LOCATION SURVEY
S.T.H. Nº52
Connection at Fort Snelling

CO. PROJ Nº
FILE Nº 7

Office of Ramsey Co. Engineer
ST. PAUL, MINN.
Filed 4/9/26
File No. 7

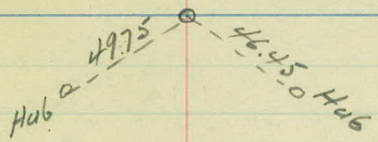
S.T.H. #52 Connection
At Fort Snelling

Alingment Notes
Sta 981+57 To 1079+23.64

Austin
Skooglan
Fritz
Jankoski
Alexander
} Party

3/22 To 3/29 - 1926

Station	Ang. Lt	Ang. Rt	
1005+00	P.O.T.		
989+78	Mont 10' Rt.		
988+87	P.T.		N. 65° 25' E.
985+35	P.I.	36°30'	
981+57	P.C. Beg. Proj.		
959+13.6	P.O.T - State Notes		N. 28° 55' E.



10° Govt. Mont.

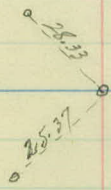
5° Curve Rt.

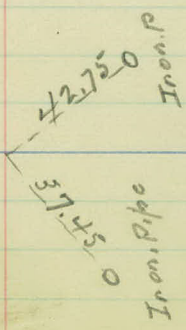
Δ = 36° 30'

Rad = 1146.28

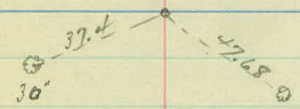
Tang = 377.99

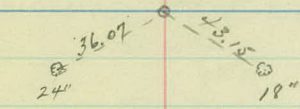
Length = 730.00





Station	Ang. Lt	Ang. Rt.
1053+05.6 P.O.T		
1036+21.6 P.O.T.		N. 14°00' E
1023+52.25 P.T.		
1021+93.9 P.I.	51°25'	
1020+09.49 P.C.		





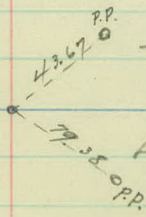
15° Curve. 4t.

$\Delta = 51° 25'$

Rad = 383.07 ✓

Tang = 184.43 ✓

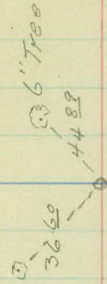
Length = 342.78 ✓



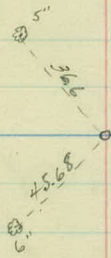
Station	Ang. Lt.	Ang. Rt	
1075+72.61 P.T.			N. 80° 15' E.
1074+67 P.I.		44°42'	
1073+49 P.C.			
1069+38 P.O.T			N. 35° 33' E.
1061+27.94 P.T.			
1058+61.85 P.I.		21°33'	
1055+89 P.C.			

Sta - Def

1073+49 = 0°00'
1074+00 = 5°05'
+50 - 10°05'
1075+00 - 15°05'
+50 - 20°05'
1075+72½ - 22°21'

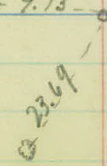


20° Curve Rt.
Δ = 44°42'
Rad = 287.94 ✓
Tang = 118.39 ✓
Length = 223.50 ✓



Sta. Def

1055+89.19 - 0°00'
1056+00 - 0°13'
1057+00 - 2°13'
1058+00 - 4°13'
1059+00 - 6°13'
1060+00 - 8°13'
1061+00 - 10°13'
+27.94 - 10°46½'



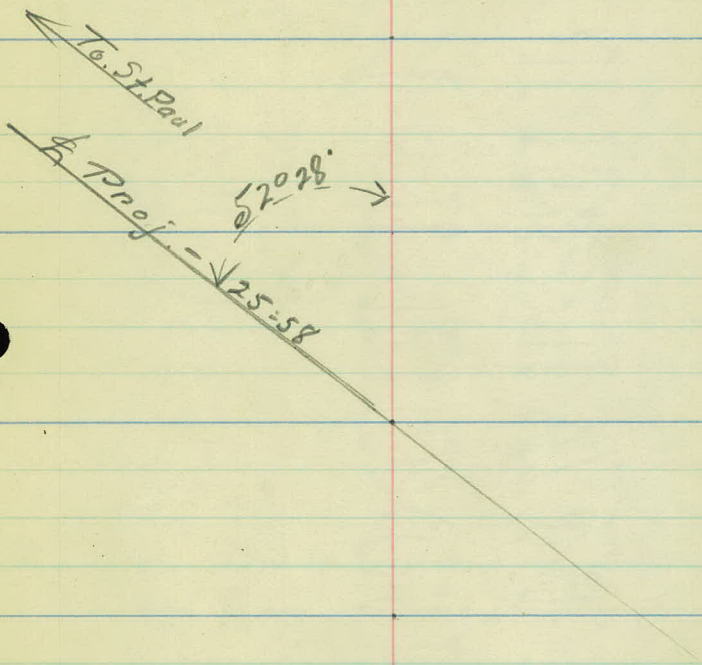
4° Curve Rt.
Δ = 21°33'
Rad = 1432.69 ✓
Tang = 272.66 ✓
Length = 538.75 ✓

Station Ang. Lt. ℄ Ang. Rt.

1079+23.64 = 12+34.35 (Proj. 25.58

1078+529 } Edge Mpls. Pav.
1078+26 } ℄ MPls. Pav.

1078+00 Edge M.Pls. Pav.


To St. Paul
2° 28'
Proj. - 25:58

S.T.H. #52 Connection
At Fort Snelling.

& levels
Sta 981+57 To 1079+23.44

Station	+	H.I.	−	Rod.	Elev.
B.M.	8.06	821.72			813.66
T.P.	7.09	828.44	0.37	821.35	
981+57	P.C.			5.9	822.5
982+00				5.7	22.7
+50				5.5	22.9
983+00				5.2	23.2
+57				5.4	23.0
+77				6.7	21.7
+85				4.7	23.7
984+00				4.7	23.7
+50				5.1	23.3
985+00				6.8	21.6
+50				8.7	19.7
986+00				10.8	17.6
T.P.	3.67	821.97	10.14	818.30	
+50				3.6	18.4
987+00				2.4	19.6
+50				3.7	18.3
988+00				4.5	17.5
+50				6.3	15.7
989+00				7.4	14.6
+50				8.8	13.7
990+00				8.0	14.0
+50				8.0	14.0
991+00				7.3	14.7
T.P.	0.26	815.42	6.81	815.16	
B.M					813.66

3-25-26

Spike in 40" Cottonwood 100' Rt. Sta (991+50 State)

Sp. in 40" Tree. 350' Lt. St. 990+75 = (991+50 State)

Station	+	H.I	−	Rod	Elev
		815.42			
991+50				2.2	813.2
992+00				3.2	12.2
+50				3.7	11.7
993+00				5.0	10.4
+46				6.3	09.1
+54				6.3	09.1
+56				8.2	07.2
+58.5				8.2	07.2
+61.5				6.2	09.2
+74				6.5	08.9
+81				5.4	10.0
994+00				4.8	10.6
+43				4.0	11.4
+50				5.2	10.2
995+00				3.8	11.6
+27				4.0	11.4
+34				5.0	10.4
+50				4.2	11.2
996+00				3.5	11.9
+50				3.4	12.0
997+00				2.8	12.6
T.P	3.23	816.42	2.23	813.19	
998+00				5.2	11.2
+50				3.9	12.5
+36				3.8	12.6

Ditch Bottom
" "

Station	+	H.I.	—	Rod	Elev.	
		816.42				
999+00				4.9	811.5	
1000+00				4.9	11.5	
1001+00				4.6	11.8	
1002+00				4.8	11.6	
1003+00				5.3	11.1	
1004+00				4.9	11.5	
T.P.	4.50	816.57	4.35	812.07		
1005+00				5.1	11.5	
1006+00				6.4	10.2	
1007+00				5.5	11.1	
B.M.				4.04	812.53	CK 812.54
1008+00				5.0	11.6	
1009+00				5.2	11.4	
1010+00				4.8	11.8	
T.P.	4.40	816.91	4.06	812.51		
1011+00				5.0	11.9	
+50				5.7	11.2	
1012+00				5.3	11.6	
1013+00				4.3	12.6	
1014+00				4.6	12.3	
1015+00				4.2	12.7	
1016+00				3.2	13.7	
1017+00				2.0	14.9	
T.P	4.72	820.35	1.28	815.63		
+25				4.9	15.5	

Sp. in 12" OAK 50' Rt. Sta. 1009+60

Station	+	H.I.	−	Rod.	Elev	
		820.35				
1018+00				5.7	814.7	
1019+00				5.4	15.0	
+38				4.6	15.8	
+47				3.0	17.4	
+50				5.0	15.4	
+63				5.5	14.9	
+69				3.8	16.6	
+91				4.0	15.4	
+94				6.8	13.6	
+96				6.8	13.6	
+97				4.8	15.6	
1020+00				4.8	15.6	
+07				4.4	16.0	
+34.5				4.8	15.6	
+37				5.7	14.7	
+38				5.7	14.7	
+42.5				4.5	15.9	
+50				4.8	15.6	
1021+00				5.1	15.3	
+04				5.0	15.4	
+15				3.8	16.6	
+23				5.8	14.6	
+24				5.8	14.6	
+28				5.2	15.2	
+50				5.4	15.0	
B.M.	2.49	818.03	4.81	815.54	CA. 815.56	

Ditch Bottom
vv vv

℄ Road

Ditch Bottom
vv vv

5/8 in P.P. 100' Rt. Sta 1021+40

Station	+	H.I.	−	Rod	Elev.
		818.03			
1022 +00				3.7	814.3
+50				5.1	12.9
1023 +00				6.8	11.2
+50				6.9	11.1
1024 +00				6.6	11.4
1025 +00				6.4	11.6
1026 +00				6.0	12.0
T.P.	7.00	818.70	6.33	811.70	
1027 +00				6.0	12.7
1028 +00				5.6	13.1
1029 +00				5.1	13.6
1030 +00				4.6	14.1
B.M.				0.58	818.12
1031 +00				4.1	14.6
1032 +00				3.7	15.0
T.P.	7.52	822.30	3.92	814.78	
1033 +00				6.4	15.9
1034 +00				5.5	16.8
1035 +00				5.1	17.2
1036 +00				4.7	17.6
+50				4.8	17.5
1037 +00				5.2	17.1
1038 +00				6.6	15.7
T.P.	3.13	818.39	7.04	815.26	
1039 +00				3.5	14.9

Mac

Top. Hydrant 125' Rt. Sta 1030+45

Station	+	H.I. 818.39	−	Rod.	Elev.	
1040 +00				4.2	814.2	
1041 +00				5.0	13.4	
1042 +00				5.3	13.1	
1043 +00				5.6	12.8	
1044 +00				5.7	12.7	
B.M.				0.17	818.22	Check 818.22
1045 +00				5.7	12.7	
T.P.	5.17	818.41	5.15	813.24		
1046 +00				5.7	12.7	
1047 +00				5.5	12.9	
1048 +00				5.3	13.1	
1049 +00				5.0	13.4	
1050 +00				4.6	13.8	
1051 +00				4.1	14.3	
1052 +00				3.7	14.7	
T.P.	7.50	821.84	4.07	814.34		
1053 +00				6.4	15.4	
1054 +00				5.8	16.0	
B.M. +50				5.4 1.81	16.4 820.03	Check 820.05
1055 +00				5.1	16.7	
1056 +00				5.4	16.4	
+40				5.6	16.2	
1057 +00				5.9	15.9	
1058 +00				6.5	15.3	
T.P.	5.73	821.88	5.69	816.15		

Top. Hydrant. 125' Rt. Sta 1044+00

Top. Hydrant. 25' Rt. Sta 1054+50

Station	+	H.I.	−	Rod	Elev.	
		821.88				
1059+00				6.5	815.4	
1060+00				6.0	15.9	
1061+00				5.5	16.4	
1062+00				5.1	16.8	
1063+00				4.6	17.3	
1064+00				4.0	17.9	
1065+00				3.5	18.4	
T.P.	6.17	825.53	2.52	819.36		
1066+00				6.7	18.8	
1067+00				6.0	19.5	
1068+00				5.4	20.1	
1069+00				4.8	20.7	
[illegible]+50				4.6	20.9	
1070+00				4.6	20.9	
+50				5.0	20.5	
B.M.				1.59	823.94	Notch 823.96
1071+00				5.5	20.0	
T.P	2.45	827.27	5.71	819.82		
1072+00				3.4	18.9	
1073+00				4.5	17.8	
B.M	3.86	821.51	4.62	817.65		
+50				4.3	17.2	
1074+00				5.0	16.5	
+43				5.7	15.8	
+43				5.25	16.26	
+50				5.25	16.26	

Top. Hydrant. 30' Rt. Sta. 1070+70

Top. Hydrant. 60' Lt. Sta. 1075+60

Top. Curb
on Sidewalk

Station	+	H.I. 821.51	−	Rod	Elev.
1075+00				5.0	816.5
+50				4.8	16.7
1076+00				5.1	16.4
+61				6.1	15.4
1077+00				7.4	14.1
+50				9.4	12.1
+70				10.0	11.5
T.P.	4.42	814.27	11.66	809.85	
1078+00				6.52	807.75
+26				6.63	807.64
+52.9				7.17	807.10
B.M.				5.61	808.66 = 113.28

CA 808.68

Edge Pav

" "

Edge Pav

Spike in 30" Tree. 102' Rt. Sta 11+62 { Proj. 25-58

St. H. #52 Connection
At. Fort Snelling.

X-Sections
Sta 981+57-1079+23.64

Station	+	H.I.	−	Rod	Elev.
B.M.	9.24	822.90			813.66
T.P.	5.93	828.22	0.61	822.29	
981+57	P.C.			5.6	22.6
982+00				5.7	22.5
+50				5.4	22.8
983+00				5.0	23.2
+50				5.2	23.0
+75				6.6	21.6
984+00				4.5	23.7
985+00				6.6	21.6
986+00				10.6	17.6
+50				10.0	18.2
987+00				8.7	19.5
T.P.	0.43	820.62	8.03	820.19	
+50				2.4	18.2

S/p. in 40" Cottonwood. 350' Ft. Sta 990+75 = { State. 991+50 }

6.7	6.2	7.3	7.3	6.0		5.8	7.6	26	6.3	6.6	6.5
50	20	19	18	14	5.6	14	19	20	22	38	50
5.7	6.1	7.6	7.0	6.0		6.1	8.0	8.0	6.6	6.6	6.6
50	21	19	18	16	5.7	15	19	20	22	40	50
5.7	5.6	6.0	7.2	7.2	5.7	5.5		5.8	7.3	7.3	5.5	6.0
50	35	24	22	21	18	10	5.4	13	16	17	18	50
5.5	5.0	7.0	5.5	4.8		5.2	6.8	6.8	5.2	5.3
50	31	28.5	26	9.0	5.0	8.0	11	12	14	50
4.6	5.0	6.8	5.3	4.8		5.4	6.6	6.6	4.7	5.4
50	28	35	32	15	5.2	15	50	6.0	7.0	50
4.7	5.0	7.0	5.3	5.0	5.3		4.7	5.0	5.6
50	43	41	37	20	4.0	6.6	2.0	30	50
4.8	5.1	7.1	5.3	4.8	5.3	6.5	4.6		5.2	5.8
50	48	45	42	26	10	6.0	4.0	4.5	19	50
5.9	6.0	6.1	6.4	7.3	5.7	5.6	6.2		7.8	8.4
56	50	42	38	34	33	21	12	6.6	25	50
9.4	10.2	10.2		10.4	10.2
50	36	23	10.4	25	50
10.6	10.7		10.0	10.0
50	23	10.0	25	50
9.0	9.0	9.4		9.0	9.1
50	17	6.0	8.7	25	50
1.8	1.6	1.8		1.7	1.7	1.7
50	25	1.0	2.4	8.0	25	50

Station	+	H.I.	−	Rod.	Elev.
		820.62			
988 +00					817.3
989 +00					14.6
990 +00					13.9
991 +00					14.6
992 +00					12.2
993 +00					10.2
T.P.	6.47	917.42	9.67	910.95	
+50					09.3
994 +00					10.4
+67					11.0
995 +00					11.5
+50					11.1
996 +00					11.8

64 & 74

4.5/50	3.5/27	2.8/10	3.3	3.3/6.0	4.0/7.0	3.8/14	2.8/19	2.8/50	
4.7/50	4.4/25		4.0	4.2/24	6.0/50				
7.0/50	6.8/25		6.7	6.5/25	6.3/50				
7.3/50	6.5/25		6.0	6.8/25	6.7/50				
8.2/50	8.0/21		8.4	7.7/8.0	8.2/9.0	5.2/13	7.6/15	9.1/50	
10.0/50	10.7/30	10.8/14	10.4	10.2/25	10.6/50				
9.2/50	9.2/40	8.4/27	8.1	8.7/25	9.0/50				
7.5/50	8.5/46	8.6/38	7.6/35	7.3/17	8.0/14	8.2/8.0	7.0	7.0/25	6.6/50
7.0/50	6.7/44	8.1/36	7.5/31	7.0/29	5.5/23	5.2/8.0	5.8/5.0	6.4	6.0/4.0	5.8/21	6.0/50
6.2/50	6.4/35	7.8/27	7.6/17	6.7/14	5.9	5.9/27	5.9/50				
5.6/50	6.0/39	5.7/20	6.3	6.8/3.0	6.8/8.0	5.8/11	5.8/29	5.9/50			
4.8/50	5.3/41	5.3/23	5.6	6.0/22	5.1/35	5.8/50					

Station	+	H.I.	−	Rod	Elev
		817.42			
997+00					12.6
998+00					11.2
999+00					11.4
1000+00					11.4
T.P.	4.09	816.39	5.12	812.30	
1001+00					11.8
1002+00					11.5
1003+00					11.1
1004+00					11.5
1005+00					11.4
1006+00					10.1
1007+00					11.0
B.M.	3.99	816.52	3.93	812.46	812.53
1008+00					11.5

Ht Q TR

5.0/50	4.9/25	4.8	5.4/20	5.8/35	6.4/42	6.1/50
5.4/50	5.6/27	6.2	6.4/25	6.8/50		
5.1/50	5.6/25	6.0	6.3/27	6.6/50		
5.6/50	6.0/22	6.0	6.4/25	6.5/50		
4.5/50	4.5/25	4.6	4.8/30	4.8/50 ✓		
4.7/50	4.7/25	4.9	5.1/25	5.1/50 ✓		
5.0/50	5.2/25	5.3	5.6/25	5.3/50		
5.1/50	5.0/25	4.9	5.0/25	5.0/50		
5.2/50	5.2/22	5.0	5.6/28	5.6/50		
6.0/50	6.2/25	6.3	6.6/30	6.5/50		
5.2/50	5.1/25	5.4	5.8/27	5.5/50		

Sp. in 12" Oak 50' Ht. Sta 1009+60

5.4/50	5.0/25	5.1	5.2/27	5.4/50

Station	+	H.I. 816.52	−	Rod	Elev
1009+00					11.5
1010+00					11.7
1011+00					12.0
+50					11.3
1012+00					11.6
1013+00					12.6
1014+00					12.2
1015+00					12.7
T.P.	6.17	819.73	2.96	813.56	
1016+00					13.7
1017+00					14.9
1018+00					14.6
1019+00					14.9

5th 2 TR

5.1/50	4.8/30	5.0	5.2/20	5.0/50	✓				
6.0/50	5.3/30	4.8	4.8/25	4.7/50	✓				
4.8/50	4.7/25	4.5	4.5/25	4.7/50	✓				
4.9/50	5.1/27	5.2	4.8/22	4.5/50	✓				
5.1/50	5.4/22	4.9	4.4/30	3.8/50	✓				
5.0/50	4.4/25	3.9	3.5/27	3.4/50	✓				
4.5/50	4.5/25	4.3	3.7/25	3.3/50	✓				
4.8/50	4.0/23	3.8	3.3/10	3.3/25	2.5/50	✓			
6.8/50	6.4/25	6.0	5.8/25	6.0/50	✓				
5.3/50	4.7/25	4.8	4.6/12	4.8/24	5.7/37	5.8/50	✓		
4.3/50	4.5/37	4.3/10	5.1	5.4/22	5.5/50	✓			
5.4/50	4.9/20	4.8	4.3/13	4.0/26	6.0/29	6.8/31	5.7/33	4.2/37	4.9/50

