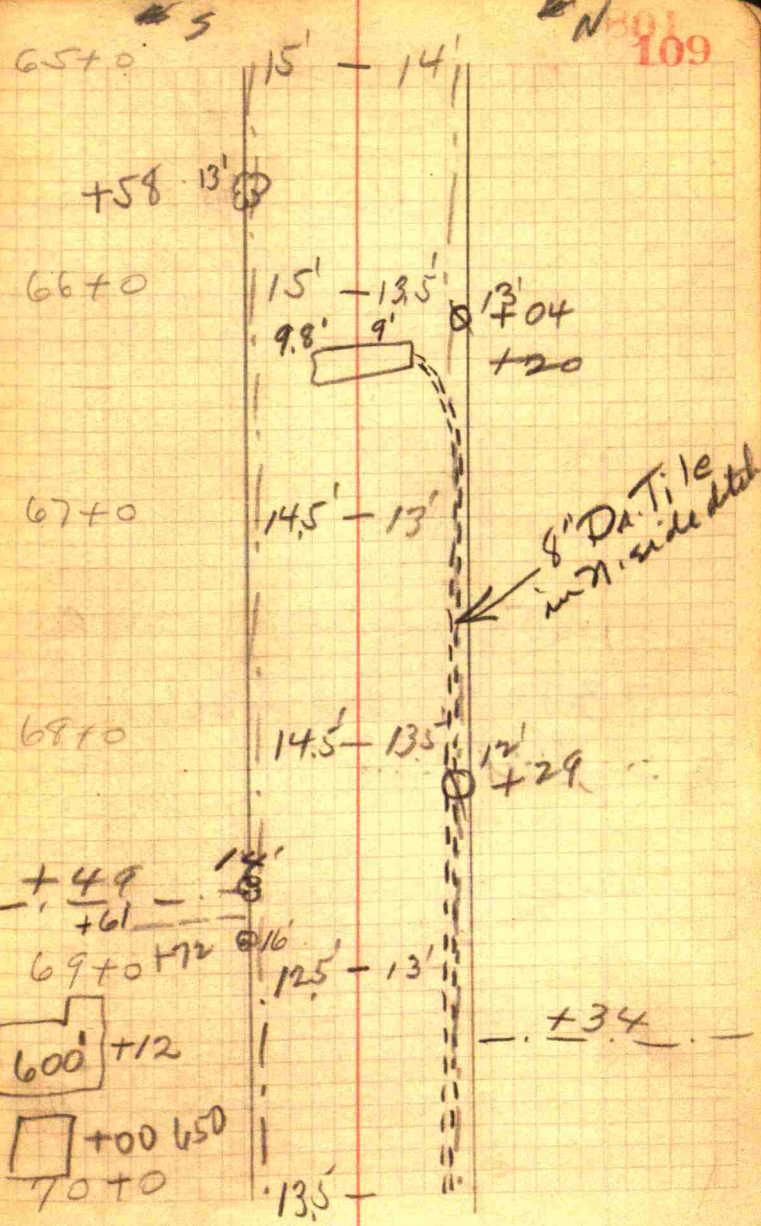
9.8' S.  
9' N.

66+20 - 16" Re Tile Plan S

66+20 - Bot road

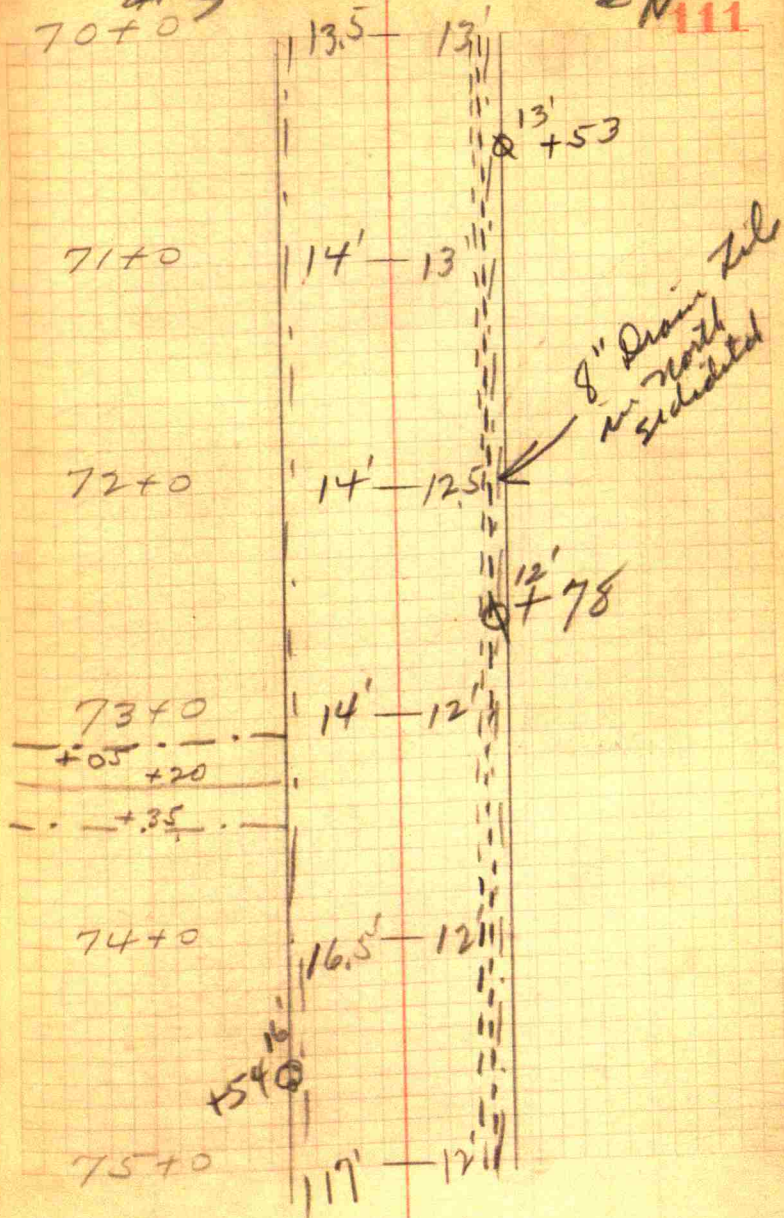
Carry 8" Re tile E on S side

68+49 - 24' x 12"