Station	+	H.I.	−	Rod	Elev.
		819.73			
1019+32					15.8
+45					17.3
+58					14.9
+69					16.5
1020+00					15.4
+50					15.5
1021+00					15.4
B.M.	3.62	819.16	4.17	815.56	815.54
+50					15.0
1022+00					14.3
+50					13.1
1023+00					11.5
+50					11.1

H. & RA

5.0/50 4.4/25 3.9 2.3/8.0 3.5/10 5.7/11 6.4/14 4.0/15 3.3/21 4.0/30 4.5/50 ✓

4.8/50 4.0/22 4.3/12 2.4 2.7/1.5 6.0/5.0 6.0/7.0 3.4/9.0 3.8/18 3.7/31 4.6/50 ✓

4.4/50 3.9/25 3.3/12 4.8 4.6/2.5 3.2/4.0 3.8/23 4.3/50 ✓

4.3/50 4.1/37 3.4/18 2.5/12 3.3/9.0 6.0/6.0 6.0/4.0 3.6/2.0 3.2 3.8/25 4.3/50 ✓

4 RR'
4.7/50 4.2/4.3 4.1/25 4.3 4.3/23 4.9/50 ✓

4.7/50 4.4/27 4.2 4.4/26 4.2/50 ✓

4 RR'
5.5/50 4.6/30 4.3 4.4/10 4.6/27 4.6/50 ✓

4.0/20 3.2/16 4.0/14 4.1/12 5.0/10 5.0/9.0 4.1/7.0 4.2 4.3/18 4.6/19 3.4/21 3.1/33 3.5/36 4.0/50
5.5/50

6.6/50 6.5/38 5.9/32 4.4/26 6.2/22 6.2/20 5.1/16 4.9 5.2/8.0 5.6/10 5.8/12 4.0/17 3.4/24 3.8/50

8.8/50 8.1/34 7.7/32 7.6/20 6.5/15 6.1 5.9/9.0 6.8/12 6.8/13 3.8/18 5.1/23 4.8/20 5.5/42 4.5/50

C
8.8/40 8.2/28 9.0/16.2 8.5/16.2 7.7 7.5/25 6.8/39 6.8/50 ✓

C C C
9.6/42 8.1/41 9.3/19.6 8.6/19.6 8.1 8.5/19.7 8.1/19.7 8.1/33

Station	+	H.I.	−	Rod	Elev	
		819.16				
1024+00					11.5	
1025+00					11.7	
1026+00					12.1	
T.P.	7.15	819.03	7.28	811.88		
1027+00					12.6	
1028+00					13.1	
1029+00					13.6	
1030+00					14.1	
B.M.				0.89	818.14	818.12
1031+00					14.5	
1032+00					15.0	
1033+00					15.8	
T.P.	7.50	822.60	3.93	815.10		
1034+00					16.9	
1035+00					17.2	

Rt. 2 Rt

	S.Walk	C				C		
	7.5	8.1	8.5		8.5	8.1	7.9	7.7 ✓
	42.6	19.5	19.5	7.7	19.6	19.6	20.0	33
	S.W	C				C		
	7.2	7.7	8.2		8.2	7.8	7.6	✓
	42.6	19.4	19.4	7.5	19.6	19.6	33	
	S.W	C				C		
	6.9	7.5	8.0		7.9	7.2	7.1	✓
	42.5	19.4	19.4	7.1	19.6	19.6	33	
	S.W	C				C		
	6.2	6.7	7.2		7.2	6.7	6.3	✓
	42.5	19.6	19.6	6.4	19.5	19.5	33	
	S.W.	C				C		
	5.6	6.2	6.6		6.6	6.2	5.8	✓
	42.5	19.5	19.5	5.9	19.4	19.4	33	
		C				C		
	5.0	5.5	6.0		6.0	5.6	5.5	✓
	42.7	19.5	19.5	5.4	19.5	19.5	33	
		C				C		
	4.5	5.0	5.5		5.5	5.0	4.6	✓
	42.7	19.7	19.7	4.9	19.4	19.4	33	
Top. Hyd } 1030+45 }	S.W	C				C		
	4.1	4.6	5.0		5.0	4.7	4.5	✓
	42.6	19.5	19.5	4.5	19.5	19.5	33	
	S.W	C						
	3.6	4.2	4.6		4.6	4.2	4.1	✓
	42.5	19.5	19.5	4.0	19.5	19.5	33	
	S.W	C						
	2.8	3.3	3.7		3.8	3.4	3.2	✓
	42.6	19.5	19.5	3.2	19.5	19.5	33	
	S.W					C		
	5.4		6.2		6.4	6.0	5.8	✓
Driveway	42.7		19.5	5.7	19.4	19.4	33	
	S.W	C				C		
	5.0	5.4	5.8		5.9	5.4	5.2	
	42.7	19.5	19.5	5.4	19.4	19.4	33	

Station	+	H.I.	−	Rod	Elev
		822.60			
1036+00					17.6
1037+00					17.1
1038+00					15.8
1039+00					15.0
T.P.	3.44	819.98	8.06	814.54	
1040+00					14.2
1041+00					13.5
1042+00					13.2
1043+00					12.8
1044+00					12.7
T.P.	6.02	818.64	5.36	813.62	
B.M.	0.68	818.90		0.42	818.22
1045+00					12.7
1046+00					12.7

LT C RT

S.W	C				C			
4.7	5.2	5.5			5.6	5.2	5.1	
42.5	19.5	19.5	5.0		19.3	19.3	33	
S.W.	C				C			
5.0	5.5	6.0			6.0	5.6	5.1	
42.7	19.7	19.7	5.5		19.3	19.3	33	
S.W	C				C			
6.5	7.0	7.3			7.4	7.0	6.7	
42.6	19.6	19.6	6.8		19.4	19.4	33	
S.W	C				C			
7.3	7.8	8.2			8.1	7.7	7.6	
42.5	19.5	19.5	7.6		19.5	19.5	33	
W	C				C			
3.4	3.9	4.3			4.3	3.9	3.5	✓
42.6	19.8	19.8	3.8		19.8	19.8	33	
W	C				C			
4.0	4.5	4.9			4.9	4.5	4.0	✓
42.5	19.4	19.4	4.5		19.5	19.5	33	
W	C				C			
4.6	5.0	5.4			5.4	5.0	4.4	✓
42.5	19.5	19.5	4.8		19.5	19.5	33	
W	C				C			
4.8	5.4	5.8			5.7	5.3	5.0	✓
42.4	19.6	19.6	5.2		19.5	19.5	33	
	C				C			
5.0	5.6	6.0			6.0	5.6	DRIVEWAY	✓
42.5	19.5	19.5	5.3		19.5	33	RT.	
	C				C			
5.9	6.4	6.8			6.8	6.4	6.1	✓
42.7	19.6	19.6	6.2		19.5	19.5	33	
					C			
5.8	6.2	6.7			6.7	6.3	5.7	✓
42.5	19.6	19.6	6.2		19.6	19.6	33	

Station	+	H.I.	−	Rod.	Elev.	
		818.90				
1047+00					13.0	
1048+00					13.1	
T.P.	6.93	820.14	5.69	813.21		
1049+00					13.4	
1050+00					13.8	
1051+00					14.4	
1052+00					14.7	
1053+00					15.5	
1054+00					16.1	
B.M.				0.07	819.07	820.07
T.P	3.85	820.15	3.84	816.30		
1055+00					16.8	
1056+00					16.5	
1057+00					16.0	

4t | 4t

S.W. 5.4 / 42.6 | C 6.1 / 19.6 | 6.5 / 19.6 | 5.9 | C 6.5 / 19.5 | 6.1 / 19.5 | 5.7 / 33 ✓

C 5.4 / 42.7 | 5.9 / 19.7 | 6.3 / 19.7 | 5.8 | C 6.2 / 19.8 | 5.8 / 19.8 | 5.5 / 33 ✓

C 6.3 / 42.8 | 6.8 / 19.7 | 7.3 / 19.7 | 6.7 | 7.2 / 19.8 | 6.8 / 19.8 | 6.5 / 33 ✓

S.W. 6.0 / 42.7 | C 6.4 / 19.7 | 6.8 / 19.7 | 6.3 | C 6.8 / 19.9 | 6.4 / 19.9 | 6.0 / 33 ✓

Road. 4t | 5.6 / 33 | 6.2 / 18 | 5.7 | C 6.4 / 19.9 | 6.0 / 19.9 | S.W 5.4 / 42.5 ✓

C 4.8 / 33 | 5.4 / 19.8 | 5.7 / 19.8 | 5.4 | C 5.8 / 19.9 | 5.3 / 19.9 | S.W 4.7 / 42.3 ✓

C 4.2 / 33 | 4.7 / 19.8 | 5.1 / 19.8 | 4.6 | C 5.1 / 19.8 | 4.7 / 19.8 | S.W 3.8 / 42.3 ✓

C 3.8 / 33 | 4.1 / 19.7 | 4.5 / 19.7 | 4.0 | C 4.5 / 19.8 | 4.1 / 19.8 | S.W 3.1 / 42.3 ✓

C 3.3 / 33 | 3.5 / 19.6 | 3.9 / 19.6 | 3.4 | C 3.8 / 19.9 | 3.7 / 25 | 3.4 / 25 | S.W 3.0 / 42 ✓ Rad. 4t

3.1 / 33 | 4.0 / 19.7 | 4.4 / 19.7 | 3.7 | 4.0 / 20 | 4.0 / 25 | C 3.7 / 25 | S.W 3.4 / 41.8 ✓ Rad.

S.W 4.0 / 33 | 4.1 / 23.2 | 4.9 / 19 | 4.2 | 4.7 / 17 | 4.5 / 19 | 4.6 / 20.6 | 4.0 / 38.2 ✓

Station	+	H.I	−	Rod	Elev
		820.15			
1058+00					15.5
1059+00					15.4
1060+00					16.0
1061+00					16.6
1062+00					16.8
T.P	7.26	823.93	3.48	816.67	
1063+00					17.3
1064+00					17.9
1065+00					18.3
1066+00					18.9
1067+00					19.6
1068+00					20.1
1069+00					20.7
T.P.	4.14	824.61	3.46	820.47	

64. & RH.

5.3 / 33	4.4 / 21.0	5.3 / 18.5	5.4 / 17.5	4.7	5.1 / 15.6	5.0 / 18	4.6 / 19.5	S.W 4.4 / 30.5			
5.0 / 26.5	4.6 / 18.0	5.3 / 15.8	5.3 / 14.4	5.0 / 13.0	4.8	5.2 / 15	5.2 / 15.7	4.7 / 17.4	S.W 4.5 / 23.0 ✓		
4.5 / 33	3.8 / 17.5	4.4 / 15.5	4.6 / 14		4.2	4.7 / 14.5	4.7 / 16	S.W 4.2 / 17.4 ✓			
4.0 / 33	3.3 / 17.0	4.1 / 14.2			3.6	4.1 / 15.2	C + S.W 3.6 / 15.2 ✓				
4.0 / 33.0	3.0 / 17.3	3.6 / 15.2	3.7 / 13		3.4	3.8 / 15.0	C + S.W 3.3 / 15.0 ✓				
6.8 / 33	6.2 / 18.5	6.7 / 15.8	6.8 / 13		6.6	7.0 / 15	C + S.W 6.6 / 15.0 ✓				
6.8 / 33	5.8 / 9.8 / 17.3	6.2 / 15.6	6.3 / 14.5		6.0	6.5 / 15	C + S.W 6.0 / 15 ✓				
5.9 / 33	5.3 / 17	5.8 / 15	5.8 / 13.0		5.6	6.0 / 15.0	C + S.W 5.5 / 15.0 ✓				
5.3 / 33	4.9 / 18.5	5.4 / 12.5			5.0	5.5 / 15	C + S.W 5.1 / 15 ✓				
4.5 / 33	4.3 / 17	4.7 / 12.5			4.3	4.7 / 15	C + S.W 4.4 / 15 ✓				
3.8 / 33	3.5 / 26	3.6 / 17	4.0 / 14.5	4.2 / 12.5	3.8	4.2 / 15	C + S.W 3.8 / 15 ✓				
3.2 / 33	3.2 / 26	3.3 / 16.8	3.4 / 15.3	3.6 / 13.5	3.2	3.6 / 15	C + S.W 3.2 / 15 ✓				

Station	+	H.I.	−	Rod	Elev	
		824.60				
1070+00					20.9	
B.M.				0.62	823.98	823.96
1071+00					20.0	
1072+00					18.9	
1073+00					17.8	
+50					17.2	
1074+00					16.6	
+50					16.3	
B.M.	2.06	819.76	6.91	817.70		Check 817.68
1075+00					16.5	
+50					16.8	
1076+00					16.4	
1077+00					14.2	
+50					12.2	

5th & 8th.

3.7/33	3.5/17	4.0/15.4	4.1/13.6		3.7	4.1/15	3.5/15	C+S.W ✓						
3.9/33	3.9/25	4.2/23.5	4.0/17.3	4.8/14.5	4.6	4.8/15	4.3/15	C+S.W ✓						
5.0/33	5.0/25.5	5.2/24.5	5.2/17.3	6.0/14.5	5.7	6.0/15	5.5/15	C+S.W ✓						
6.0/33	6.0/28	6.5/27.3	6.5/16.5	7.1/14.4	6.8	7.2/15.2	6.7/15.2	6.6/21	6.3/23	6.2/33	C+S.W			
6.7/33	7.2/17	7.7/15			7.4	7.8/15.2	7.4/15.2	7.2/21	6.8/24	6.7/33	C+S.W			
7.3/33	7.7/29	7.7/21.3	8.3/18.7	8.0/4.6	8.0	8.3/10.7	7.8/10.7	7.8/16.5	7.3/19.5	7.2/33	C+W ✓			
9.0/33	8.6/17	8.8/2.6	9.8/2.6	& W 8.3/3.3	7.9/7.0	7.2/33	& Rd ✓							
4.7/50.5	4.8/33	C 4.4/33	4.2/25	3.7/18	3.3	2.5/33	& Rd ✓							
3.8/33	3.0	2.5/33												
4.3/33	3.4	2.8/33												
5.7/33	5.6	6.2/28	5.9/38											
& MDHS P&V 9.8/75	10.4/50	C 9.8/50	7.4/34	7.6	7.6/18	8.2/34	7.9/43	8.4/48	& Rd. 8.3/60	8.2/92	8.6/72			

Station	+	H.I.	−	Rod	Elev
		819.76			
1077+69					11.6
T.P.	2.53	812.58	9.71	810.05	
1078+00	Edge Pav.				07.8
+76	Ctr Pav.				07.7
B.M.			3.88	808.70	Check 808.68

Lt. ℄ Rt.

MP/S. P&V.

10.5 / 52.5	11.0 / 28.6	C 10.4 / 28.6	9.0 / 20	8.3 / 7.5	8.2	8.0 / 76	10.0 / 29	℄ Rd 10.0 / 42.5	9.5 / 58	9.5 / 70

Top. Curb 3.5 / 47	4.1 / 47	℄ P&V. 4.1 / 24	4.8	℄ Rd 4.8 / 16.5	4.2 / 46	4.8 / 54.5	T.R. 4.7 / 55	T.R. 4.6 / 62		

℄ Edge P&V 4.8 / 23.7	4.9	T. Curb 5.5 / 24.7	4.9 / 24.7	5.8 / 38	5.2 / 46	5.2 / 50				

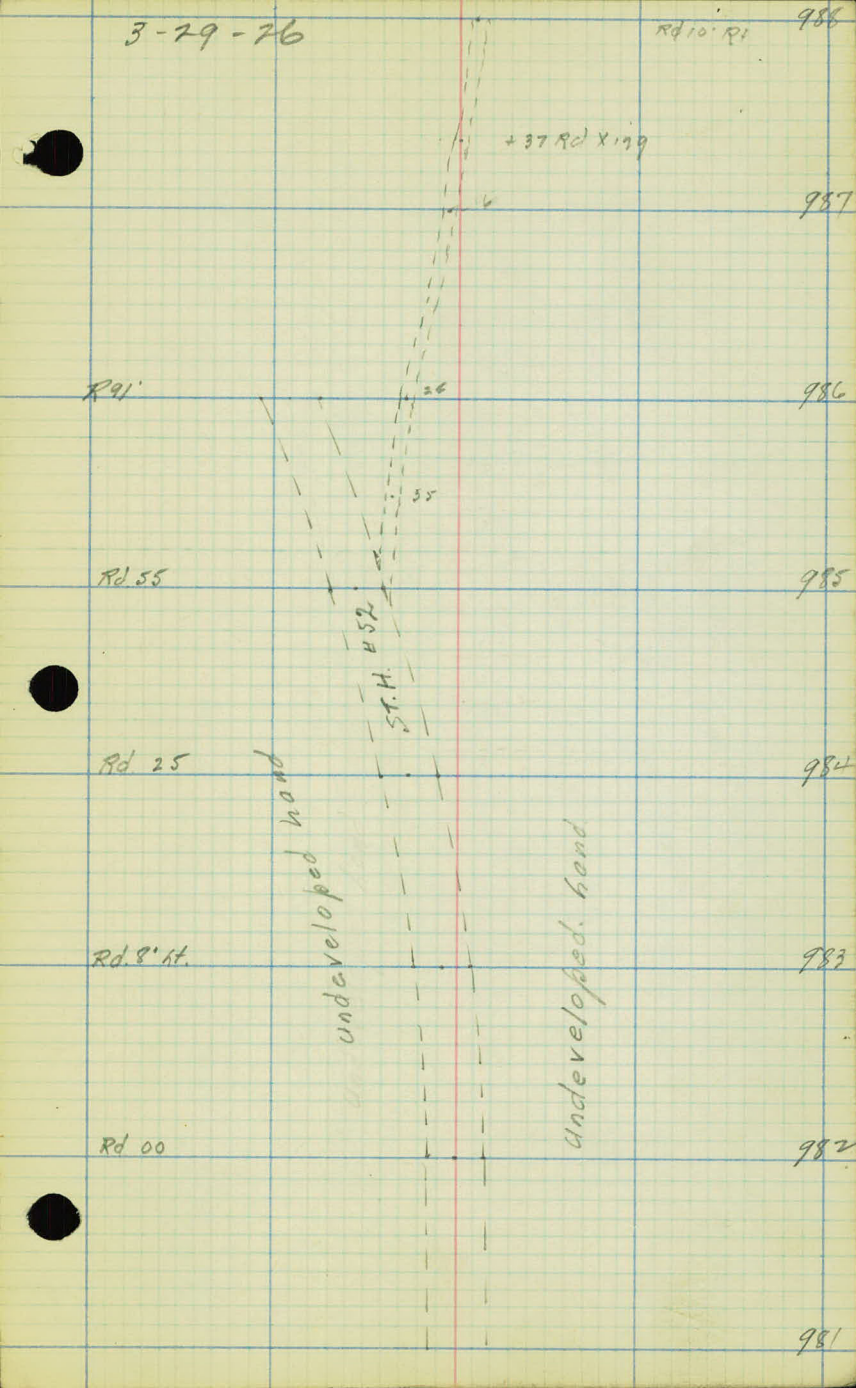
Spike in 30" Tree 102' Lt. Sta 11+62 (Proj. 25.58)