73+05 - 35 - 26' x 12"  
in S ditch —

70+0 S



76+0

17' - 13'

77+0

17' - 13.5'

12' +29

78+0

17.5' - 13.5'

Tile in side ditch

79+0

17.5' - 15'

17' +

+39

15' +51

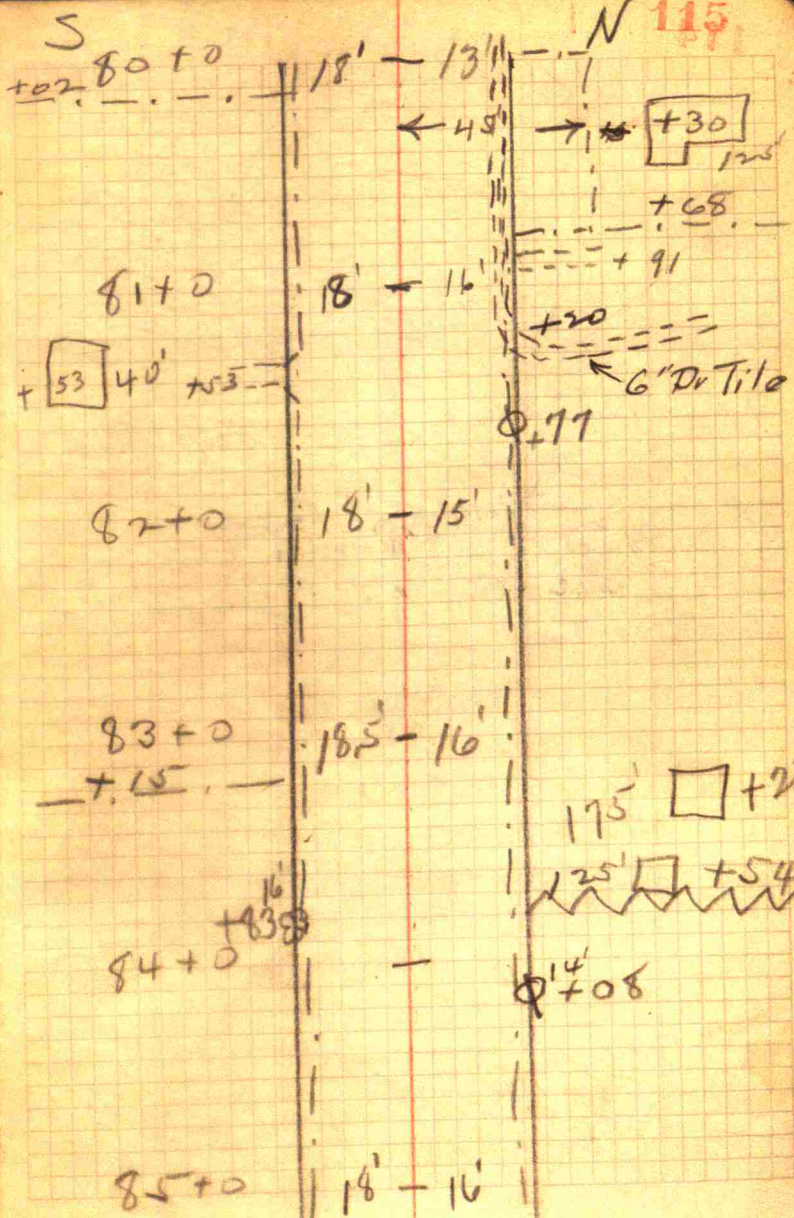
+58

80+0

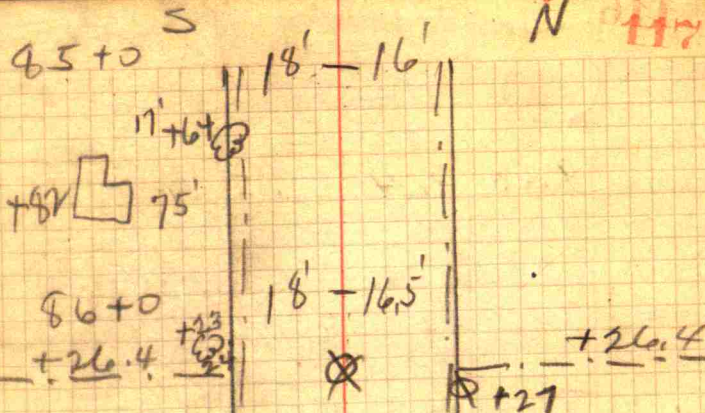
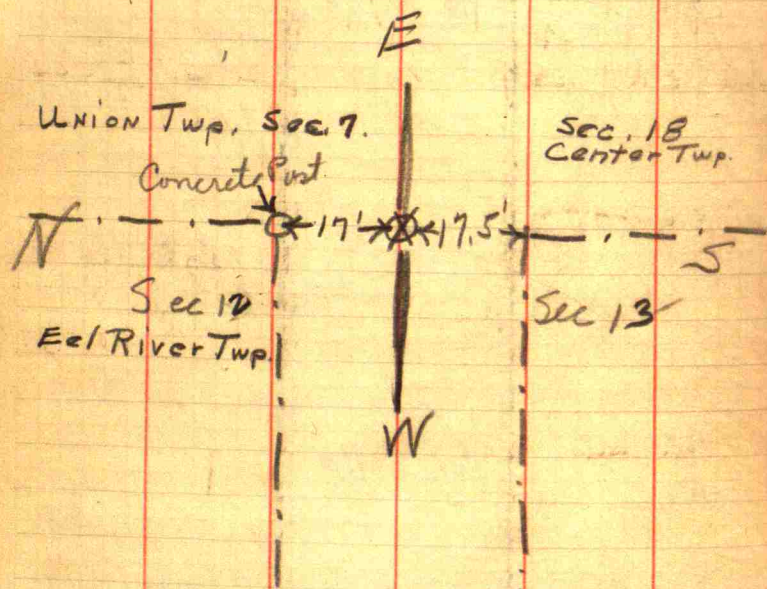
+93



82x41 - Wooden Box  
culvert 10" -



86+26.4 Stone.



86+26.4  
End of Inspec.

Sta.	3' out	Stake	Ditch	Berm	¢
0+00	100'	N. 99.28	50' N.	99.04	99.10
1+00	96.43	96.45	96.68	97.28	97.48
2+00	96.50	96.55	96.38	97.36	97.65
3+00	95.85	95.94	96.13	97.05	97.43
4+00	94.64	94.75	95.07	96.43	96.73
4+20		95.06	94.79	96.00	96.80
5+00	96.00	95.75	95.65	96.53	97.01
6+00	97.22	96.94	96.25	97.75	97.95
7+00	98.12	98.15	97.41	99.05	99.32
8+00	98.68	98.62	98.00	99.40	99.65
9+00	99.35	99.34	98.62	100.00	100.12
10+00	99.80	99.53	99.51	100.55	100.88
11+00	100.92	100.91	100.40	101.59	102.00
12+00	103.37	103.40	102.76	103.85	103.95
13+00	104.06	104.57	104.26	105.70	105.91
14+00	104.46	104.60	104.35	105.67	105.94
15+00	104.78	104.78	104.58	105.63	105.96
16+00	103.73	103.75	103.78	104.76	104.90
17+00	101.78	101.65	101.43	102.97	103.07
18+00	100.62	100.50	99.91	101.75	102.25
19+00	100.52	100.32	99.92	101.07	101.25
20+00	99.49	99.26	99.76	100.45	100.60
20+27	98.91	98.91	98.72	98.91	100.53

Berm 100.44

99.80

Berm	Ditch	Stake	3' out
50.3	99.09	100.5	99.11
97.56	96.74 <sup>13</sup>	97.76	97.60
97.30 <sup>5</sup>	96.53 <sup>14</sup>	97.55	97.45
97.19 <sup>6</sup>	95.86 <sup>13</sup>	97.34	97.24
96.50 <sup>5</sup>	94.77 <sup>11</sup>	95.34	95.10
96.48 <sup>5</sup>	95.91 <sup>6</sup>	94.80 <sup>Fl.</sup>	95.12 <sup>Stake</sup> 95.70
96.40 <sup>5</sup>	95.37 <sup>11</sup>	96.35	96.00
97.74 <sup>6</sup>	96.00 <sup>11</sup>	97.20	97.00
99.21 <sup>5</sup>	97.72 <sup>10</sup>	99.35	98.92
99.50 <sup>5</sup>	98.05 <sup>10</sup>	98.42	98.37
99.94 <sup>6</sup>	98.55 <sup>11</sup>	99.35	99.14
100.85 <sup>6</sup>	99.33 <sup>11</sup>	100.13	100.10
101.71 <sup>5</sup>	100.59 <sup>10</sup>	101.10	101.43
103.70 <sup>5</sup>	102.17 <sup>10</sup>	103.10	103.00
105.09 <sup>5</sup>	103.74 <sup>10</sup>	104.31	104.10
105.75 <sup>5</sup>	104.90 <sup>10</sup>	105.55	105.88
105.77 <sup>6</sup>	104.55 <sup>11</sup>	105.30	105.62
104.79 <sup>6</sup>	104.30 <sup>10</sup>	104.63	104.95
102.71 <sup>6</sup>	101.50 <sup>11</sup>	102.26	102.40
101.66 <sup>6</sup>	100.60 <sup>10</sup>	101.05	101.30
101.05 <sup>6</sup>	99.55 <sup>12.5</sup>	99.76	99.80
100.65 <sup>6</sup>	99.00 <sup>12</sup>	99.26	99.10
100.57 <sup>6.5</sup>	98.80 <sup>12</sup>	98.76	

Ditch 98.87

B.M.  
ON Stake  
Nailed  
To connect  
50' N of  
Sta 0+00  
Fl. 100.00

97.45

105.35

100.85

Sta	3' out	Stake	Ditch	Berm	4
21+0	99.74	100.09	99.00	100.53	100.70
22+0	99.83	99.33	99.66	101.50	101.71
23+0	100.31	100.69	100.24	102.04	102.92
24+0	101.37	101.68	101.15	102.85	103.10
25+0	101.04	101.35	101.16	102.74	102.10
26+0	102.62	103.16	102.85	104.05	104.33
27+0	102.49	102.59	102.65	104.37	104.74
28+0	103.19	103.64	103.17	105.04	105.43
29+0	105.18	105.42	105.48	107.04	107.44
30+0	109.55	109.81	109.53	100.10	100.45
31+0	113.30	113.65	113.60	114.25	114.61
32+0	115.70	116.01	115.21	115.85	116.24
33+0	117.19	117.31	116.30	116.87	116.86
33+83.5			50 feet →	117.83	117.41
34+0	117.56	116.71	116.30		116.56
35+0	114.24	114.71	114.47	114.59	114.83
36+0	113.00	112.94	113.29	114.27	114.57
37+0	113.59	113.51	113.64	114.58	114.77
38+0	114.75	114.64	114.09	114.97	115.35
39+0	115.81	115.60	115.10	115.86	116.16
40+0	115.62	115.58	115.49	116.15	116.45
41+0	115.74	115.44	114.48	114.87	114.94
42+0	112.62	112.56	112.09	112.71	113.30
43+0	111.81	111.78	110.89	112.63	112.49