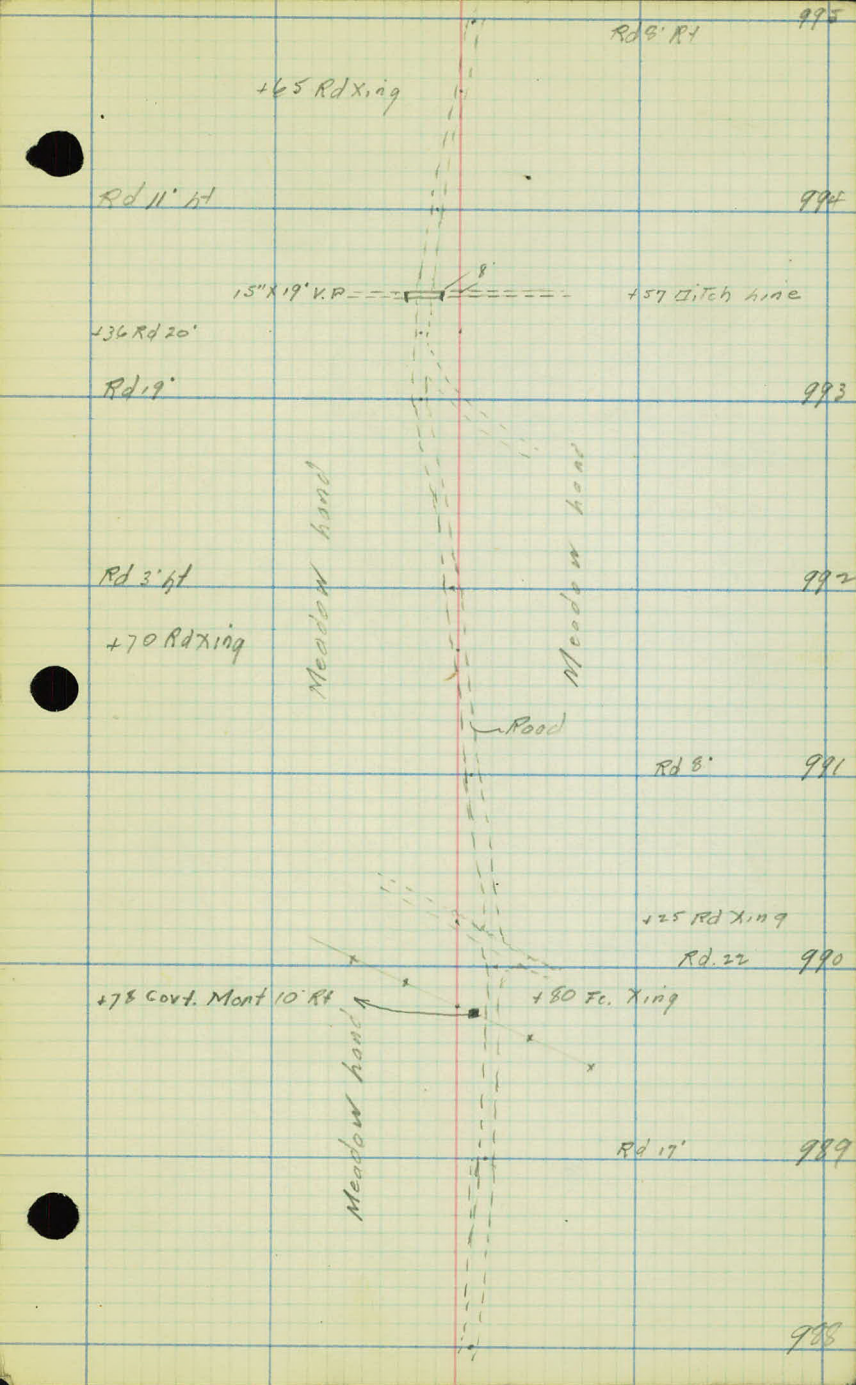
St. H. #52 Connection
At Font Smelling

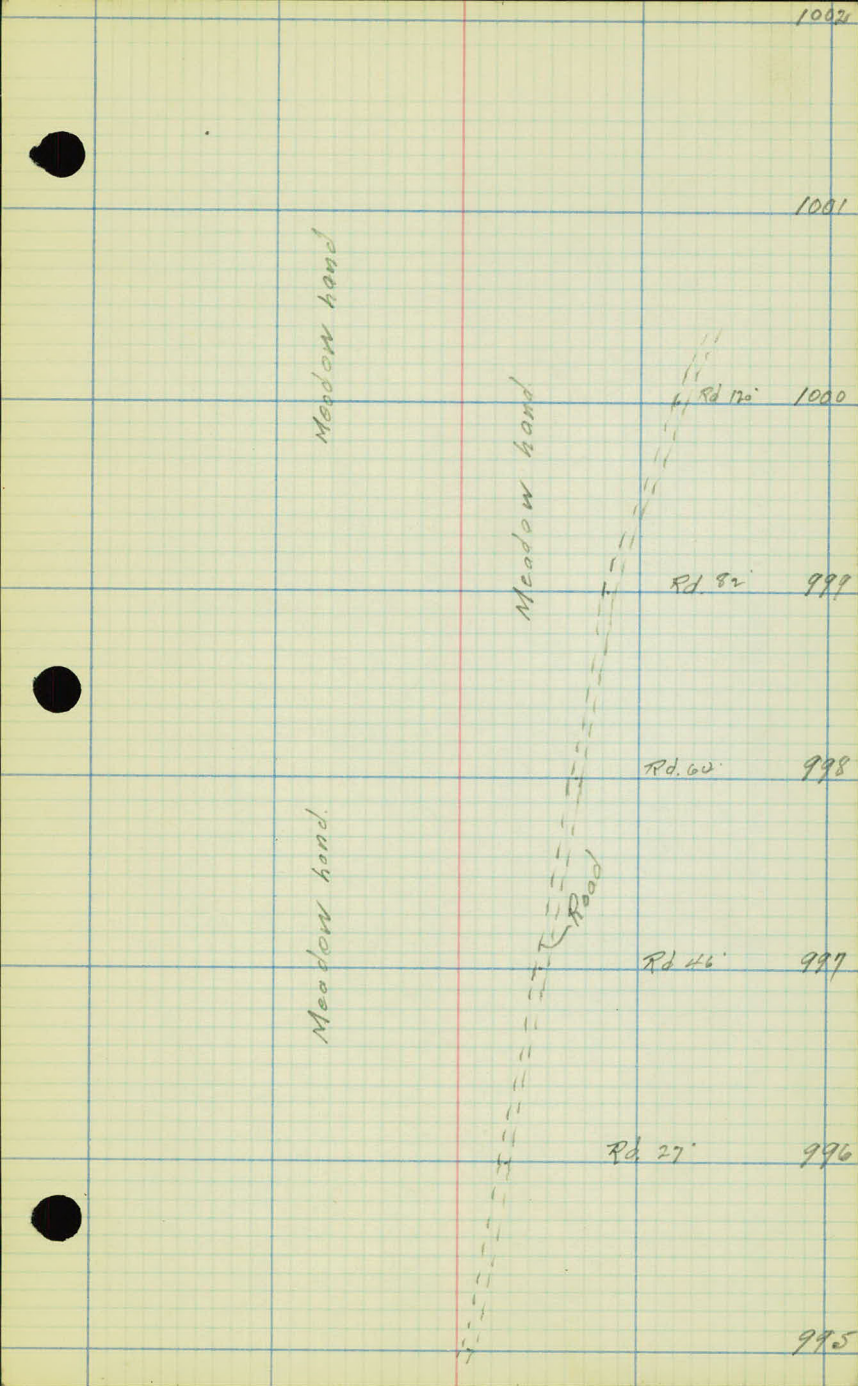
Artificial Topography
Sta 981+57 To 1079+73 ℄

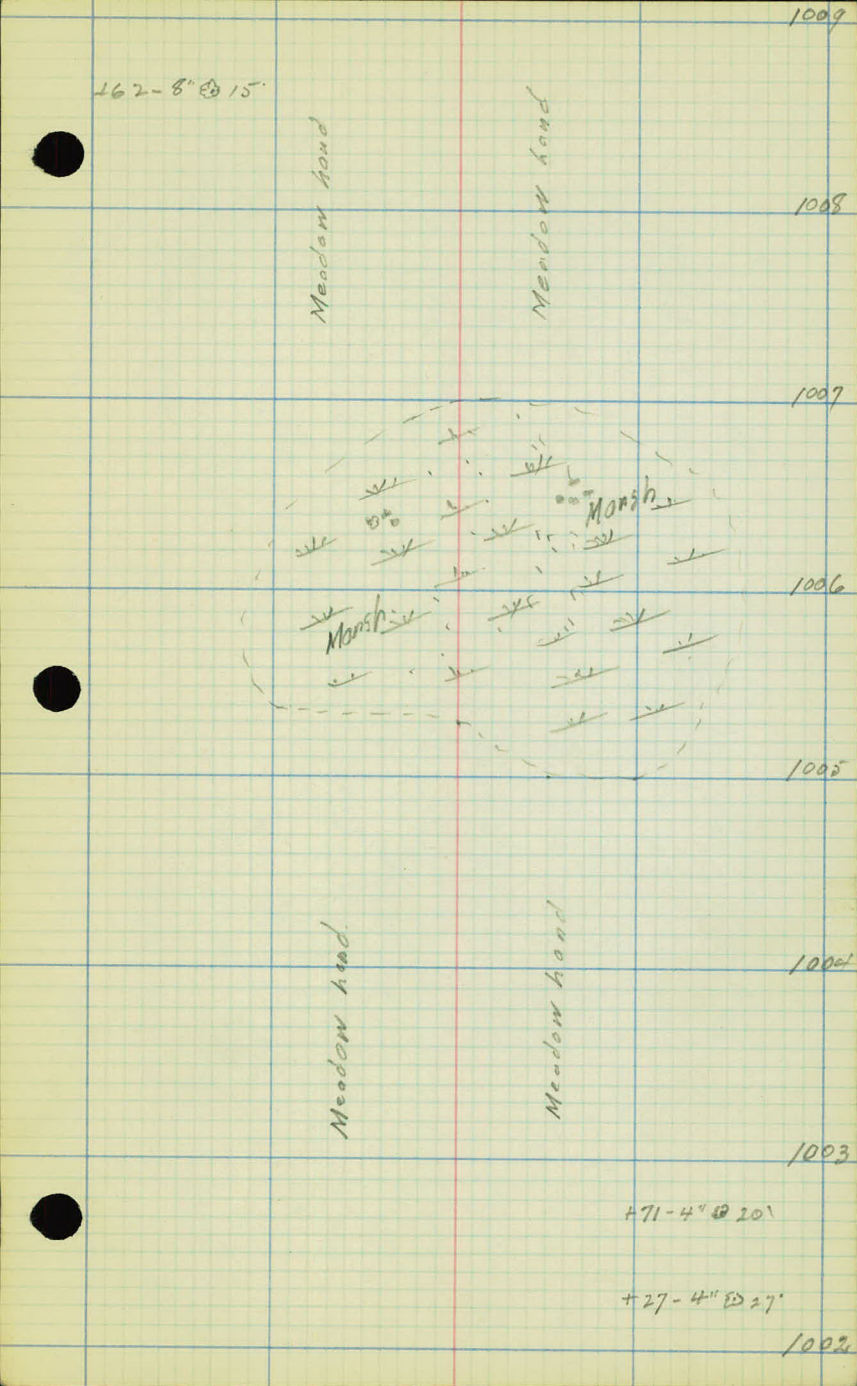
Austin
Skooglan
Fritz
Jankoski
Alexander
} Party

3/22 To 3/29 - 1926


3-29-76
Rd 10' Rt
986
+37 Rd X 1.79
987
R 91'
986
26
35
Rd 55
985
Rd 25
984
S.T.H. #52
undeveloped land
Undeveloped land
Rd 8' Rt.
983
Rd 00
982
981


995
Rd 5' Rt
+65 Rd Xing
Rd 11' Lt
994
15" X 19" V.P.
8'
+57 Ditch line
+36 Rd 20'
Rd 9'
993
Meadow land
Meadow land
Rd 3' Lt
992
+70 Rd Xing
Road
Rd 8'
991
+25 Rd Xing
Rd. 22
990
+78 Cont. Mont 10' Rt
+80 Fc. Xing
Meadow land
Rd 17'
989
988


1002
1001
1000
999
998
997
996
995
Meadow land
Meadow land
Meadow land
Road
Rd 170'
Rd. 82'
Rd. 60'
Rd 46'
Rd 27'


1009
1008
1007
1006
1005
1004
1003
1002
+62-8" @ 15'
Meadow Road
Meadow Road
Marsh
Marsh
Meadow Road
Meadow Road
+71-4" @ 20'
+27-4" @ 27'