Berm	Ditch	Stake	3' out
100.50	99.00	99.49	99.29
101.69	99.70	101.06	100.83
102.14	100.84	101.58	101.76
102.53	101.53	102.57	102.55
103.00	101.76	101.95	102.00
103.98	102.47	103.51	103.44
104.42	102.90	103.86	103.30
105.11	103.73	104.36	104.36
107.24	105.45	106.11	106.04
100.26	109.37	100.90	100.00
114.02	114.00	115.55	115.71
115.90	114.92	114.95	115.05
116.86	116.10	116.13	116.14
50 feet →	115.65		
	115.80	116.65	116.50
114.66	114.16	114.52	114.42
114.24	112.84	113.30	113.25
114.54	113.25	114.07	113.92
115.10	114.09	114.88	114.90
115.85	114.55	115.75	115.55
116.04	114.59	115.58	115.55
114.84	114.16	115.05	114.90
112.95	111.60	112.72	112.45
112.30	111.00	111.88	111.59
		116.04	

101.86

110.49

B.M.  
119.70  
94+30

Height of station based on  
reference to datum of  
National Tidal Station



	3' out	stake	Ditch	Berm	R
44+0	111.09	111.09	110.85 <sup>9.5</sup>	111.93 <sup>4</sup>	112.20
45+0	110.20	109.88	110.00 <sup>11.5</sup>	111.20 <sup>4.5</sup>	111.51
<del>46+0</del>	111.10	111.03	110.46 <sup>8.5</sup>	111.45 <sup>3.5</sup>	111.57
<del>47+0</del>					
47+0	110.41	110.43	110.27 <sup>6</sup>	110.40 <sup>2.5</sup>	110.59
48+0	110.43	110.50	108.92 <sup>7.5</sup>	110.51 <sup>3.5</sup>	110.55
49+0	109.30	109.55	108.06 <sup>7.5</sup>	109.72 <sup>3</sup>	109.75
50+0	108.38	108.60	107.35 <sup>7.5</sup>	109.15 <sup>3</sup>	109.21
51+0	108.19	108.42	106.34 <sup>10.5</sup>	107.98 <sup>3</sup>	108.04
52+0	107.09	106.89	105.45 <sup>11.5</sup>	106.45 <sup>2.5</sup>	106.45
53+0	104.66 <sup>stake</sup>	104.61 <sup>Flank L. 7</sup>	104.24 <sup>7.5</sup>	105.49 <sup>2</sup>	105.47
53+12.5	104.43	103.90	105.05 <sup>11.5</sup>	105.35 <sup>3</sup>	105.22
54+0	105.30	105.17	104.26 <sup>11.5</sup>	105.44 <sup>3</sup>	105.40
55+0	106.95	106.68	106.10 <sup>11.5</sup>	106.19 <sup>4</sup>	106.31
56+0	105.85	106.06	104.97 <sup>8.5</sup>	105.72 <sup>4</sup>	105.89
57+0	104.10	104.24	103.44 <sup>8.5</sup>	104.07 <sup>4.5</sup>	104.26
58+0	102.21	102.46	101.20 <sup>8.5</sup>	102.54 <sup>4</sup>	102.51
59+0	100.29	100.08	99.10 <sup>10</sup>	101.30 <sup>5</sup>	101.56
59+0	100.29 <sup>stake</sup>	99.82 <sup>Flank 9.5</sup>	100.70 <sup>10</sup>	101.65 <sup>5.5</sup>	101.65
59+0.9	100.50	99.23	100.19 <sup>10</sup>	101.32 <sup>7.5</sup>	101.73
60+0	102.08	102.06	100.77 <sup>10</sup>	101.64 <sup>7.5</sup>	101.89
61+0	103.05	103.00	101.60 <sup>12</sup>	102.80 <sup>6.5</sup>	103.30
62+0	103.54	103.49	102.28 <sup>10</sup>	103.44 <sup>6.5</sup>	103.82
63+0	102.59	102.82	101.40 <sup>10</sup>	102.47 <sup>5.5</sup>	102.60
64+0	100.95	101.19	110.32 <sup>9.5</sup>	101.09 <sup>5.5</sup>	101.78
65+0	99.58	99.95	98.82 <sup>9.5</sup>	99.34 <sup>5</sup>	99.45

Berm	Ditch	stake	3' out
111.66 <sup>9</sup>	110.65 <sup>13</sup>	111.25	111.54
111.47 <sup>7.5</sup>	110.36 <sup>12.5</sup>	110.70	110.65
111.30 <sup>10</sup>	110.85 <sup>12.5</sup>	111.01	111.04
110.43 <sup>9.5</sup>	110.01 <sup>13.5</sup>	109.80	109.78
110.28 <sup>9.5</sup>	109.09 <sup>13</sup>	109.87	109.74
109.34 <sup>9.5</sup>	108.30 <sup>13</sup>	109.24	108.89
108.24 <sup>9.5</sup>	107.53 <sup>13</sup>	108.41	107.95
107.86 <sup>9.5</sup>	106.90 <sup>13</sup>	108.06	108.01
106.32 <sup>10</sup>	105.68 <sup>14</sup>	106.50	106.31
105.25 <sup>11</sup>	104.53 <sup>13</sup>	104.80 <sup>SE Flank</sup>	104.43 <sup>stake</sup>
105.20 <sup>11</sup>	104.85 <sup>13</sup>	103.55	103.62
105.40 <sup>9</sup>	104.53 <sup>12.5</sup>	104.78	104.38
106.05 <sup>9</sup>	105.40 <sup>12.5</sup>	105.50	105.95
105.69 <sup>8.5</sup>	105.49 <sup>12</sup>	105.91	105.78
104.15 <sup>8</sup>	103.81 <sup>12.5</sup>	104.93	104.70
102.46 <sup>8</sup>	101.70 <sup>12.5</sup>	102.80	102.95
101.64 <sup>6.5</sup>	100.52 <sup>11.5</sup>	100.52	100.65
101.30 <sup>7.5</sup>	100.42 <sup>11.5</sup>	99.10 <sup>Flank</sup>	99.00 <sup>stake</sup>
101.36 <sup>7.5</sup>	100.80 <sup>11.5</sup>	101.91	101.85
102.55 <sup>7</sup>	102.04 <sup>11.5</sup>	102.65	102.85
102.97 <sup>7</sup>	102.83 <sup>11.5</sup>	102.80	102.95
102.00 <sup>7.5</sup>	101.34 <sup>11</sup>	102.05	102.24
100.96 <sup>7.5</sup>	100.43 <sup>11</sup>	101.16	101.35
99.29 <sup>6</sup>	98.76 <sup>10</sup>	100.50	100.72