1016

1015

Meadow land

Meadow land

1014

+63-14"@27°

1013

+48-(2)8"@11°+20°

1012

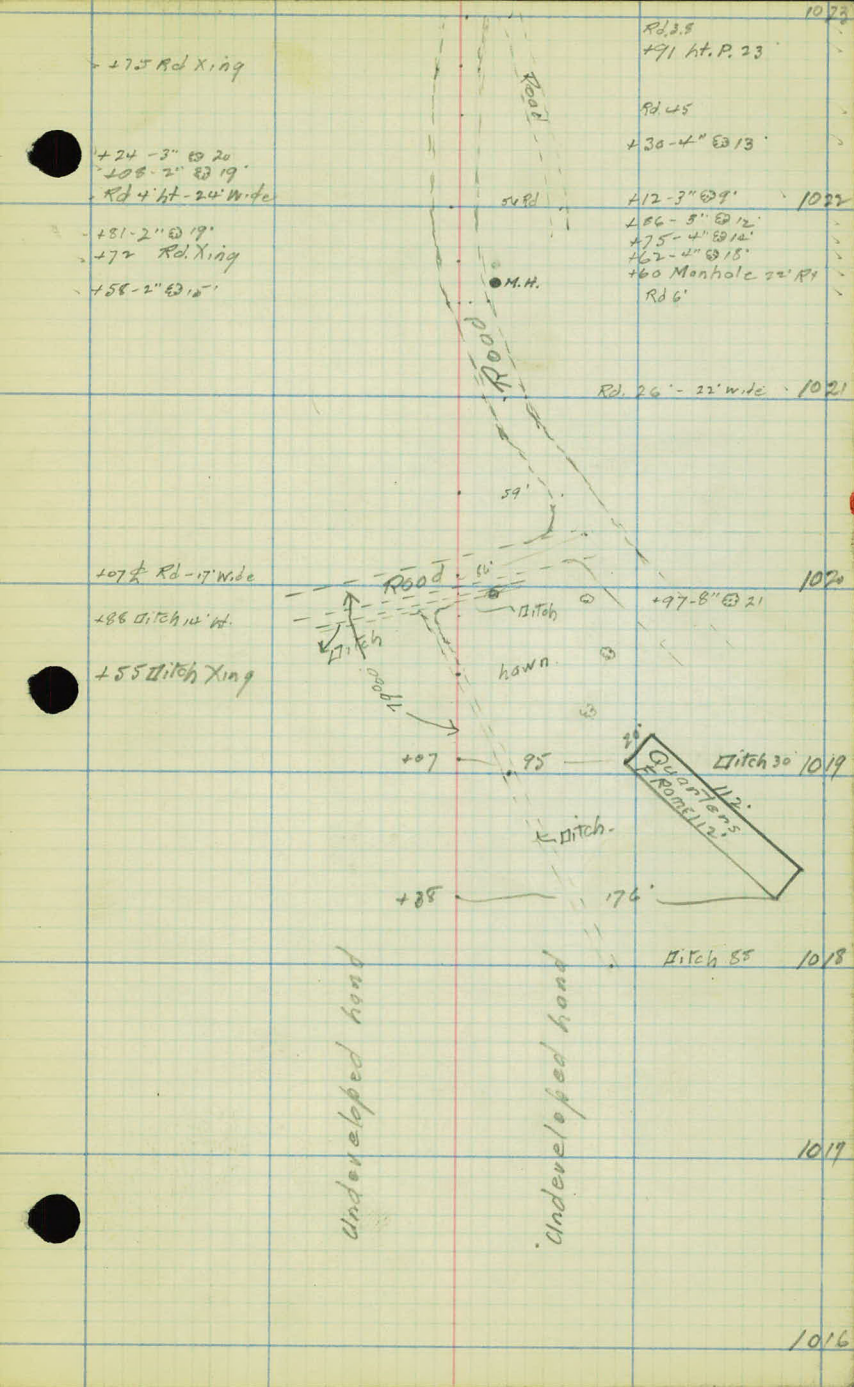
1011

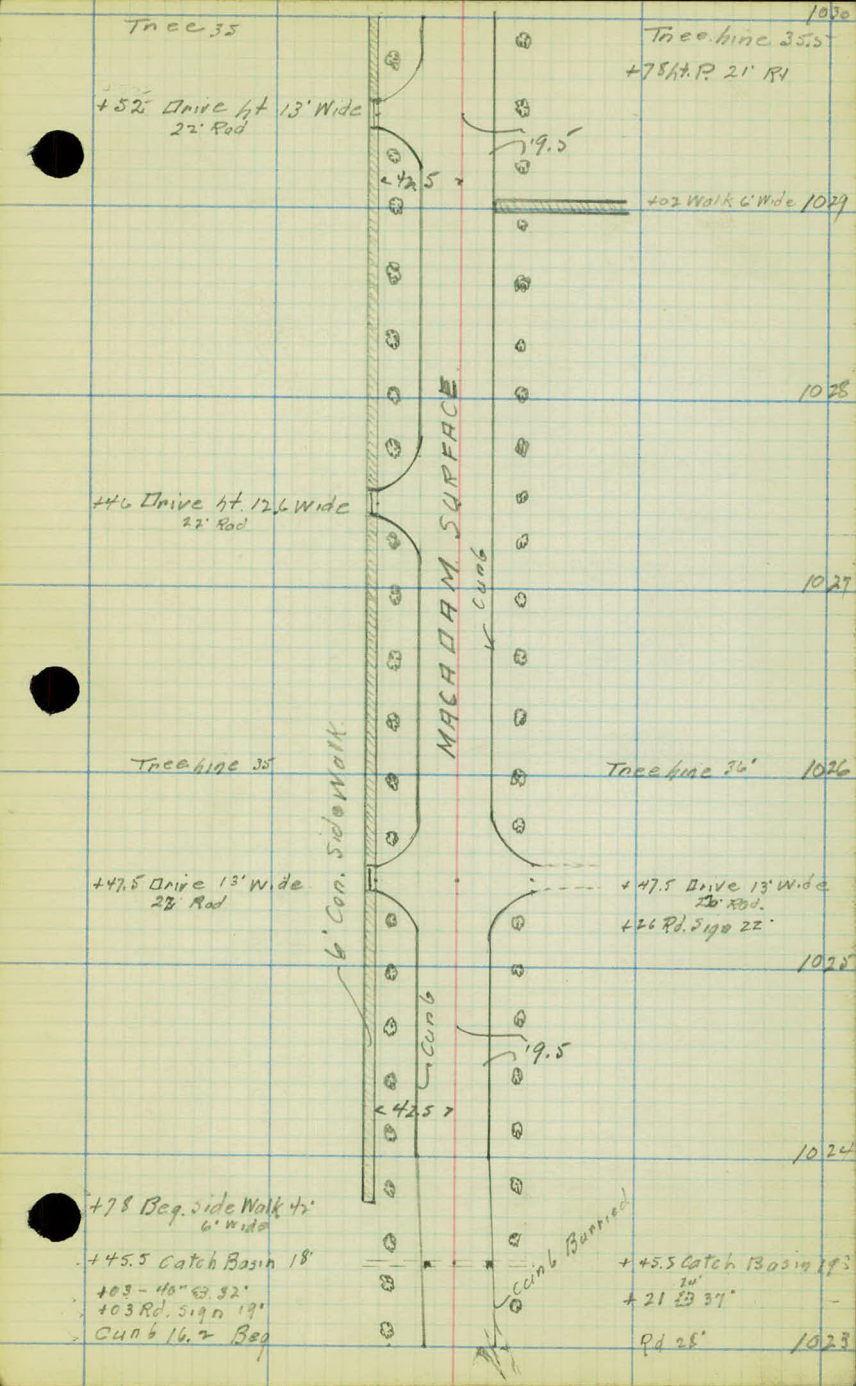
Meadow land

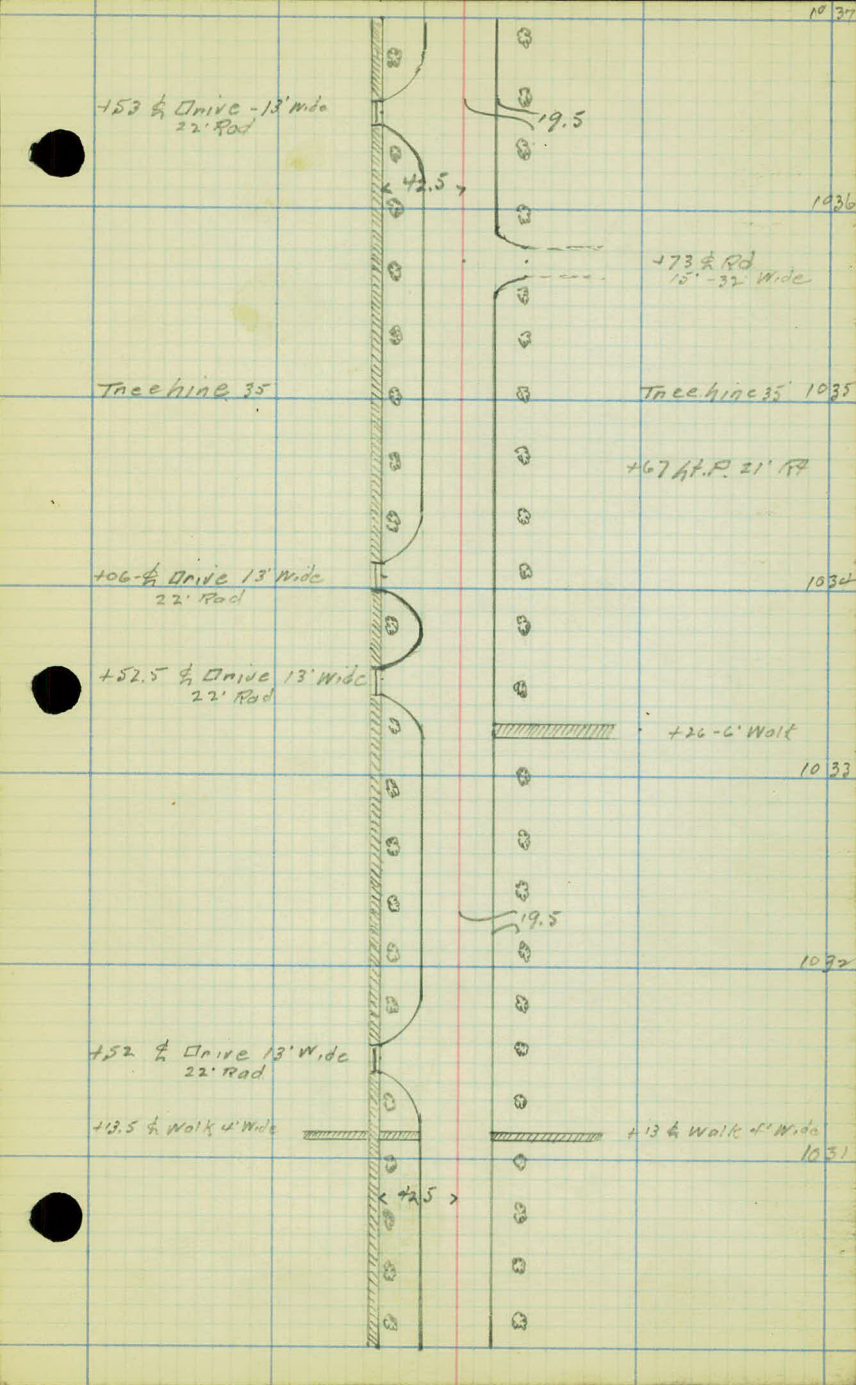
Meadow land

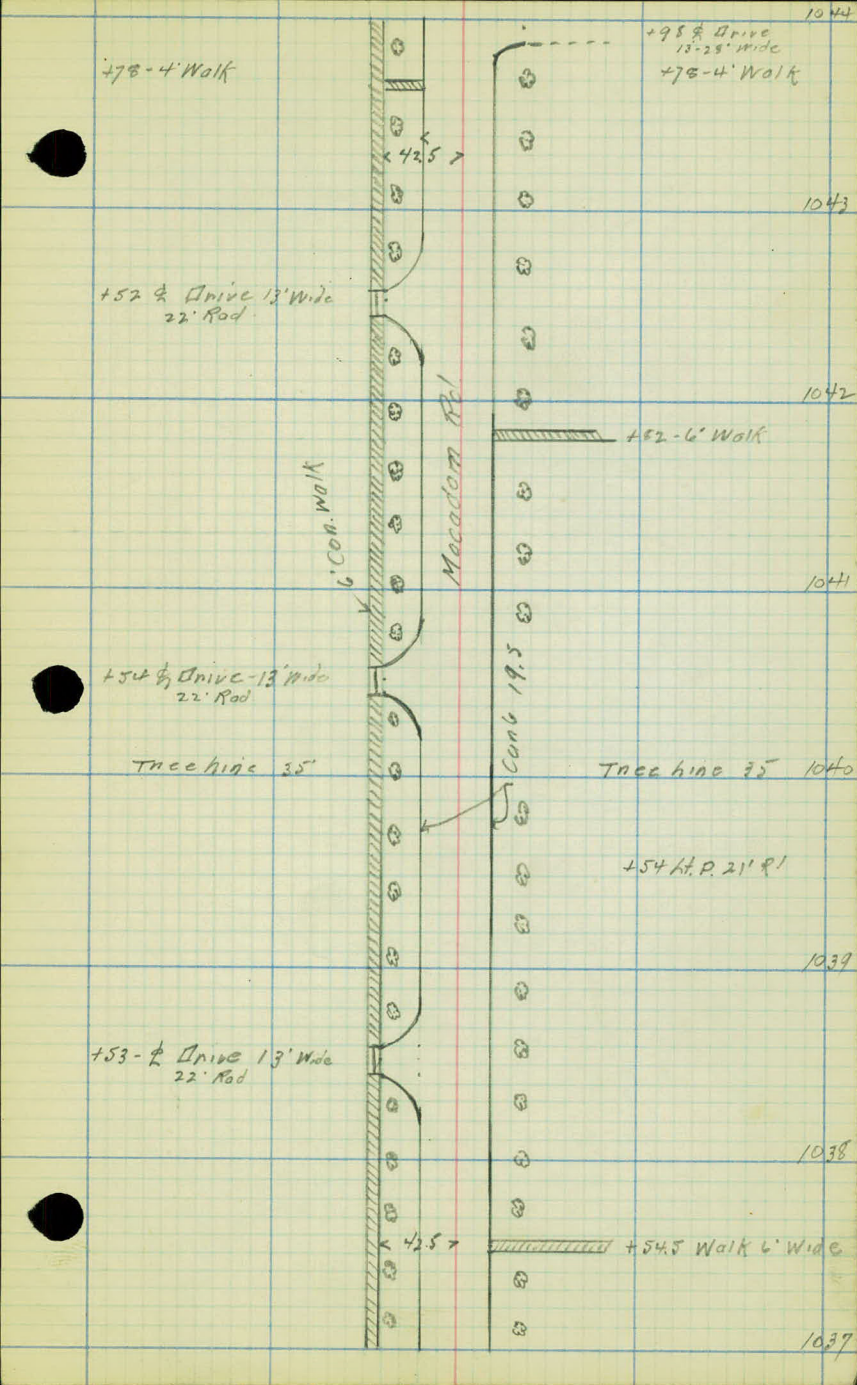
1010

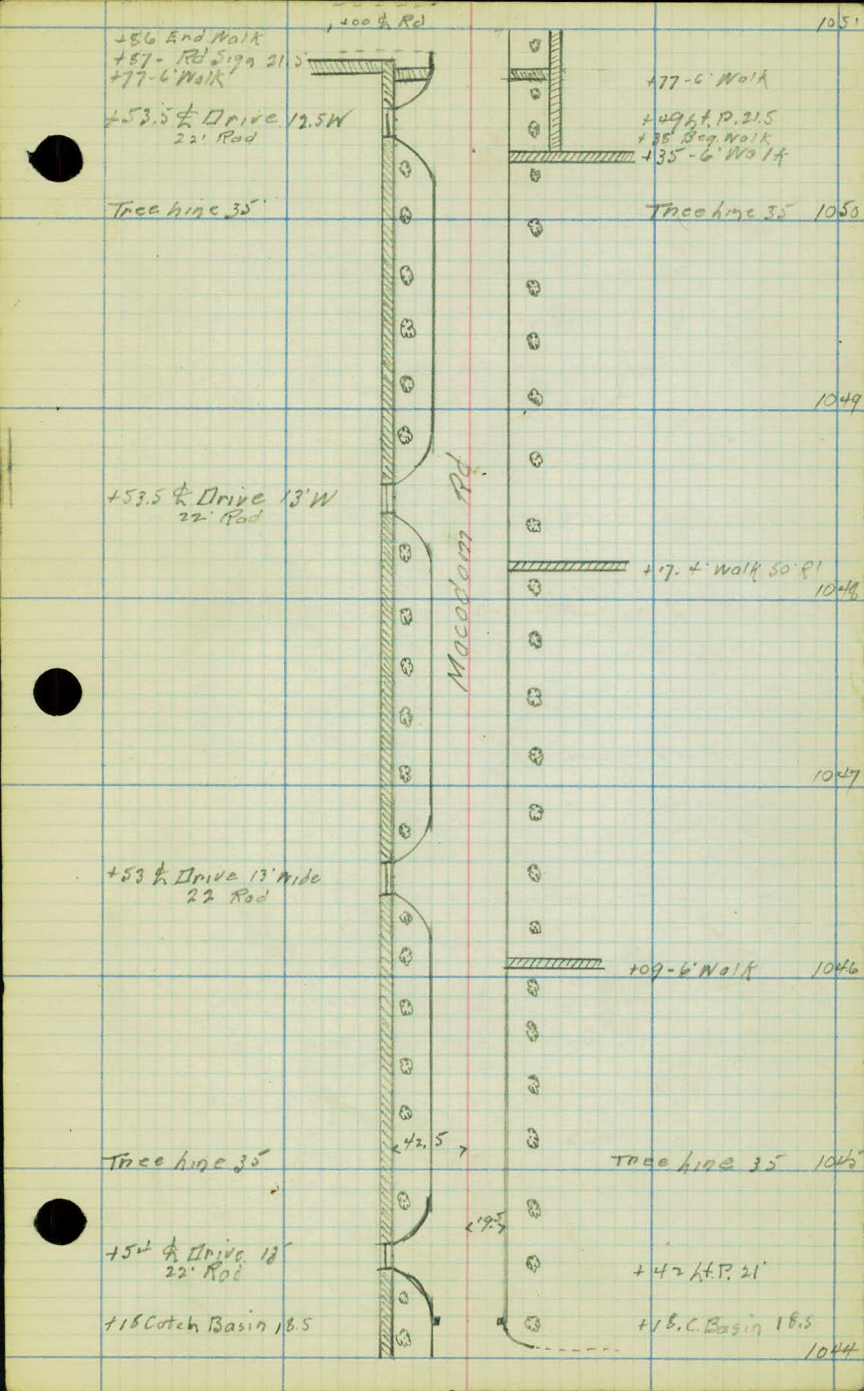
1009

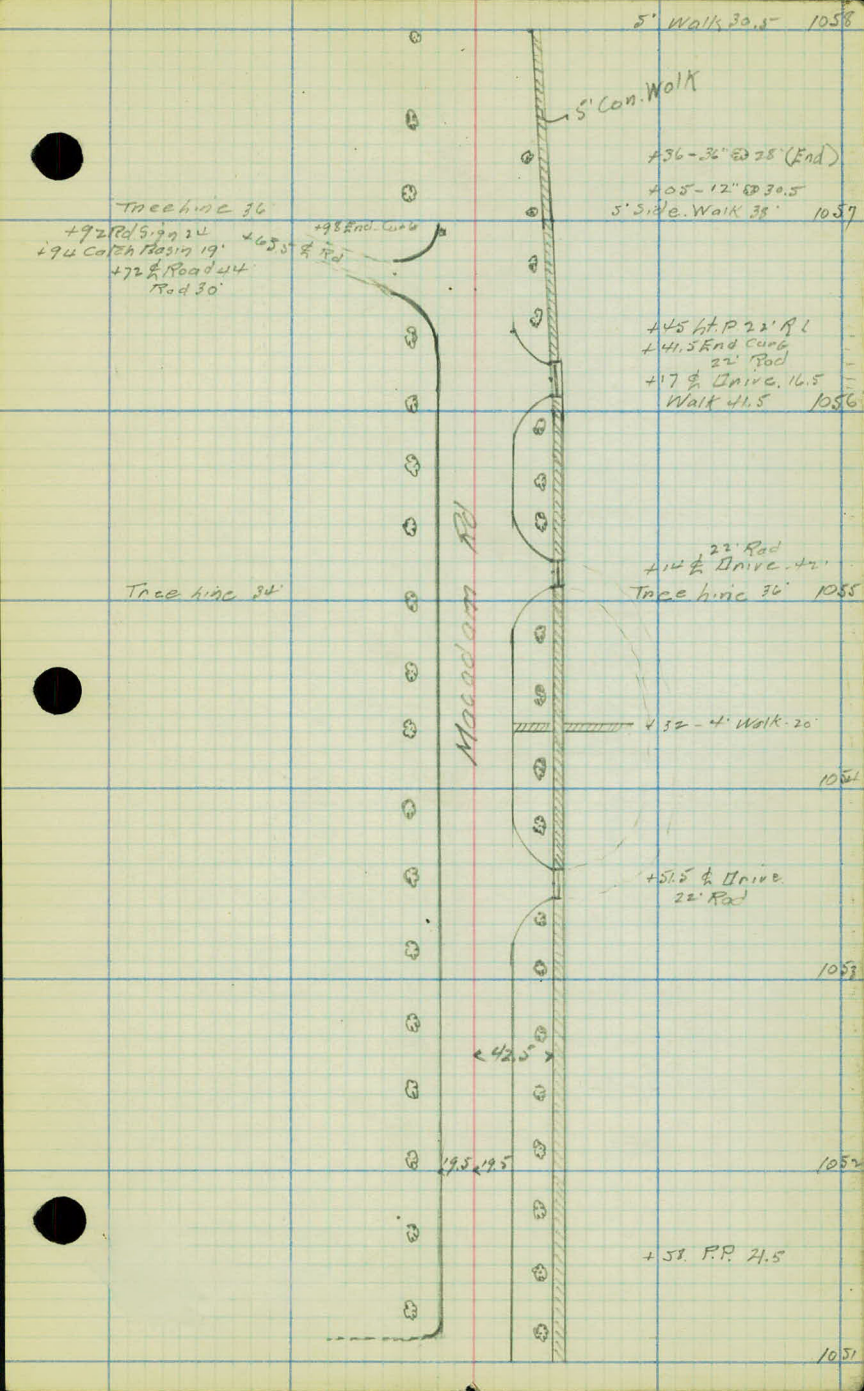

1022
Rd. 3.8
+91 Ht. P. 23'
Rd 45
+38-4" @ 13'
A12-3" @ 9'
L86-5" @ 12'
475-4" @ 12'
462-4" @ 15'
+60 Manhole 22' Rt
Rd 6'
1022
+17.5 Rd X.ing
+24-3" @ 20'
+108-2" @ 19'
Rd 4' ht-24' wide
+81-2" @ 19'
+72 Rd. X.ing
+58-2" @ 15'
Road
Road
Rd
M.H.
Rd. 26' - 22' wide
1021
59'
+07½ Rd-17' Wide
Road
1020
+86 Ditch 14' wd.
+55 Ditch X.ing
Ditch
Ditch
Ditch
+97-8" @ 21
hawn
Road
+07
95'
Ditch 30'
1019
Quarters
Ditch
+88
174'
Ditch 85'
1018
Undeveloped land
Undeveloped land
1017
1016

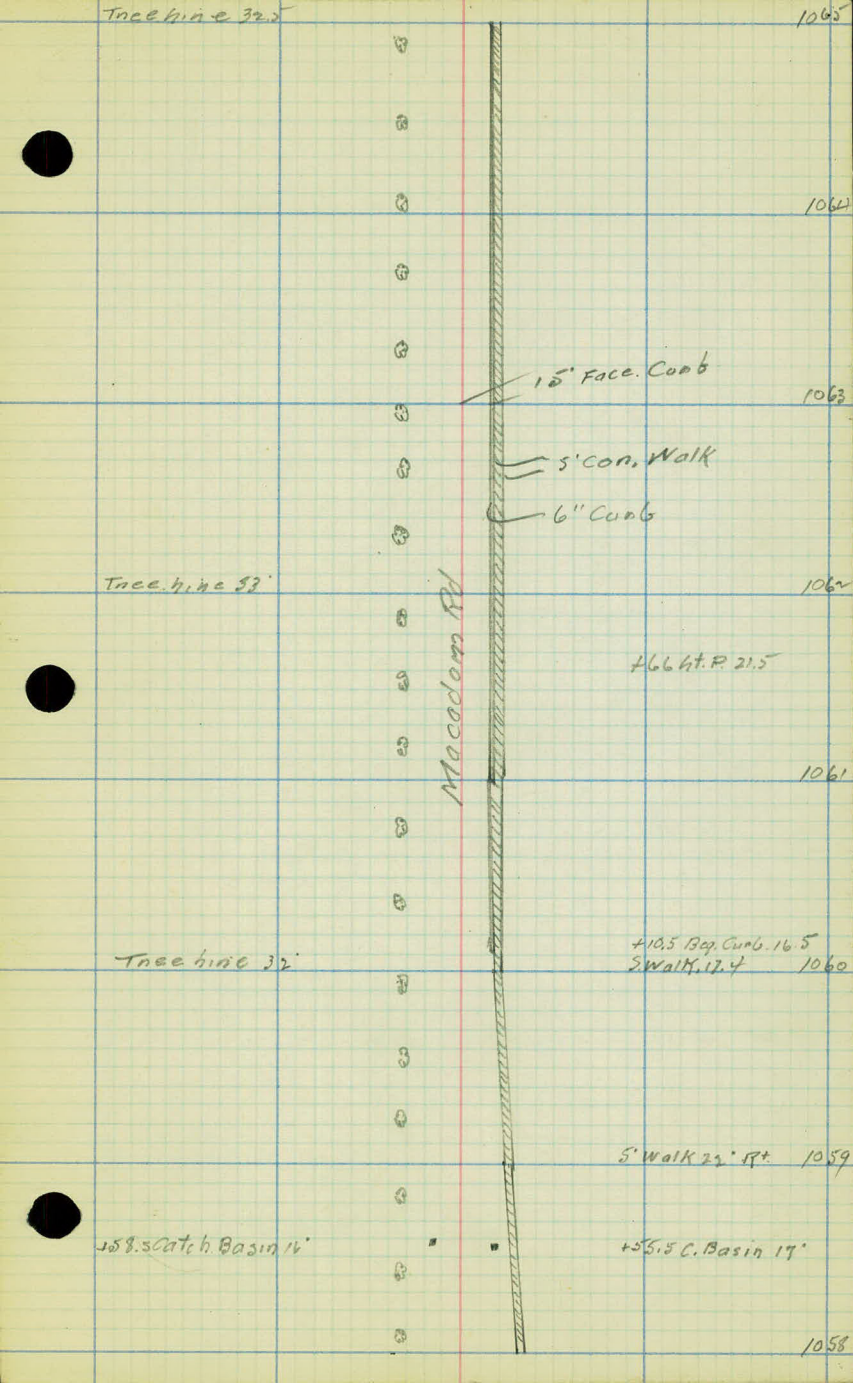

Tree 35
+52 Drive Rt 13' Wide
22' Rad
Tree line 35.5
+78 Rt. P. 21' Rt
19.5
+42.5
+02 Walk 6' Wide
1029
1028
+46 Drive Rt. 12.6 Wide
22' Rad
MACADAM SURFACE
Curb
1027
Tree line 35
6' Con. Side Walk
Tree line 36'
1026
+47.5 Drive 13' Wide
22' Rad
+47.5 Drive 13' Wide
22' Rad.
+26 Rd. Sign 22'
1025
Curb
19.5
+42.5
1024
+78 Beg. Side Walk Rt.
6' Wide
+45.5 Catch Basin 18'
+03 - 48" @ 32'
+03 Rd. Sign 19'
Curb 16.2 Beg
Curb Buried
+45.5 Catch Basin 18'
+21 24" @ 37'
Rd 28'
1023

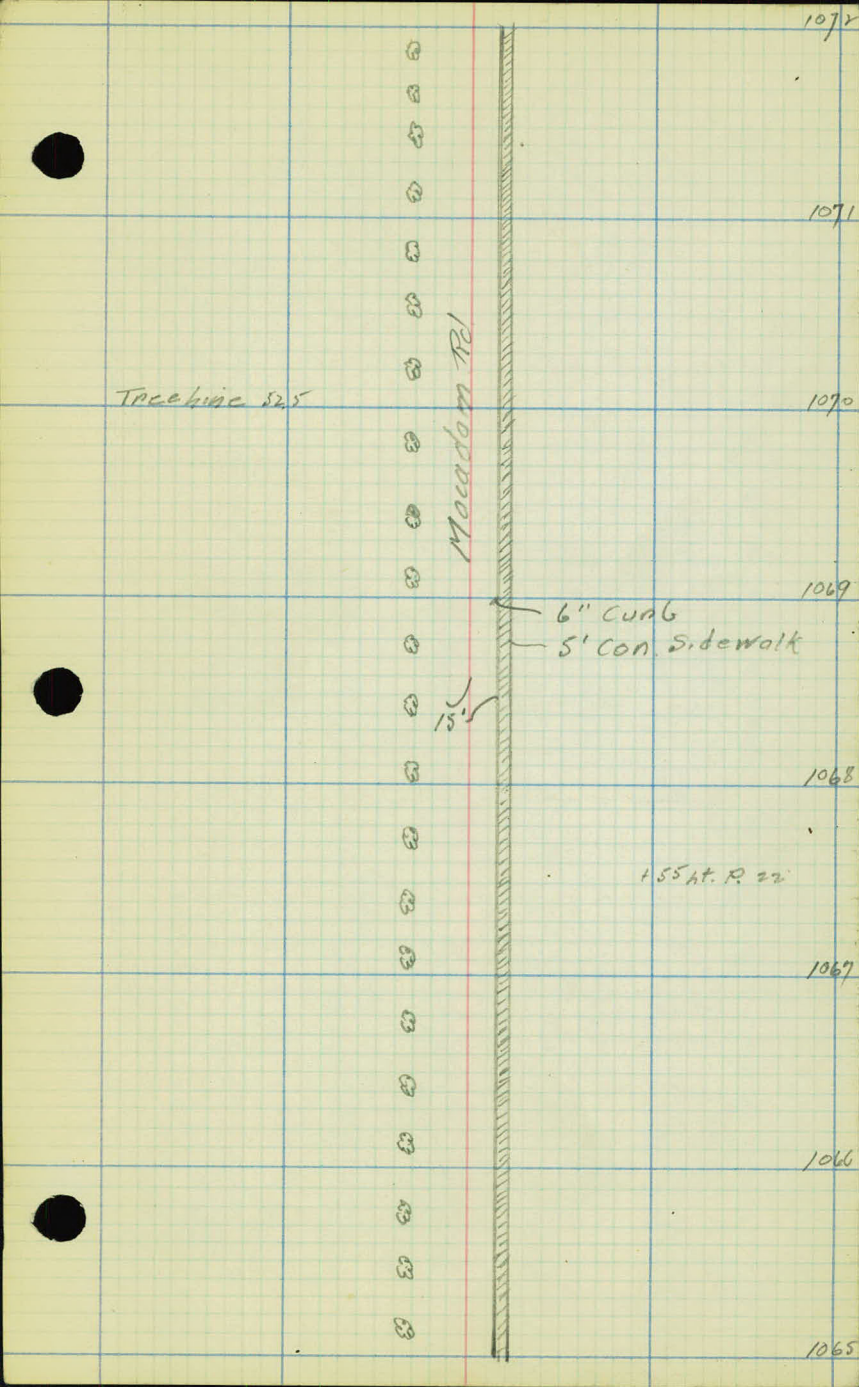

+53 ℄ Drive - 13' Wide
22' Rad
42.5
19.5
+73 ℄ Rd
15' - 32' Wide
Treeline 35
Treeline 35
+67 A.P. 21' RT
+106 ℄ Drive 13' Wide
22' Rad
+52.5 ℄ Drive 13' Wide
22' Rad
+26 - 6' Walk
19.5
+52 ℄ Drive 13' Wide
22' Rad
+13.5 ℄ Walk 4' Wide
+13 ℄ Walk 4' Wide
42.5
1037
1036
1035
1034
1033
1032
1031


1044
+98 ℄ Drive
13-28' Wide
+78-4' Walk
+78-4' Walk
+42.5 ℄
1043
+52 ℄ Drive 13' Wide
22' Rad
1042
+52-6' Walk
6' Con. Walk
Macadam 28'
1041
+54 ℄ Drive-13' Wide
22' Rad
Conc 19.5
Tree hine 35'
Tree hine 35'
1040
+54 Lt. P. 21' ℄
1039
+53-℄ Drive 13' Wide
22' Rad
1038
+42.5 ℄
+54.5 Walk 6' Wide
1037

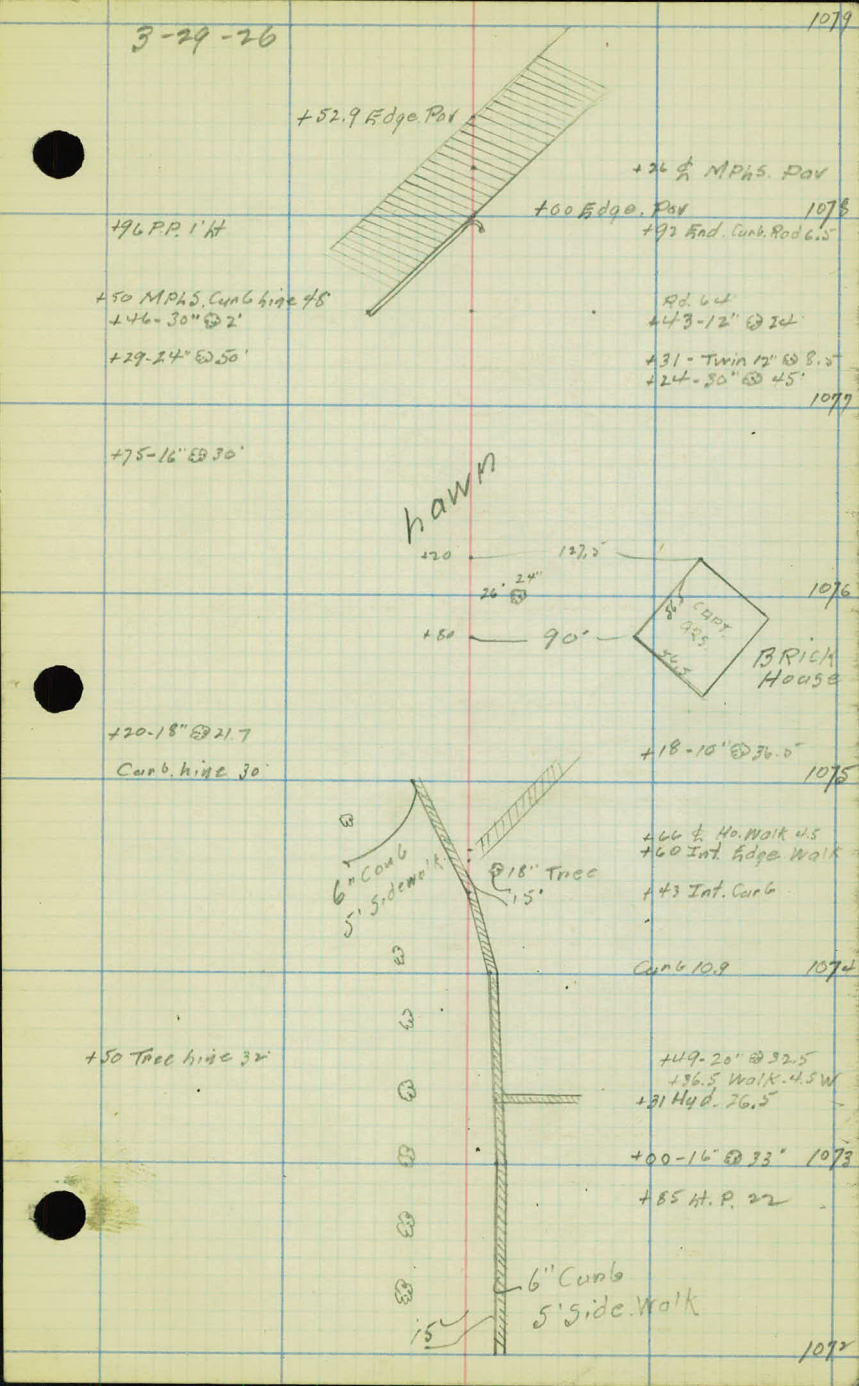

+00 ℄ Rd
+56 End Walk
+57 - Rd Sign 21.5
+77-6' Walk
+53.5 ℄ Drive 12.5W
22' Rod
Tree line 35'
+53.5 ℄ Drive 13'W
22' Rod
+53 ℄ Drive 13' Wide
22 Rod
Tree line 35'
+42.5
+19.5
+54 ℄ Drive 18'
22' Rod
+18 Catch Basin 18.5
Macadam Rd
+77-6' Walk
+49 ℄ H.P. 21.5
+35 Beg. Walk
+35-6' Walk
Tree line 35'
+17.4' Walk 50' R'
+09-6' Walk
Tree line 35'
+42 H.P. 21'
+18 C. Basin 18.5
1051
1050
1049
1048
1047
1046
1045
1044


5' Walk 30.5
1058
5' Con. Walk
+36 - 36" ED 28' (End)
+05 - 12" ED 30.5
5' Side. Walk 38'
1057
Tree hine 36
+92 Rd S. gn 24
+94 Catch Basin 19'
+72 ℄ Road 44'
Rod 30'
+98 End Curb
+63.5 ℄ Rd
+45 ht P 22' R ℓ
+41.5 End Curb
22' Rod
+17 ℄ Drive. 16.5
Walk 41.5
1056
Maddox Rd
+14 ℄ 22' Rad
Drive. 42'
Tree hine 34'
Tree hine 36'
1055
+32 - 4' Walk 20'
1054
+51.5 ℄ Drive
22' Rad
1053
42.5'
19.5
19.5
1052
+58 P.P. 21.5
1051


Tree hine 32'
1065
1064
15" Face. Conb
1063
5' con. Walk
6" Conb
Tree hine 33'
1062
Macadam Rd
+66 Ht. R. 21.5
1061
+10.5 Beg. Curb. 16.5
S. Walk. 17.4
Tree hine 32'
1060
5' Walk 22' Rt
1059
+58.5 Catch Basin 16'
+55.5 C. Basin 17'
1058


1071
1071
Macadam Rd
Treeline 82.5
1070
1069
6" Curb
5' Con. Sidewalk
15.5
1068
1.55 ht. R 22
1067
1066
1065

3-29-26


1079
+52.9 Edge Pav
+36 ℄ MPhS. Pav
+00 Edge. Pav
1078
+96 P.P. 1' Ht
+92 End. Curb. Rod 6.5
+50 MPhS. Curb hinge 48
+46-30" ⊖ 2'
+29-24" ⊖ 50'
Rd. 6.4'
+43-12" ⊖ 20'
+31 - Twin 12" ⊖ 8.5'
+24-30" ⊖ 45'
1077
+75-16" ⊖ 30'
lawn
+20
137.2'
26'
24" ⊖
1076
+80
90°
CAPT. ORS.
BRICK House
+20-18" ⊖ 21.7
Curb hinge 30'
+18-10" ⊖ 36.6'
1075
6" Curb
5' Side walk
18" Tree
15'
+66 ℄ Ho. Walk 4.5
+60 Int. Edge Walk
+43 Int. Curb
Curb 10.8
1074
+50 Tree hinge 32'
+49-20" ⊖ 32.5
+36.5 Walk 4.5 W
+31 Hyd. 26.5
+00-16" ⊖ 33'
1073
+85 H. P. 22
6" Curb
5' Side Walk
15'
1072

Ref 9/c. # 98

Alignment on Fort

Snelling Connection from S.T.H. 52.

Station		Ang. Lt.	Ang. Rt.	
				N. 33° 59' E.
1043+27.9	P.T.			
1041+30	P.I		20° 00'	
1039+27.9	P.C.			
1032+71.7	P.O.T.			N. 13° 59' E.
1031+46.74	P.T.			
1030+54.8	P.O.S.T			
1026+70.15	P.I	51° 26'		
1021+93.9	P.O.S.T	= Old P.I.		
1021+18.9	P.C.			
				N. 65° 25' E.

5-14-26

Sta. – Def.

1039+27.9 – 0°00'
1040+00 – 1°48'
1041+00 – 4°18'
1042+00 – 6°48'
1043+00 – 9°18'
1043+27.9 – 10°00'

Tack in Tie
45.14
Track P.
44.80
37.64
Tack in Tie

5° Curve. Rt.
Δ = 20°00'
Rad = 1146.28
Tang = 202.12
Length = 400.00

Sta. – Def

1021+18.7 – 0°00'
1022+00 – 2°03'
1023+00 – 4°33'
1024+00 – 7°03'
1025+00 – 9°33'
1026+00 – 12°03'
1027+00 – 14°33'
1028+00 – 17°03'
1029+00 – 19°33'
1030+00 – 22°03'
1031+00 – 24°33'
1031+46.7 – 25°43'

PP. 27.65
50.08
37.6

5° Curve. Lt.
Δ = 51°26'
Rad = 1146.28
Tang = 552.083
Length = 1028.67

℄

Station		Ang. Lt.	Ang. Rt.	
				N. 28°57'E.
1062+68.35	P.T.			
1061+25.00	P.I.		14°25'	
1059+80.02	P.C.			
1058+00	P.O.T			N. 14°32'E.
1051+58.45	P.T.			
1049+65.91	P.I.	19°27'		
1047+69.45	P.C.			N. 33°59'E.

5-14-26

Sta - Def

1059+80.25 - 0°00'

1060+00 - 0°30'

+25 - 1°12'

+50 - 1°45'

+75 - 2°22½'

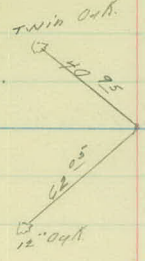
1061+00 - 3°00'

+50 - 4°15'

1062+00 - 5°30'

+50 - 6°45'

1062+68.35 - 7°-12½'



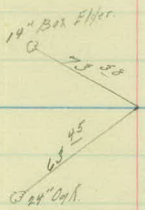
5° Curve Rt.

Δ = 14° 25'

Rad = 1146.28

Tang = 144.98

Length = 288.33



Sta - Def

1047+69.45 - 0°00'

1048+00 - 0°46'

+50 - 2°01'

1049+00 - 3°16'

+50 - 4°31'

1050+00 - 5°46'

+50 - 7°01'

1051+00 - 8°16'

+38.45 - 9°43½'

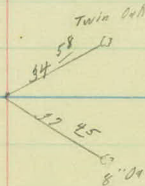
5° Curve Lt.

Δ = 19° 27'

Rad = 1146.28

Tang = 196.45

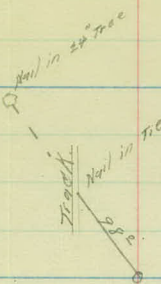
Length = 389.00



Station	Ang. Lt.	Ang. Rt.	
			N. 28°47'E.
1075+08 32	P.T.	= 01+73 27	On Pike Island Survey.
		03+03 46	Beg. of Narr. Pike Island Survey.
1073+79 25	P.I.	= 10°18'	
1072+50 82	P.C.		
1070+80 55	P.O.T		N. 18°29'E.
1070+30 45	P.T.		
1069+00	P.I.	10°28'	
1067+68 78	P.C.		
			N. 28°57'E.
1066+12 0	P.O.T		

5-15-26

Sta.	Def
1072+50.87	0°00'
1073+00	0°59'
+50	1°59'
1074+00	2°59'
+50	3°59'
1075+00	4°59'
+08.32	5°09'



4° Curve. Rt.
Δ = 10°18'
Rad = 1432.69
Tang = 129.13
Length = 257.50

Sta.	Def
1067+68.78	0°00'
1068+00	0°37½'
+50	1°37½'
1069+00	2°37½'
+50	3°37½'
1070+00	4°37½'
+30.45	5°14'

4° Curve. Lt.
Δ = 10°28'
Rad = 1432.69
Tang = 131.22
Length = 261.67

FORT SNELLING
ADDITIONAL TOPOG. ON STATE LINE
S.T.H. #52

Station		Ang. Lt.	Ang. Rt.
1068+05±	P.T.		
1066+63±	P.I.		62°46'
1064+53±	P.C.	= 1065+93±	

4-22-76

Sta. - Def

1064+53.2 - 0°00'

1065+00 - 1°38'

+50 - 6°30¾'

1066+00 - 11°23¼'

+50 - 16°15¾'

1067+00 - 21°08¼'

+50 - 26°00¾'

1068+00 - 30°53¼'

+05.1 - 31°23'

19°30' Curve Rt.

Δ = 62°46'

Rad = 295.3

Tang = 180.1

Length = 321.9

Station	Ang. Lt.	Ang. Rt.
1091+42.3 = 0+00 Proj. 25-58		
1086+24.5	P.T.	
1083+48±	P.I.	16°42'
1080+67.8	P.C.	
1078+96.9	P.T.	
1076+57.0	P.I.	4°48'
1074+16.9	P.C.	=1074+17.6

4-22-26

Sta. Def

1080+67.8 - 0°00'
1081+00 - 0°29'
1082+00 - 1°59'
1083+00 - 3°29'
1084+00 - 4°59'
1085+00 - 6°29'
1086+00 - 7°59'
+24.5 - 8°21'

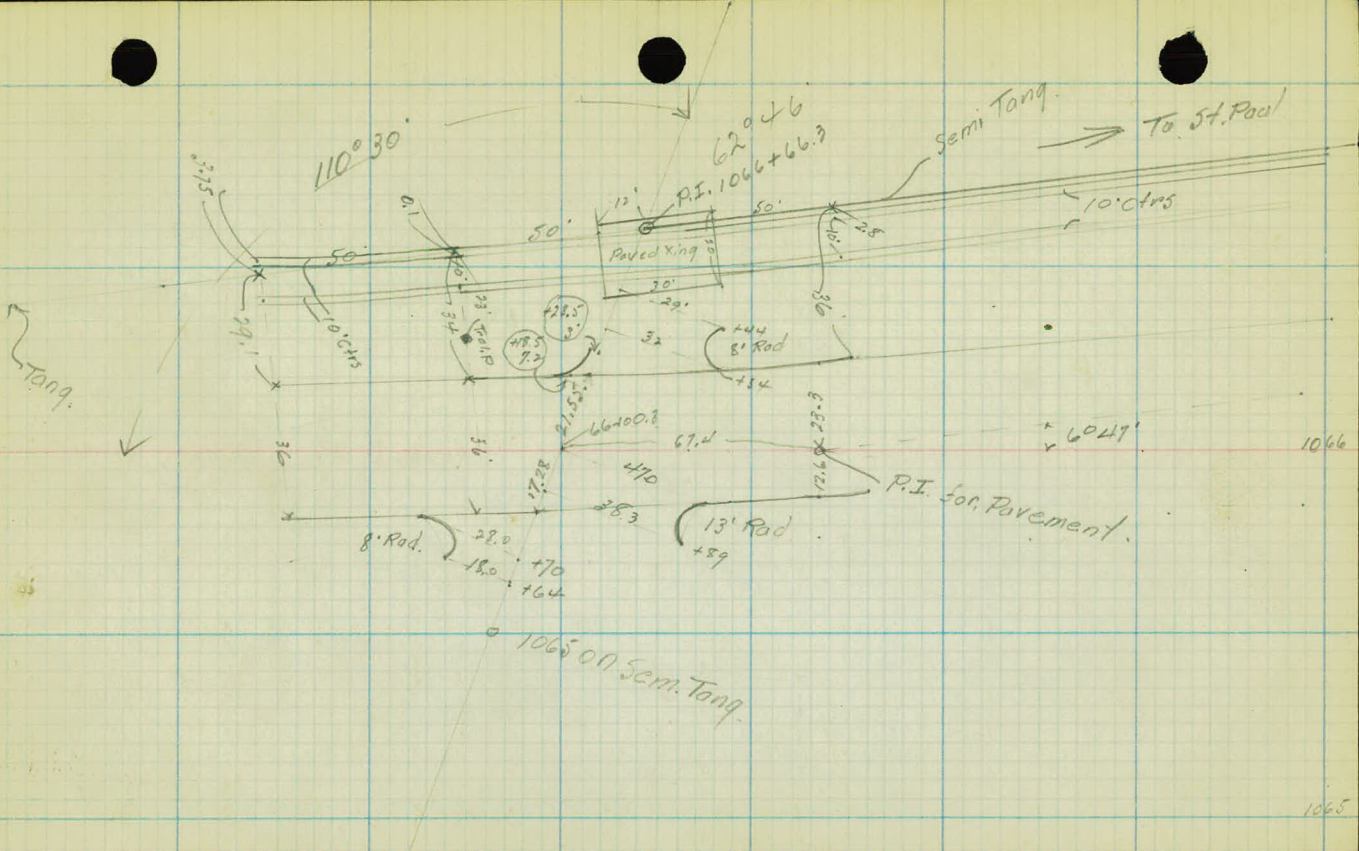
3° Curve. ht.
Δ = 16°42'
Rad = 1910.08
Tang = 280.4
Length = 556.7