112.47  
 46+7.5  
 55+0  
 108.46  
 Berm on East corner of Flank  
 111.72  
 Berm on East corner of Flank  
 108.46  
 stake  
 stake  
 stake

105.84  
 103.20

	3' out	stake	Ditch	Berm	Q
66+0	96.70	96.89	97.20	98.12	98.12
66+20	95.40	94.71	97.55	98.08	98.34
67+0	99.13	99.35	97.62	98.31	98.35
68+0	97.89	98.17	97.95	98.53	94.95
69+0	98.95	99.27	98.54	99.45	99.81
70+0	99.73	99.60	98.78	99.84	100.02
71+0	99.66	99.60	98.77	99.64	99.83
72+0	98.62	98.60	98.70	99.50	99.81
73+0	99.80	99.83	99.90	100.20	100.50
74+0	101.02	101.11	100.78	101.02	101.22
75+0	102.35	102.40	101.80	103.22	103.30
76+0	102.40	102.41	102.23	103.26	103.55
77+0	102.73	102.69	102.30	103.71	103.74
78+0	102.53	102.47	102.61	103.70	103.63
79+0	103.07	103.02	102.98	103.84	104.11
80+0	103.88	103.80	103.28	104.21	104.22
81+0	103.60	103.66	103.07	103.67	103.85
82+0	102.96	102.89	102.79	103.90	104.10
82+41			102.42	103.63	103.89
83+0	102.54	102.69	102.95	103.96	104.09
84+0	105.08	105.12	104.94	105.15	105.17
85+0	102.75	102.87	103.33	104.36	104.62
86+0	104.90	104.95	103.77	105.07	105.05
86+26.4	105.19	105.20	103.95	105.45	105.52

66+27 Q of tile from east into culvert. 93.00 Fl.  
 tile ditch from east on north side 66+20  
 ditch empties into culvert.

	Berm	Ditch	stake	3' out
	98.02	97.16	96.10	96.10
	97.90	97.24	94.24	94.08
	98.23	97.82	98.60	98.72
	98.70	98.06	98.31	98.50
	99.24	98.73	99.49	99.59
	99.83	98.80	99.51	99.62
	99.60	98.73	99.10	99.17
	99.17	98.45	98.61	98.42
	99.99	100.05	99.75	99.55
	100.85	100.25	101.61	101.50
	102.45	102.28	103.64	103.66
	103.16	102.68	103.65	103.55
	103.81	102.95	103.84	103.71
	103.60	102.89	103.96	103.65
	103.62	103.93	103.86	103.74
	103.86	103.21	104.14	103.80
	103.56	103.41	103.75	103.28
	103.90	103.00	103.25	103.10
	103.58	102.11	102.54	102.36
	103.75	102.53	102.54	102.36
	105.02	104.90	105.79	105.59
	104.46	103.79	103.61	103.42
	104.65	104.52	104.82	104.95
	104.90	104.66	105.24	105.57

about 18" tile carries water from  
 culvert south (el. 94.10 top.)

Road South 25" 100.14

50' up road E.  
 el. 105.83

103.08

103.26

127  
6" tile from east in north  
side ditch empty into  
culvert at 66+27 (El. 93.00  
flow line) top of tile in side  
ditch el. (101.39 at 82+20

B.M. foundation Rock 2nd  
stone from ~~North~~<sup>on</sup> East side of Barn  
on south side of Rd.  
Stat. 81+75 (El. 104.73)

101.39  
57  
100.72

	Routh		Road	
	N. Side	new	Fill to	cut to
	Gr. Stk.	Grade	Sub. Rd.	Sub. Rd.
1+00	97.07	98.03	0'-11 $\frac{3}{4}$ "	
2+00	96.98	97.79	0'-10"	
3+00	96.37	97.55	1'-2"	
4+00	95.34	97.31	1'-11 $\frac{1}{2}$ "	
5+00	96.45	97.07	0'-7 $\frac{1}{2}$ "	
6+00	97.62	97.72	1'-1 $\frac{1}{4}$ "	
7+00	98.10	98.37	0'-3"	
8+00	98.72	99.02	0'-3 $\frac{1}{2}$ "	
9+00	99.54	99.67	0'-1 $\frac{1}{2}$ "	
10+00	99.85	100.32	0'-5 $\frac{1}{2}$ "	
11+00	101.14	100.97		0'-2"
12+00	103.69	101.62		2'-3"
13+00	104.45	102.27		2'-2"
14+00	104.70	102.92		1'-9"
15+00	105.04	103.57		1'-5 $\frac{1}{2}$ "
16+00	104.16	103.31		0'-10"
17+00	102.00	103.05	1'- $\frac{1}{2}$ "	
18+00	100.74	102.79	2'- $\frac{1}{2}$ "	
19+00	100.53	102.53	2'-0"	
20+00	99.51	102.27	2'-9"	
21+00	100.20	102.01	1'-10"	
22+00	100.13	101.25	1'-1 $\frac{1}{2}$ "	
23+00	100.85	101.49	0'-8"	
24+00	101.44	102.14	0'-8 $\frac{1}{2}$ "	

(See Page 134)