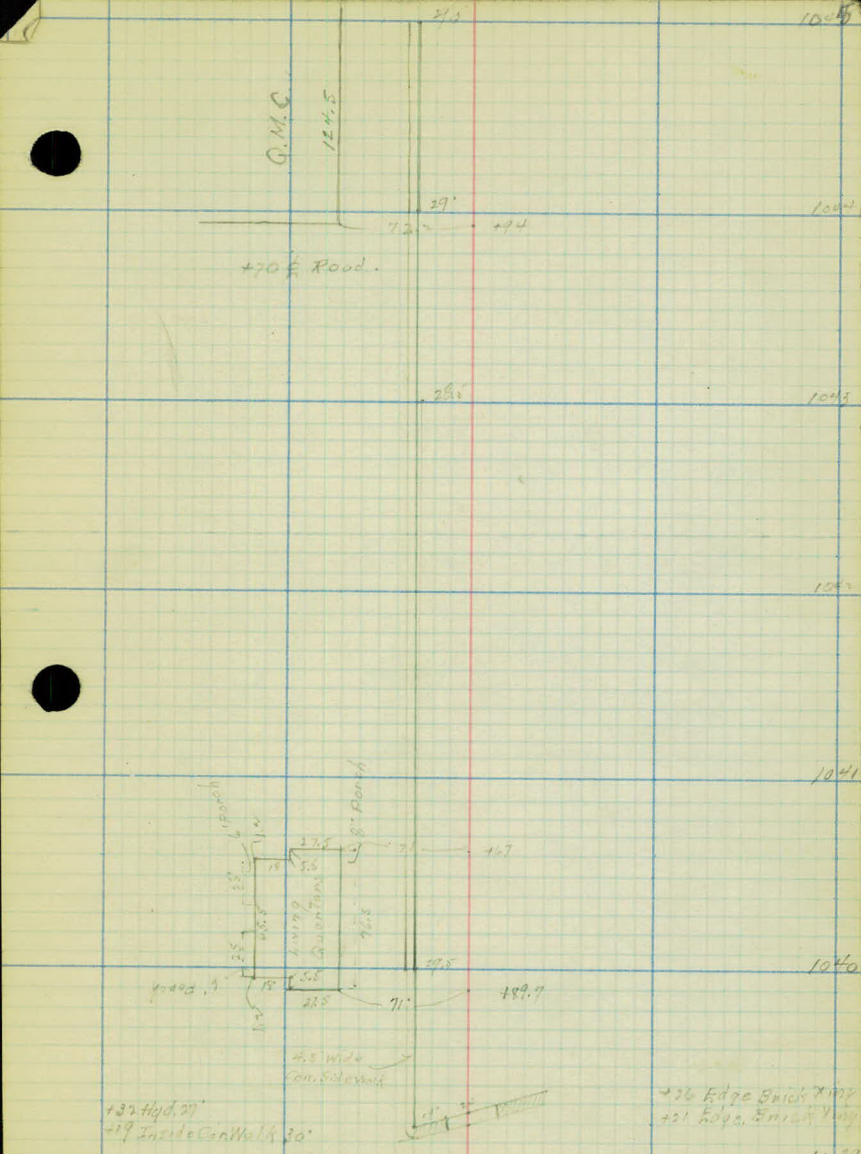
1074+16.9 - 0°00'
1075+00 - 0°25'
1076+00 - 0°55'
1077+00 - 1°25'
1078+00 - 1°55'
1078+96.2 - 2°24'

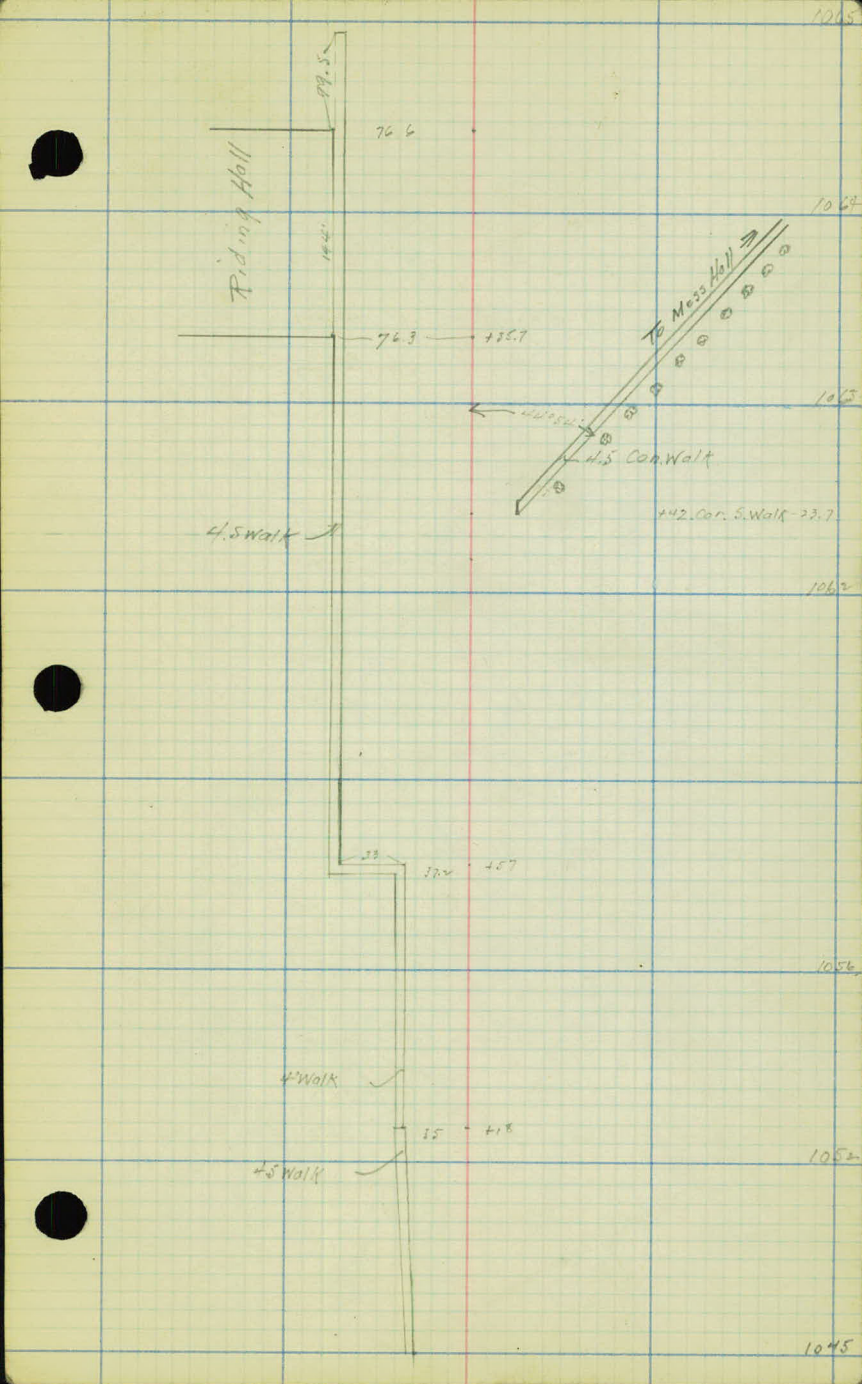
1° Curve ht.
Δ = 4°48'
Rad = 5729.7
Tang = 240.1
Length = 480.0

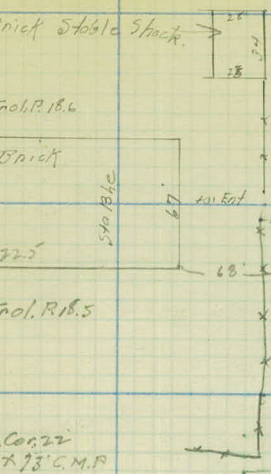
Ft. Snelling #52

Additional Topog. on
State Line.- S.T.H. #52


110° 30'
62° 46'
Semi Tang.
To St. Rad
P.I. 1066+66.3
Paved X-ing
50'
50'
50'
10' Ctrs
Tang.
10' Ctrs
Tan P
8' Rad
13' Rad
66+00.8
67.4
60.47
1066
P.I. for Pavement
8' Rad.
1065 on Sem. Tang.
1065


Q.M.C.
124.5
39°
+94
+70 E Road.
8" Road
Existing Concrete
+89.7
4.5 Wide Con. Sidewalk
+32 Hyd. 39°
+19 Inside Con. Walk 30°
+36 Edge Brick X 107
+21 Edge Brick 39°


Fid. of Hall
99.5
76.6
14.4
76.3
+35.7
To Mens Hall
4' Walk
4.5 Con. Walk
+42 Cor. S. Walk +33.7
4.5 Walk
33
37.4
+5.7
4' Walk
35
+1.8
4.5 Walk
1045

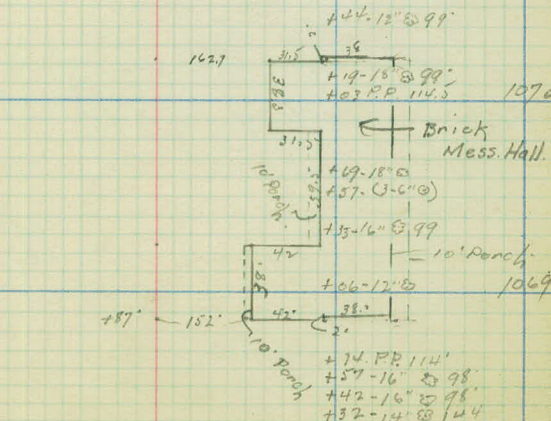


+54 Tnol. P. 18.6

+57 Tnol. P. 10'

+26 G. P. 17'

Tn. 2.65 - 12.65' Curb 46' Pav 35.8 1070
+94. P. P. 25.5'
+58 Tnol. P. 25.5'
+44. 30" ⊗ 76'
+20-12" ⊗ 26'
(Tn. 2.65 - 12.65) {Pav. 35.7 / Curb 45.8} 1069
+94-30" ⊗ 25.5'
+68-18" ⊗ 26'
+44-20" ⊗ 26'
+37 Tnol. P. 25.5'
+19-16" ⊗ 27.5'
{35.8 Wide
Tn. 2.65 Tn. 12.65} Pav. 45.3 1068
+95-24" ⊗ 29.5'
+27 Tnol. P. 19'
+07 P. P. 103.5' 1067
Rd. 19'
+30 Rd. 10'
+29-20" ⊗ 168'
+17-20" ⊗ 94'
Rd. 86' - 20' Wide 1066
+99-16" ⊗ 71'
+77-24" ⊗ 32'
+68-20" ⊗ 107'
+56-P. P. 25'
+43-12" ⊗ 40'
+16-24" ⊗ 43'
+03-16" ⊗ 95' 1065
+61 P. P. 32'
+39-8" ⊗ 48'
+15-30" ⊗ 45'
1064


+44-12" ⊙ 99'
162.7
31.5'
36'
+19-18" ⊙ 99'
+63 P.P. 114.5
Brick
Mess. Hall.
31.5'
+49-18" ⊙
+57-(3-6" ⊙)
10' Porch
+33-16" ⊙ 99'
10' Porch
42'
+06-12" ⊙
38.5'
42'
38.5'
2'
+87'
152'
10' Porch
+34 P.P. 114'
+57-16" ⊙ 98'
+42-16" ⊙ 98'
+32-14" ⊙ 104'
Road 127'
1071
1070
1069
1068

+61 Fc. 16.5 End.

+87 End. 19' Wide

Fc. 18.7

+89 Tan. P. 18.5

+12 Tan. P. 18'

Brick Stable Shed

+07

+99 Tan. P. 17.7

+01 - Tan. P. - 18'

+59 - Hyd. 22.5

+80 - Tan. P. 18.5

+02 Beg Fc. 19.5

16.5

+42 40.5

+24 36

+12 31.6

+91 57'

20

(Tan. 39.6 - 49.6)

(Tan. 34.4 - 44)

(Tan. 24.1 - 34.1)

(Tan. 13.95 - 23.35) (Curb 81.5) Pav. 35.9

20'

(+50 Tan. 6.6 - 16.6) (Curb - 69.3)

(Tan. 3.7 - 13.7)

30'

+01 Entrance 17.5

+66 - 18" @ 27'
+55 Tan. P. 30'
(+50 Tan. 44.7 - 54.7)
+47 End Culv. 36
12" x 54' C.M.P.
+16 - 18" @ 27'
+12 Culv. 34.6
(Tan. 43.4 - 53.4)

+99 - 18" @ 26.5
+82 - 14" @ 26.5
+67 - 15" @ 26'

(Curb 131)
+50 - 15" @ 26'
A. 38 Tan. P. 27.3
+34 - 15" @ 25.5'
+18 - 18" @ 26'

Curb - 117.8

+91 Tan. P. 59.8

+23 Tan. P. 40.6

+19 - 12" @ 25.5'
+13 - Tan. P. 23'
Curb 60.5 Pav. 35.9

+95 - 24" @ 25'

+70 - 15" @ 25.5'

+44 - 24" @ 26'

+19 - 12" @ 25.5'
+07 Tan. P. 25.5'

Pav. - 49' Width 35.8

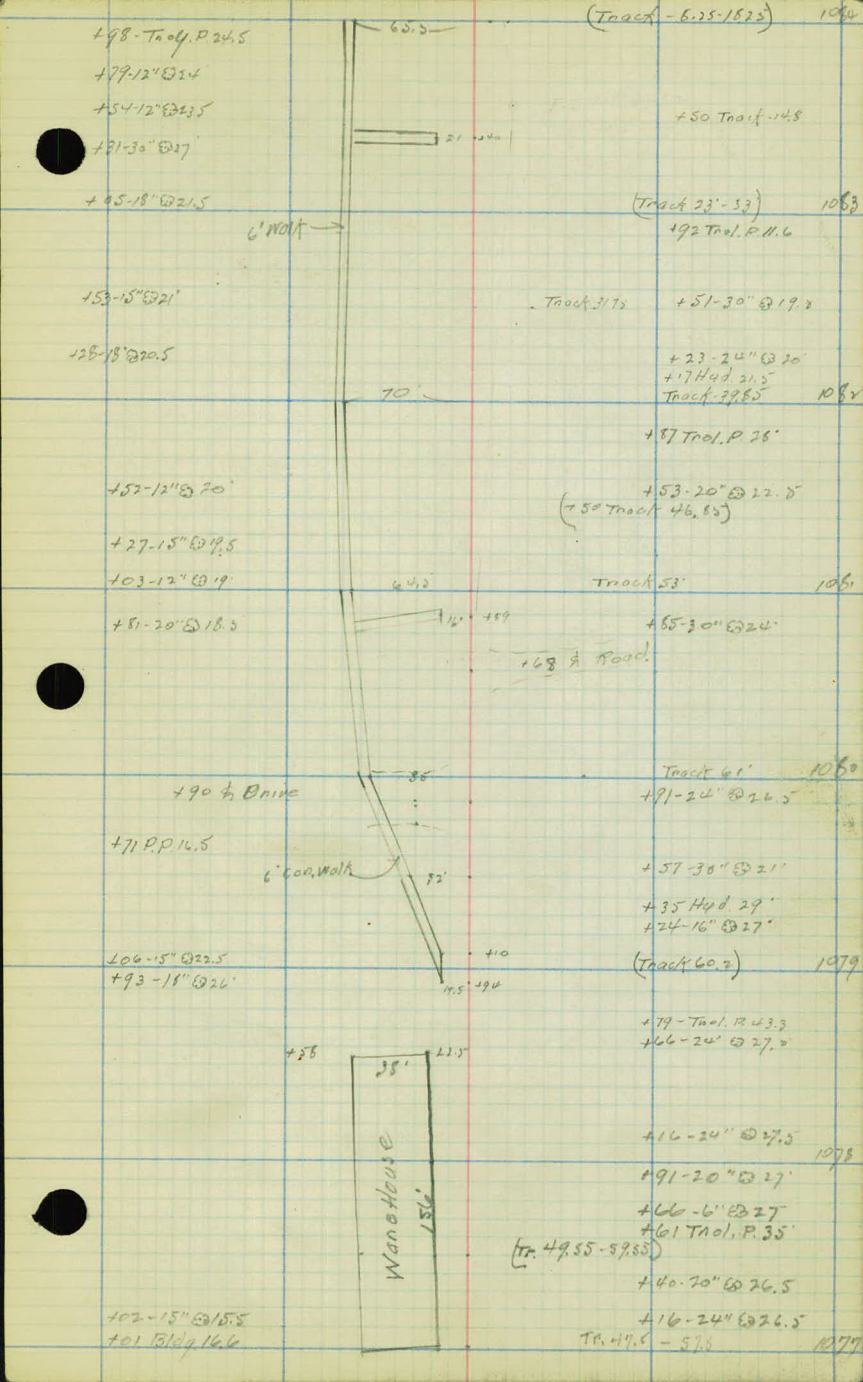
+94 - 24" @ - 26'

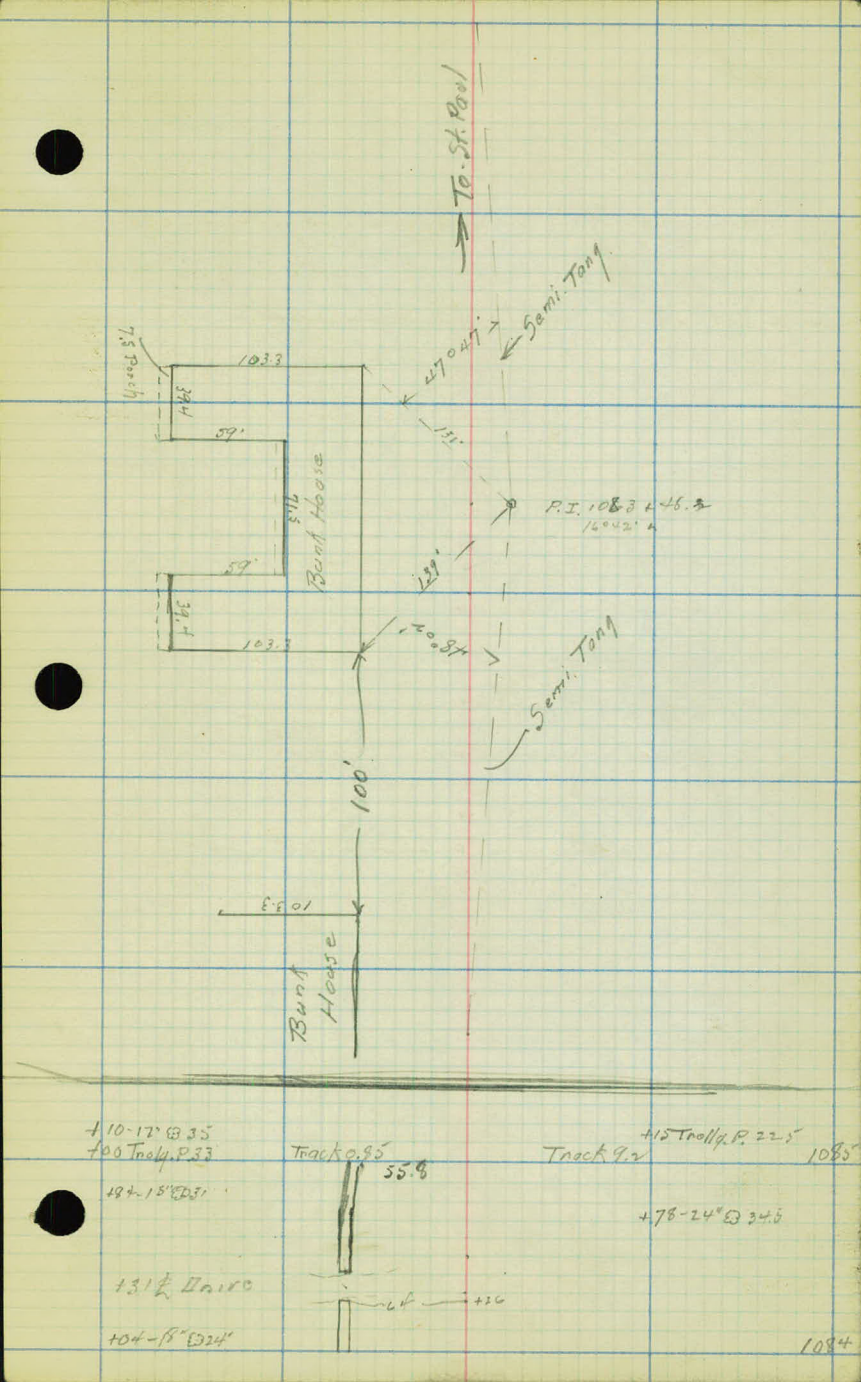
+44 - 30" @ - 25.5'

Pav. 46 (Width 35.8)

+80 Tan. P. - 24.5'
T70 - 10" @ 25.5'

1077
1076
1075
1074
1073
1072
1071
1070


+98 - Tnol. P. 24.5
+79-12" @ 24
+54-12" @ 23.5
+31-30" @ 27
+05-18" @ 21.5
6' Walk
+53-15" @ 21'
+28-18" @ 20.5
+52-12" @ 20'
+27-15" @ 19.5
+03-12" @ 19'
+81-20" @ 18.5
+90 ℄ Drive
+71 P.P. 16.5
6' Con. Walk
+06-15" @ 22.5
+93-18" @ 26'
+58
38'
21.5'
Warehouse
45'
+02-15" @ 15.5
+01 Bldg. 16.6
65.5'
21' +24
70'
+59
+68 ℄ Road
86'
92'
+10
14.5' +94
(Track - 6.25-1825)
+50 Tnol-148
(Track 23'-33')
+92 Tnol. P. 11.6
Track 31.72
+51-30" @ 19.8
+23-24" @ 20'
+7 Hyd. 21.5'
Track 29.85
+87 Tnol. P. 28'
+53-20" @ 22.5'
(+58 Track 46.83)
Track 53'
+65-30" @ 24'
Track 61'
+91-24" @ 26.5'
+57-30" @ 21'
+35 Hyd. 29'
+24-16" @ 27'
(Track 60.7)
+79 - Tnol. P. 43.3
+66-24" @ 27.2
+16-24" @ 27.5
+91-20" @ 27'
+66-6" @ 27'
+61 Tnol. P. 35'
(TR. 49.55-89.85)
+40-20" @ 26.5
+16-24" @ 26.5
TR. 49.5 - 57.8
(Track - 6.25-1825)
1084
1083
1082
1081
1080
1079
1078
1077


To St. Paul
Semi Tang.
Wood Pole
103.3
44.5'
59'
54.5'
Bent House
59'
44.5'
103.3
47°47'
151'
P.I. 108+46.3
160°42'
139'
120.8'
Semi Tang.
100'
103.3
Bent House
+10-17° @ 35
+00 Trolly. P. 33
+84-15° @ 31
+31 ℄ Univ
+04-58° @ 24'
Track 8.95
55.8
+16
Track 9.2
+15 Trolly. P. 22.5'
108.5
+78-24° @ 34.5
108+

Rd. 9/c # 98

Art. Topog on Fort Snelling Connection.

1026

1025

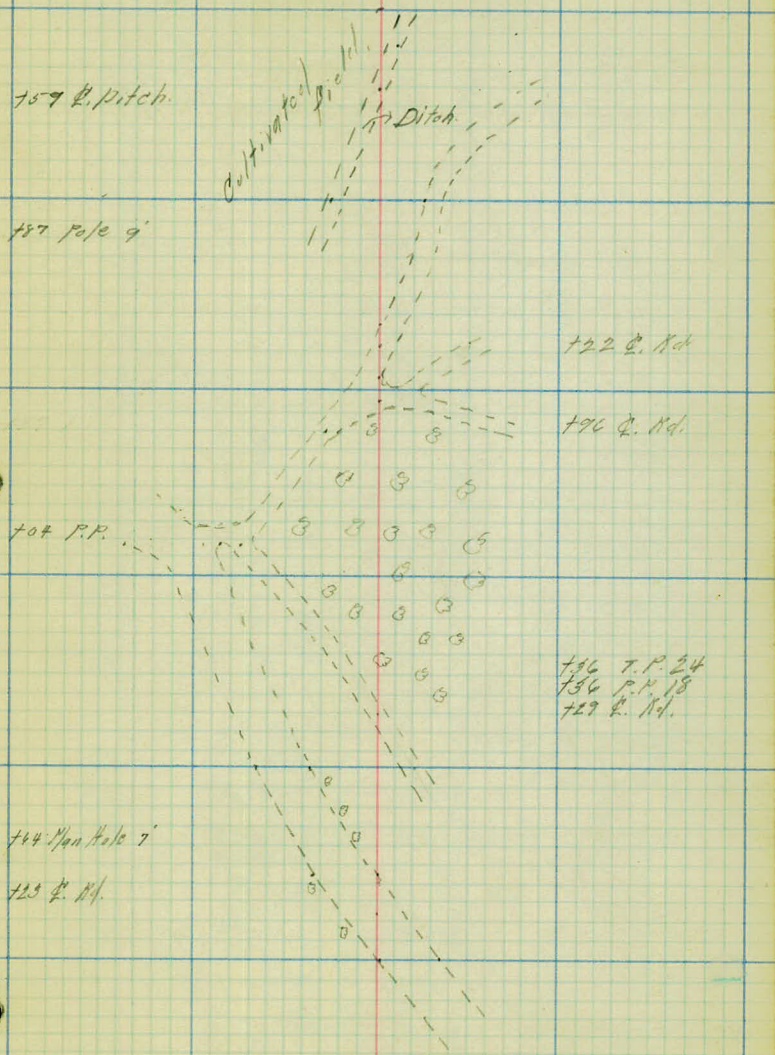
1024

1023

1022

1021

5/19/20


+59 ℄ Pitch.
California Pipe Line
Ditch
+57 Pole 9'
+22 ℄ Rd.
+96 ℄ Rd.
+04 P.P.
+96 T.P. 24
+96 P.P. 18
+29 ℄ Rd.
+44 Man Hole 7'
+29 ℄ Rd.

1032

1031

1030

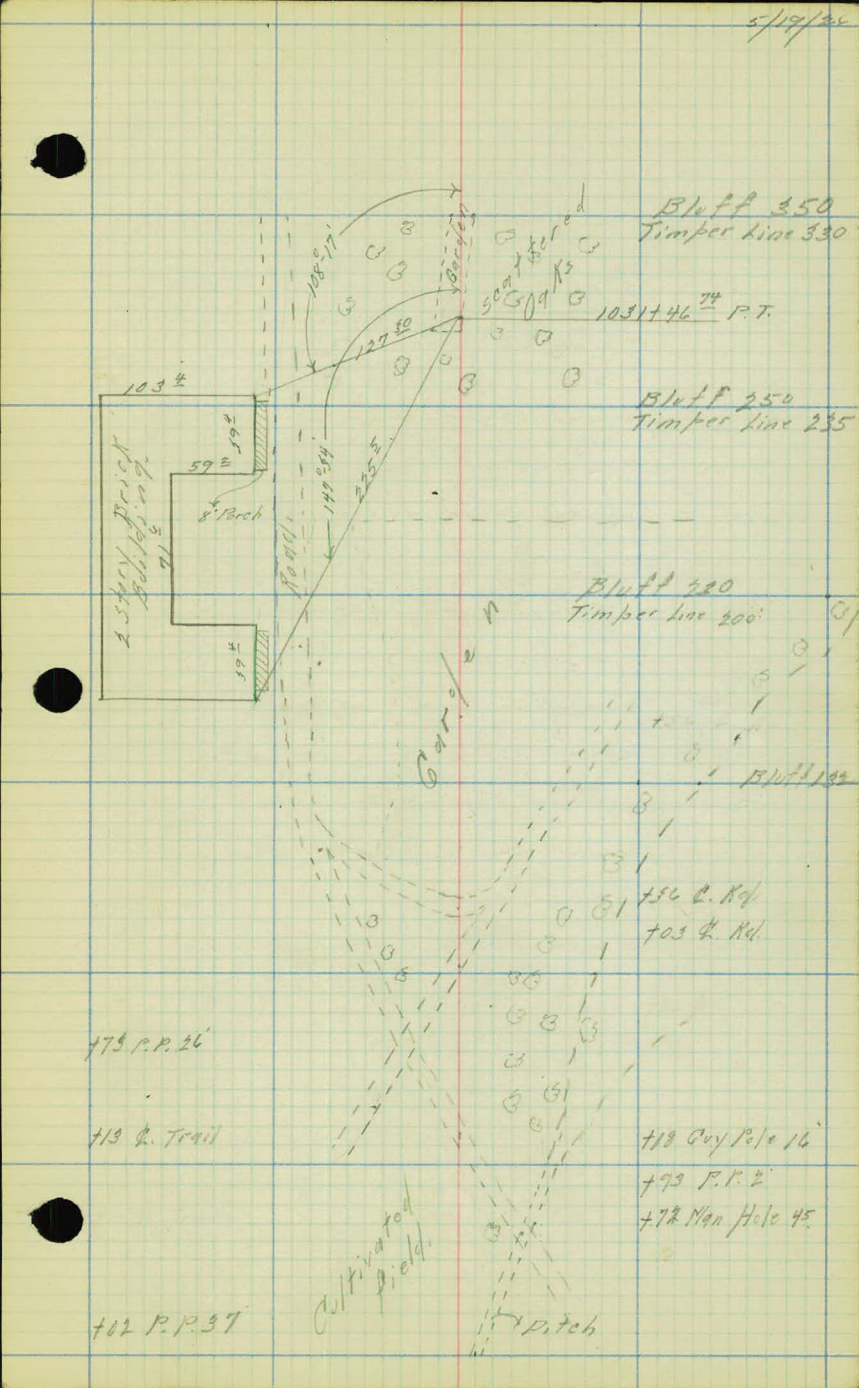
1029

1028

1027

1024

5/19/26


Bluff 350
Timber Line 330
108°17'
Broken
56°30'
1031+46 74 P.T.
127.30
103 ft
59 ft
8' Porch
149.84
225 ft
Road
2 Story Brick Building
71 ft
59 ft
Bluff 250
Timber Line 235
Bluff 220
Timber Line 200
Bluff 183
756 C. Rd
703 C. Rd
779 P.P. 26'
713 C. Trail
718 Guy P/e 16'
793 P.P. 2
772 Man Hole 45
Cultivated Field
Pitch
702 P.P. 37'

1038

1037

1036

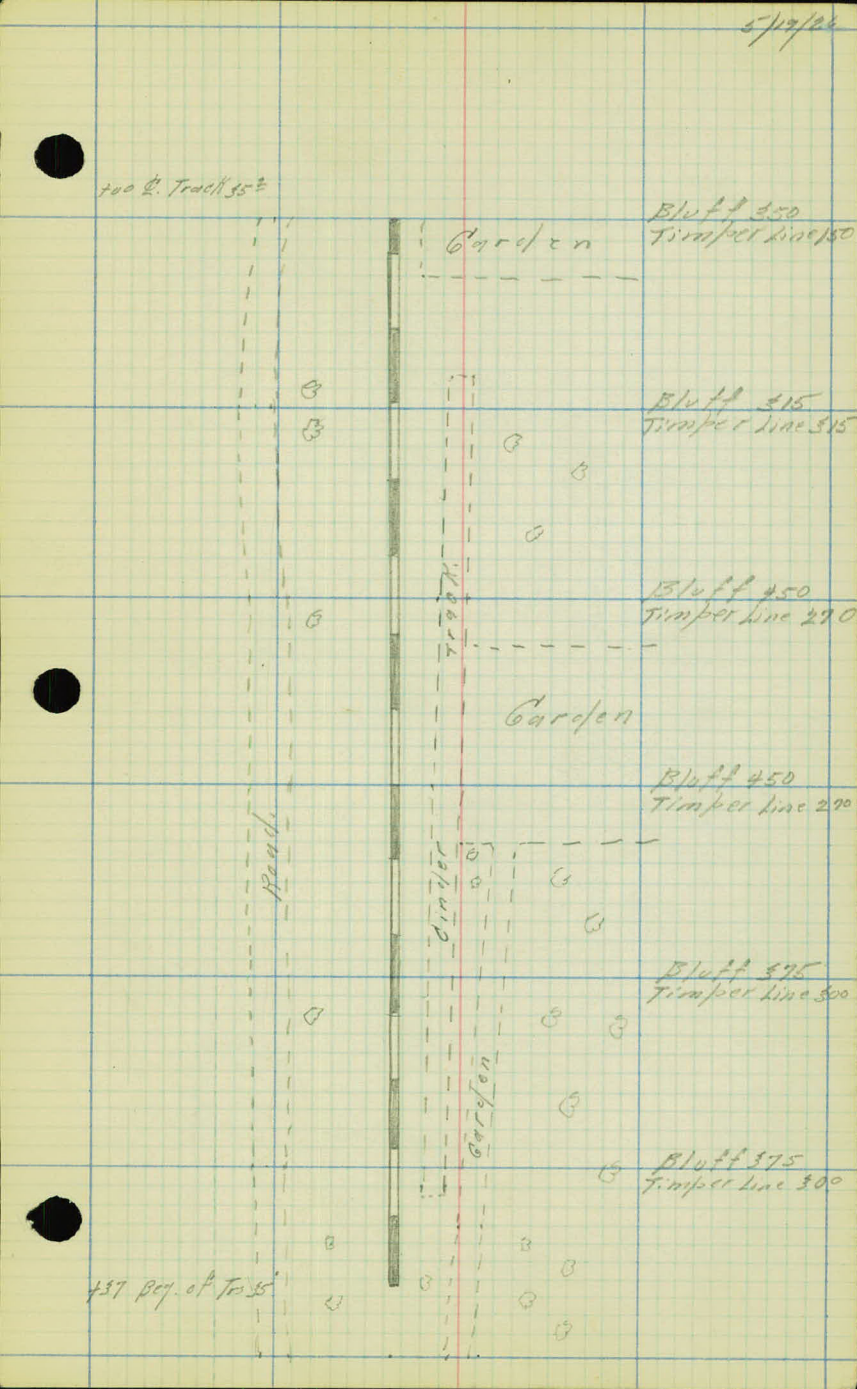
1035

1034

1033

1032

5/12/26


two ℄ Track 35°
Garden
Bluff 250
Timber Line 150
Bluff 315
Timber Line 315
Bluff 450
Timber Line 270
Garden
Road
Bluff 450
Timber Line 270
Bluff 375
Timber Line 300
Garden
Bluff 375
Timber Line 300
437 Beg. of Trestle

1044

1043

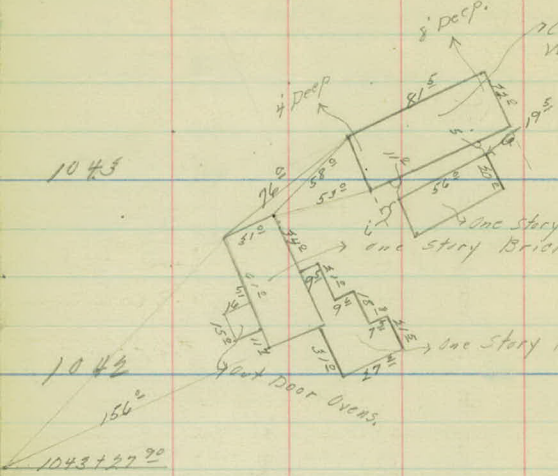
1042

1041

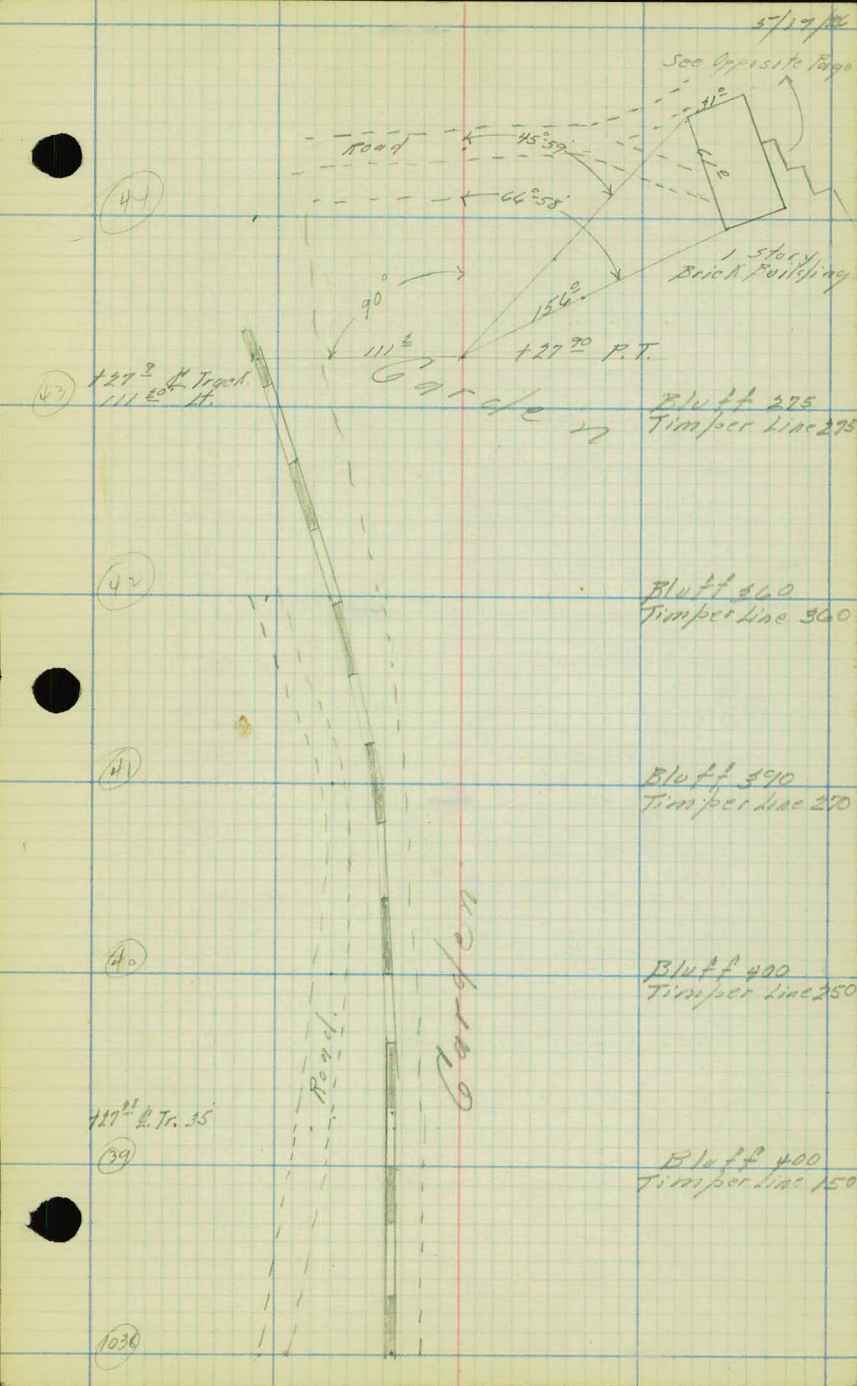
1040

1039

1038



5/17/22


See Opposite Page
31°
Road
45°39'
66°58'
Brick Building
1 Story
90°
156°
111 E
+27.30 P.T.
+27.3 E
111 E
Bluff 275
Timber Line 275
Bluff 360
Timber Line 360
Bluff 390
Timber Line 230
Bluff 200
Timber Line 250
Road
Garden
+27.21 E. Tr. 35
Bluff 400
Timber Line 150
41
42
43
39
40
1030