5341 cu yds. Exc. @ 40¢  
 2415 Tons stone @ \$3.00 (28.7)  
 2588 yds. Gravel @ 2.50 (30 yds)  
 6500' x 5" Dr. Tile @ 12¢  
 6640' x 6" Dr. Tile @ 15¢  
 3000 x 9" Dr. Tile @ 15½¢  
 930 x 8" Dr. Tile @ 18¢  
 154' x 12" Cor. Metal @ 1.50  
 6' x 15" " " @ 1.75¢  
 78' x 18" " " @ 2.50  
 87' x pipe relaid @ 20¢  
 348' x 12" Dr. Tile laid @ 30¢  
 81 cu yds. Bl. Stone @ 13.00  
 1778# Lorie Steel @ .05

2136.40  
 7245.00  
 6470.20  
 780.00  
 996.00  
 465.00  
 167.40  
 231.00  
 10.50  
 195.00  
 17.40  
 104.40  
 1053.00  
 88.90

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19960.00

Banks 21500

Est. 20,000<sup>00</sup>

File Notes

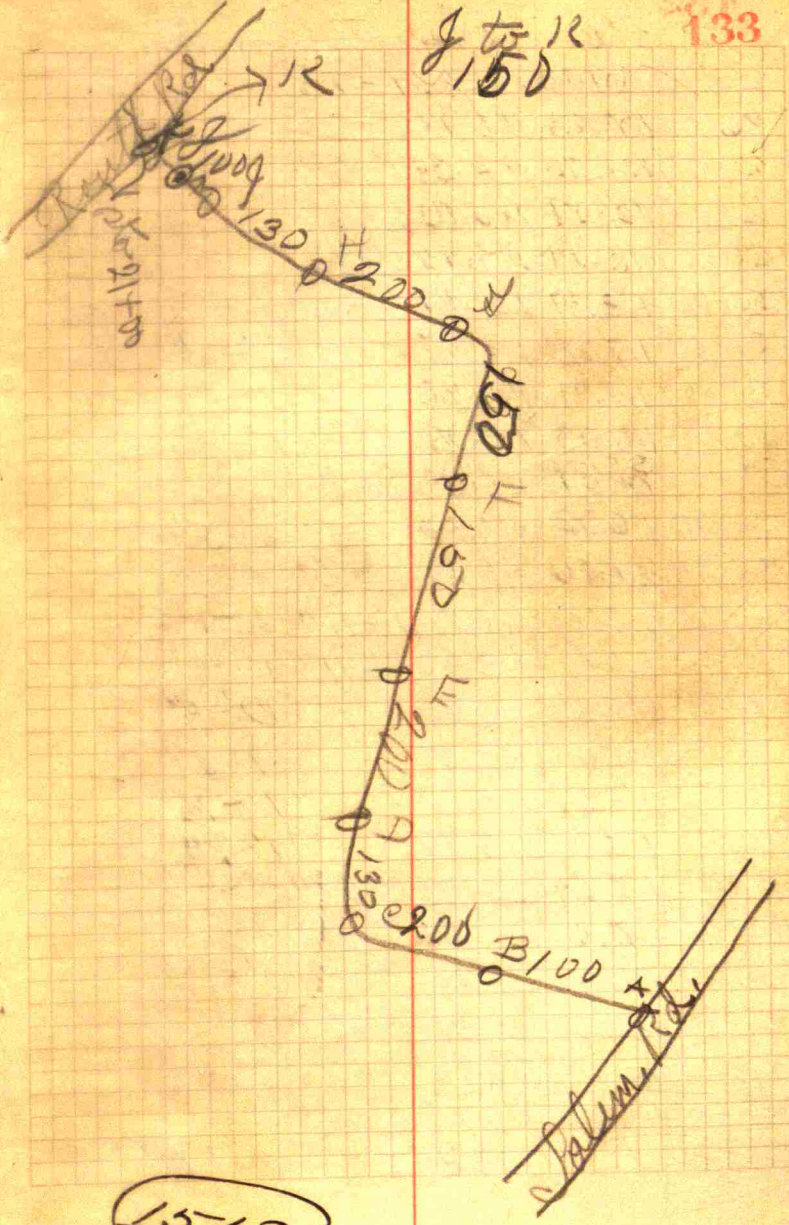
topline Ground

a	89.03	91.37
b	91.12	92.34
c	92.07	93.70
d	92.74	94.55
e	93.75	95.10
f	94.71	96.41
g	95.45	97.60
h	95.98	98.05
i	96.34	98.33
j	96.50	97.82
k	97.10	99.35

096.75  
 095.32  
 092.06  
 095.42

9710  
 89.03  
 -----  
 810.7

~~B.M.~~  
~~topline~~  
~~at Sta 20+75~~  
 Brace Rock  
 at Saleat  
 Sta 20+75  
 on Route Rd.  
 B.M.  
 El. 100.07



1570

Sta.	Stk.	Ent. Grade	Sub. Hd.	Sub. Hd.
25+00	101.40	102.79	1'-4 $\frac{1}{2}$ "	
26+00	103.74	103.44	0'-2 $\frac{1}{2}$ "	
27+00	102.75	104.25	1'-6"	
28+00	103.53	106.03	2'-6"	
29+00	105.60	107.97	2'-4 $\frac{1}{2}$ "	
30+00	109.87	109.91	0'- $\frac{1}{2}$ "	
31+00	113.38	111.85	1'-6 $\frac{1}{4}$ "	
32+00	115.71	113.79	1'-11 $\frac{1}{2}$ "	
33+00	117.03	115.73	1'-9 $\frac{3}{4}$ "	
34+00	116.92	116.50	0'-5"	
35+00	114.66	116.10	1'-5"	
36+00	113.76	115.70	1'-11"	
37+00	114.41	115.30	0'-11"	
38+00	115.23	117.90	0'-4"	
39+00	115.95	114.50	1'-8"	
40+00	115.87	114.10	1'-9 $\frac{1}{2}$ "	
41+00	115.29	113.70	1'-7"	
42+00	112.67	113.30	0'-7 $\frac{3}{4}$ "	
43+00	112.16	112.69	0'-6 $\frac{1}{4}$ "	
44+00	111.94	112.08	0'-1 $\frac{3}{4}$ "	
45+00	111.16	111.47	0'-3 $\frac{3}{4}$ "	
46+00	111.20	110.86	0'-4 $\frac{3}{4}$ "	
47+00	110.14	110.25	0'-1 $\frac{1}{2}$ "	
48+00	110.21	109.64	0'-6 $\frac{1}{4}$ "	

Sta. S. Side  
Gr. Stk.

South Side

BM. 34+30 - 119.25 - 119.70 135

46+75 - 111.67 - 111.72

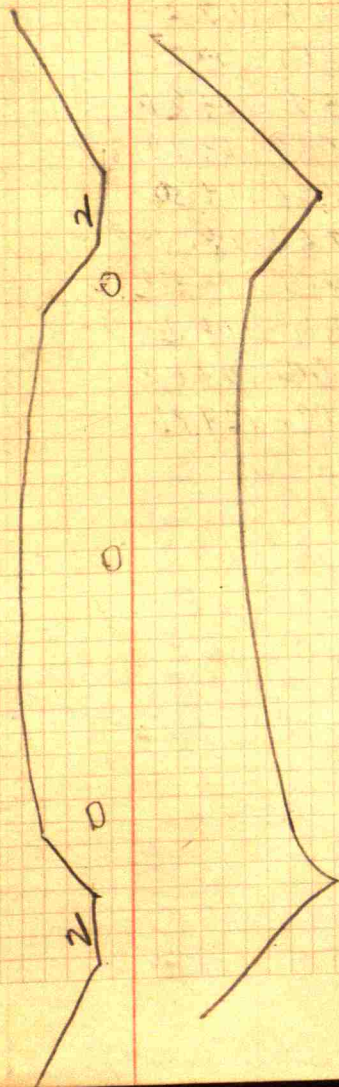
55+00 - 108.44 - 108.46

81+75 - 104.75 - 104.73

49+00	109.16	109.03	0'-1 $\frac{1}{2}$ "
50+00	108.74	108.42	0'-3 $\frac{3}{4}$ "
51+00	108.50	107.81	0'-8 $\frac{1}{4}$ "
52+00	107.01	107.20	0'-2"
53+00	104.45	106.59	2'-1 $\frac{3}{4}$ "
54+00	105.00	105.98	0'-11 $\frac{1}{2}$ "
55+00	105.52	105.37	0'-1 $\frac{3}{4}$ "
56+00	106.08	104.76	1'-3 $\frac{3}{4}$ "
57+00	105.18	104.15	1'- $\frac{1}{4}$ "
58+00	103.32	103.57	0'-3"
59+00	100.95	103.01	2'- $\frac{1}{2}$ "
60+00	102.43	102.44	gd.
61+00	103.32	101.87	
62+00	103.40	101.30	2'-1 $\frac{1}{2}$ "
63+00	102.54	100.73	1'-10"
64+00	101.57	100.16	1'-5"
65+00	100.95	99.59	1'-4"
66+00	96.62	99.02	2'-5"
67+00	99.22	99.18	0'- $\frac{1}{2}$ "
68+00	98.60	99.34	0'-9"
69+00	99.87	99.50	0'-4 $\frac{1}{2}$ "
70+00	99.94	99.66	0'-3 $\frac{1}{2}$ "
71+00	99.63	99.82	0'-2"
72+00	98.85	99.98	1'-1 $\frac{3}{4}$ "
73+00	100.22	100.52	0'-3 $\frac{3}{4}$ "
74+00	102.12	101.06	1'- $\frac{1}{2}$ "

© 98.33

75+00	104.05	101.60	2'-5"
76+00	103.89	102.14	1'-9"
77+00	103.94	102.68	1'-3"
78+00	104.31	103.22	1'-1"
79+00	104.10	103.76	0'-4"
80+00	104.55	104.20	0'-4"
81+00	104.02	104.28	0'-3"
82+00	103.51	104.36	0'-10"
83+00	102.83	104.44	1'-7 $\frac{3}{4}$ "
84+00	106.05	104.52	1'-6"
85+00	104.00	104.60	0'-7"
86+00	105.13	104.68	0'-5"
86+26	105.40	104.70	0'-8 $\frac{1}{2}$ "



Sta 10 E. side N. side  
1+0 15½F 16F  
2+0 15½F 15F  
3+0 15½F 15½F  
4+0 16½F 17F  
5+0 15½F 15½F  
6+0 15F 15½F  
7+0 19½C 18½C  
8+0 14½F 15F  
9+0 17½C 18C  
10+0 18C 17½C  
11+0 18½C 19C  
12+0 20C 21C  
13+0 21C 21C  
14+0 22½C 21C  
15+0 21C 20½C  
16+0 20½C 19C  
17+0 15½F 16F  
18+0 16F 16F  
19+0 18F 17F  
20+0 18F 17F  
21+0 17F 16F  
22+0 15½F 16F  
23+0 19C 15F  
24+0 19½C 17C  
25+0 15F 15½F

Sta	Slide	Slide
26+0	18½C	18C ✓
27+0	15½F	15½F
28+0	16½F	16½F
29+0	16½F	16½F
30+0	20½C	18C ✓
31+0	24C	21C ✓
32+0	20C	21C
33+0	19C	20C
34+0	18½C	20C
35+0	17F	16½F
36+0	17F	17F
37+0	16F	16F ✓
38+0	18½C	17C
39+0	20½C	20½C
40+0	21C	21C ✓
41+0	20C	22C ✓
42+0	15½F	14½F ✓
43+0	15F	15F
44+0	15F	15F
45+0	15F	17F ✓
46+0	19C	19C ✓
47+0	17C	18½C ✓
48+0	18½C	19½C ✓
49+0	18½C	19C
50+0	18C	19C

Sta	S. Side	N. Side	
51+0	19½ C	19½ C	
52+0	15½ F	15 F	
53+0	16½ F	16 F	✓
54+0	15 F	15 F	✓
55+0	18½ C	21 C	✓
56+0	20 C	20 C	✓
57+0	19½ C	18½ C	✓
58+0	15½ F	15½ F	✓
59+0	17 F	17½ F	✓
60+0	20½ F	17 F	✓
61+0	15 F	17 C	✓
62+0	21 C	22 C	✓
63+0	21 C	21 C	✓
64+0	20½ C	21 C	✓
65+0	20½ C	18½ C	✓
66+0	17½ F	16½ F	✓
67+0	17½ C	18½ C	✓
68+0	15 F	16 F	✓
69+0	18 C	18 C	✓
70+0	17½ C	18½ C	✓
71+0	14½ F	18 C	✓
72+0	15 F	16 F	✓
73+0	17 C	18 C	✓
74+0	19 C	19 C	✓
75+0	21 C	20 C	



Sta.	S. Side	N. Side	
76+0	20C	19C	✓
77+0	20C	18½C	✓
78+0	19C	17½C	✓
79+0	18½C	15F	✓
80+0	18½C	18C	✓
81+0	17C	18C	✓
82+0	15F	15½F	✓
83+0	16F	16F	✓
84+0	20C	19½C	
85+0	14½F	15½F	✓
86+0	19C	19C	
86+R6	19½C	19½C	

150  
County line Rd

Sta 18+50 - Rose Road

Sta 39+60 - S. About

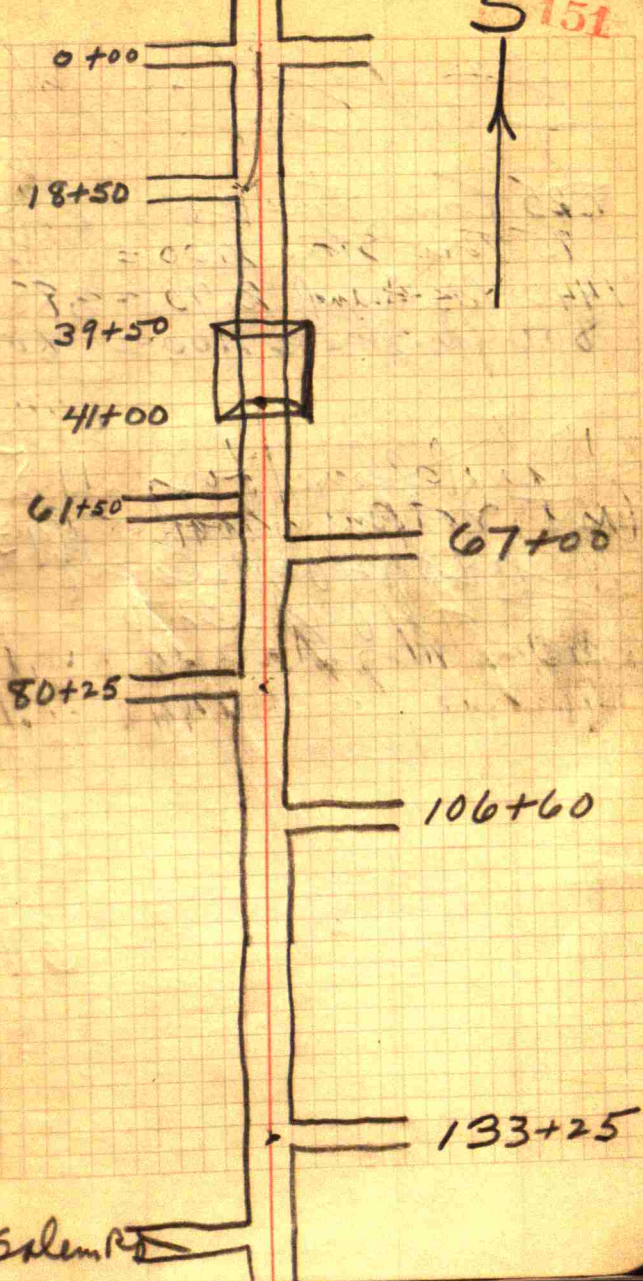
Sta 41+00 - W. About

Sta 80+25 - Engelmist Rd E  
67+00 Rd W

Sta 106+60 - Road W  
61+50 - Rd E

Sta 133+25 - Road W

Stone Road = 2460 yds = 23 1/2 miles  
Gravel " = 2460 yds = 23 1/2 miles



# Cost Completing Road

825 Tons Stone 2.40 = 1980<sup>00</sup>  
 75 Tons Stone 1.00 = 75<sup>00</sup>  
 1440 Yds Gravel 2.70 = 3888<sup>00</sup>  
 800 yds Gravel 1.00 = 800<sup>00</sup>

6743.00

Amount allowed for  
 Cost not put in road 1188.00  
 11 Cars of 40 yds each  
 = 440 yds @ 2.70

6743.00

$$\begin{array}{r}
 1050 \\
 270 \\
 \hline
 1350 \\
 18.5 \\
 40 \\
 \hline
 740.00 \\
 3 \\
 \hline
 2220
 \end{array}$$

2.00

$$\begin{array}{r}
 18.5 \\
 9.5 \\
 \hline
 28.0 \\
 27 \\
 40 \\
 \hline
 1080 \\
 3020 \\
 \hline
 3020
 \end{array}$$

800 Sandstone at 1.50 = 1200.00  
 300 yd stone @ 3.00 = 900.00  
 1080 yds Gravel = 1500.00

$$\begin{array}{r}
 3600.00 \\
 3250.00 \\
 \hline
 6850.00 \\
 3500.00 \\
 \hline
 10350.00
 \end{array}$$

10350.00

$$\begin{array}{r}
 740 \\
 740 \\
 370 \\
 \hline
 1850
 \end{array}$$

$$\begin{array}{r}
 \text{all} \\
 \text{stone} \\
 \text{Gravel} \\
 \hline
 800 \\
 2220 \\
 1850 \\
 \hline
 4870 \\
 3600
 \end{array}$$

$$\begin{array}{r}
 1300 \\
 1300 \\
 650 \\
 \hline
 3250
 \end{array}$$