1050

1049

1048

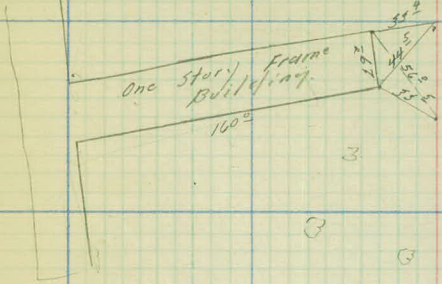
1047

1046

1045

1044

5/19/36



Calks

150'

Top of Bluff

Top of Bluff 66

Scattered

Ravine

Bluff 225
Timberline 225

+50 E. Trail

+28 E. R/R

+07 P.F. 23
Bluff 250
Timberline 250

1056

1055

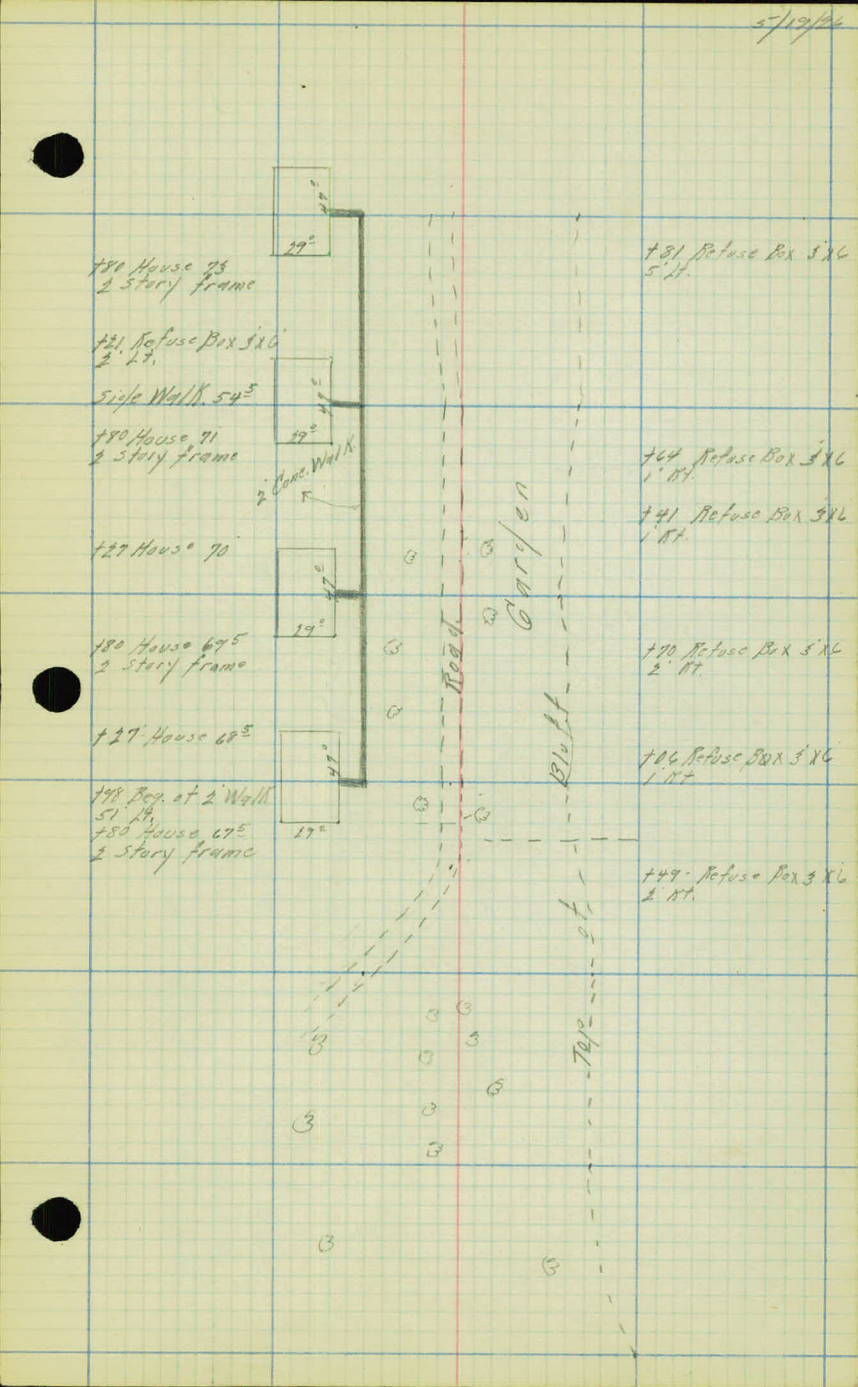
1054

1053

1052

1051

1050


#80 House 73
2 Story Frame
#81 Refuse Box 3'X6
2' Ht.
Side Walk 54=5
#80 House 71
2 Story Frame
2' Conc. Wall
#27 House 70
#80 House 69=5
2 Story Frame
#27 House 68=5
#78 Box of 2 Walls
51 Ft.
#80 House 67=5
2 Story Frame
#81 Refuse Box 3'X6
5' Ht.
#64 Refuse Box 3'X6
1' Ht.
#41 Refuse Box 3'X6
1' Ht.
#70 Refuse Box 3'X6
2' Ht.
#06 Refuse Box 3'X6
1' Ht.
#47 Refuse Box 3'X6
2' Ht.
Road
Garden
Bldg. Ln.
74'
29'
42'
17'

1062

1061

1060

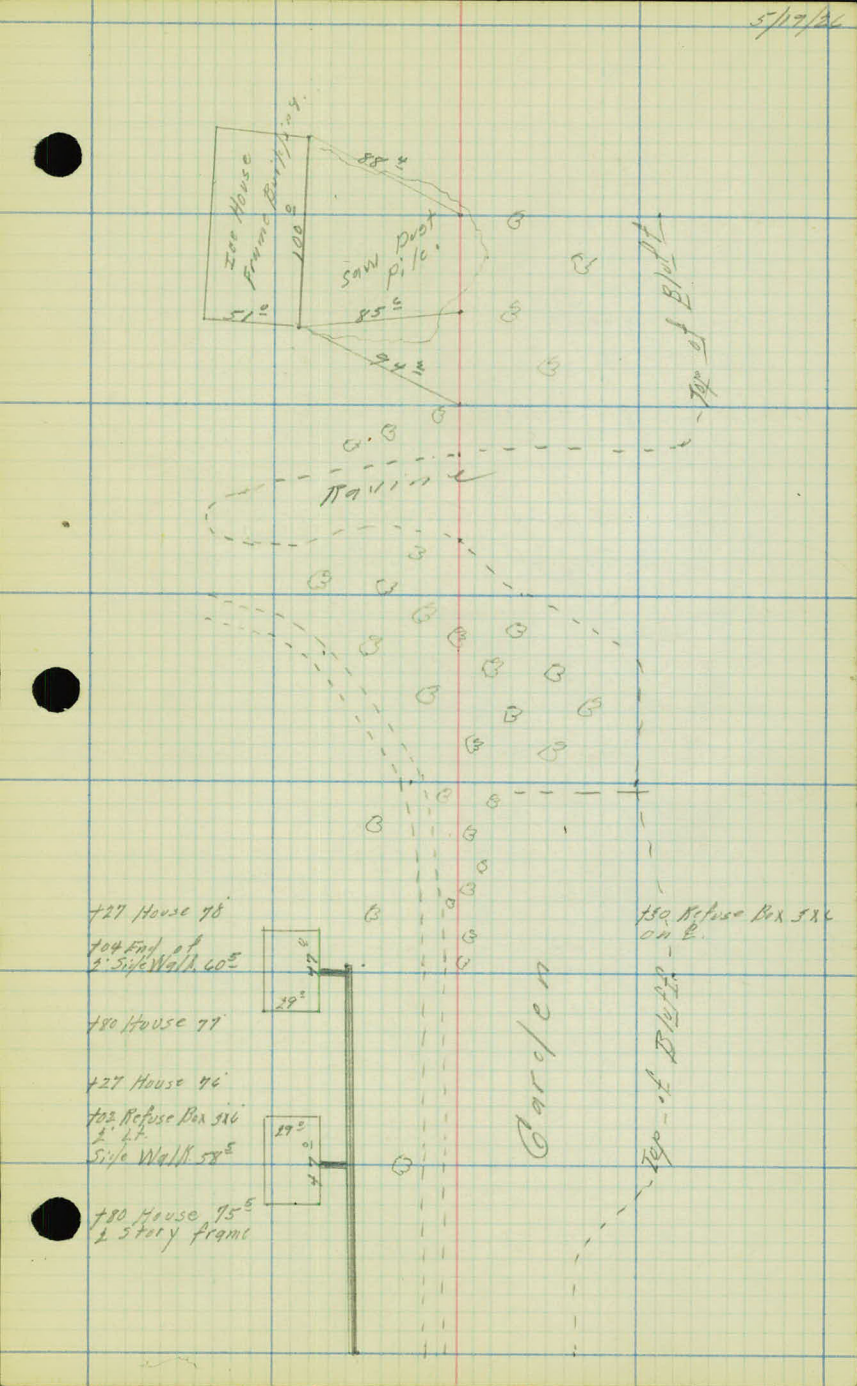
1059

1058

1057

1056

5/19/26


Ice House
Frame 1 Story
100 ft
51 ft
85 ft
85 ft
Saw Dust
Pile
Wall
Garden
#27 House 78'
#04 End of
1 Side Wall 60 ft
#80 House 77'
#27 House 76'
#02 Refuse Box 5x6
1 Side Wall 58 ft
#80 House 75 ft
1 Story Frame
#80 Refuse Box 5x6
on R.

1068

1067

1066

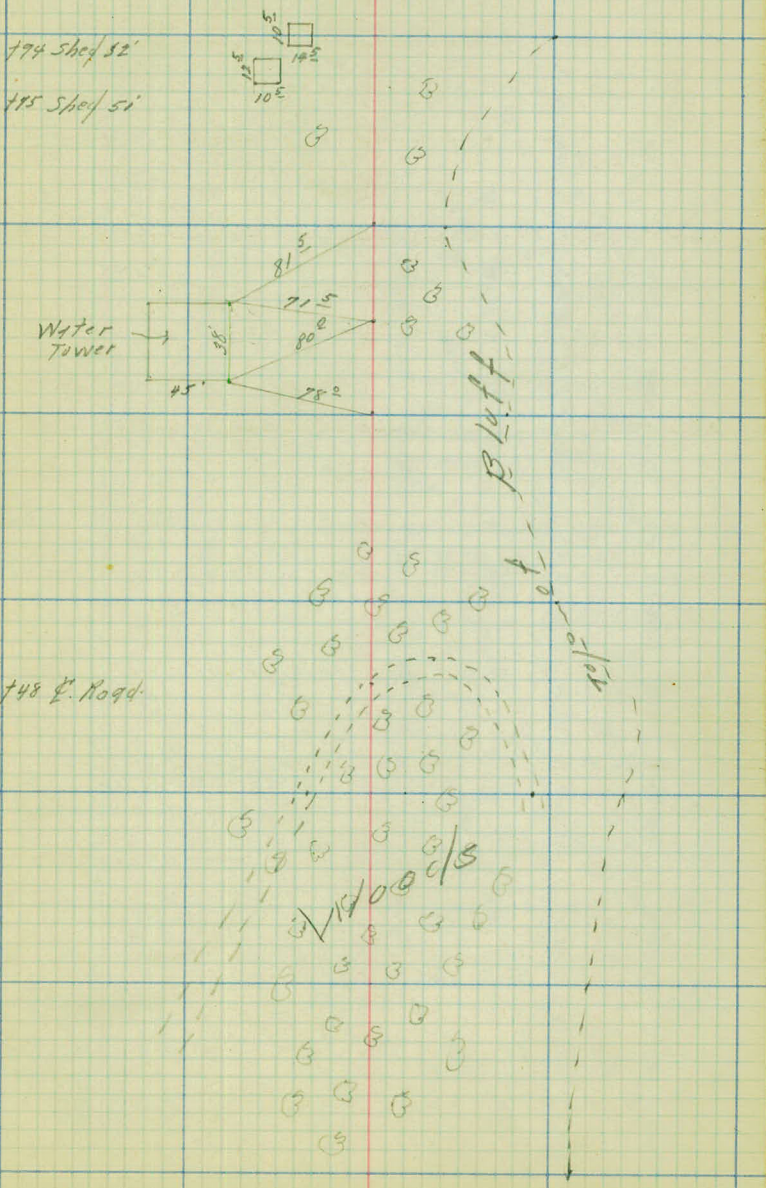
1065

1064

1063

1062

5/11/62



1074

1073

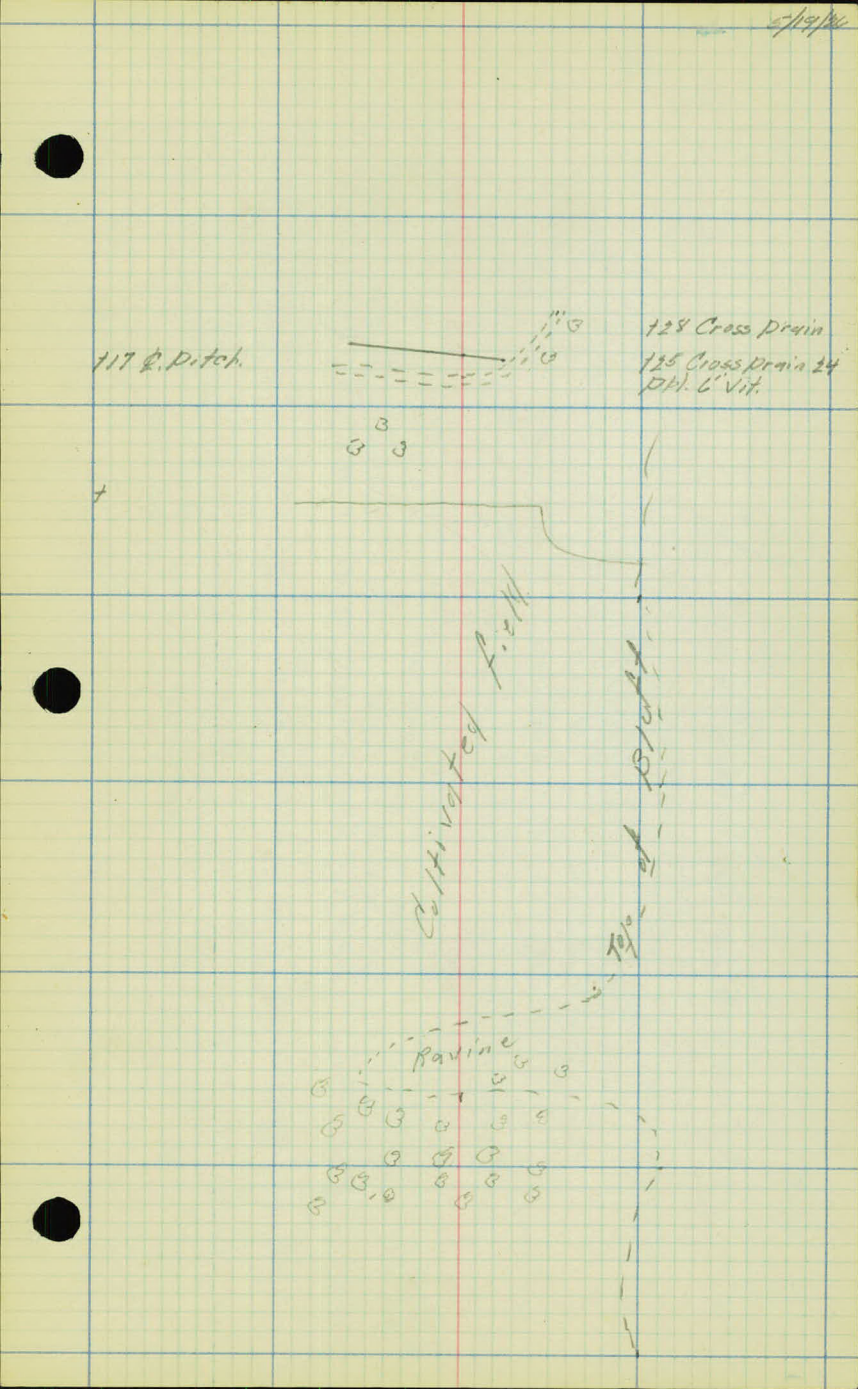
1072

1071

1070

1069

1068


117 ℄ Ditch.
124 Cross Drain
125 Cross Drain 24" Dia. C.I. Pipe
Ravine

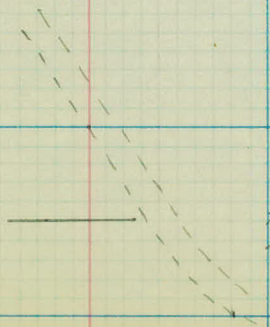
1077

1076

1075

1074

5/19/36



Ref. 9/c # 98

Center line Levels and
x sections on Fort Snelling
Connection.

Sta.	+	H.I.	−	Rod.	Elev.
B.M.	4.22	819.76		815.54	
1021+23	℄ Road			4.4	815.2
+45				5.0	14.8
+47				4.0	15.8
1022				4.3	15.5
+28	℄ Trail			4.9	14.9
+38				4.8	15.0
+48				4.6	15.2
+74				8.8	11.0
+81				8.3	11.5
1023				7.7	10.1
+22				11.0	08.8
+28				9.8	10.0
T.P.	0.93	812.76	7.93	811.83	
+65					06.5
+79				5.7	07.1
+80				3.7	09.1
+92	℄ Trail			3.8	09.0
1024				3.7	09.1
+50				4.6	08.2
1025				4.6	08.2

5/20/26

Lt. Rt.

Spk. in P.P. 100' Rt. Sta. 1021+65

5.3 4.5 5.1 5.2 4.7 5.0 4.0 4.9
50 30 18 15 11 4.6 14 17 50

↱ ℄ Rd.

5.0 4.1 4.7 5.6 4.6 4.6 4.0 4.2 4.6
50 40 35 32 24 17 5.0 1 23 50

↱ ℄ Rd. ↱ ℄ Trail

5.6 5.9 6.4 4.7 4.2 4.5 4.6 5.1 4.8
50 38 32 27 14 4.3 15 24 45 50

815.9 = Elev. at Main Hole
Tie to ℄ Sta. 1021+44.
7

7.0 4.4 5.2 5.0 4.4 4.9 10.0 10.3
50 45 30 15 4.8 11 33 42 50

↱ ℄ Road

11.1 4.6 5.3 5.1 9.3 10.9 11.0 9.7 9.3 10.9
71 50 35 15 4.4 8 18 29 35 44 50

↱ ℄ Road

6.2 6.0 6.4 5.3 4.7 9.7 9.9 8.8 11.2
50 41 36 24 10 8.8 17 29 44 50

6.7 5.0 9.1 7.5 9.2 9.3 9.1
50 33 20 15 9 9.7 27 50

7.5 9.2 10.0 9.5 12.0 10.8 10.8 11.0
50 53 14 9.8 4 7 19 35 50

↱ ℄ Rd.

2.0 2.7 2.8 2.8 5.7 4.9 3.5 4.9 5.0 4.1
50 46 36 29 15 6.3 8 18 24 34 50

↱ Bottom of Ditch

7.6 3.3 3.3 3.7 3.9 3.2 3.6 3.3 3.7 4.6 4.5
74 54 50 35 21 16 11 3.7 19 30 39 50

↱ Bottom of Ditch

3.8 7.7 7.7 4.0 3.8 4.9 4.5 4.7 4.4 4.1 5.3 5.4
57 47 43 37 29 22 12 4.6 11 15 27 38 50

↱ Bottom of Ditch ↱ ℄ Rd.

4.7 4.2 8.5 8.5 4.6 4.1 3.9 4.2 4.2
50 34 25 13 16 4.6 13 30 44 50

Stg.	+	H.I.	−	Rod.	Elev.
		812.76			
+37				5.2	807.6
+59				7.1	05.7
+71				6.4	06.4
1026				7.0	05.8
T.P.	7.15	811.32	8.59	804.17	
+50				6.3	05.0
1027				5.0	06.3
+05				6.1	05.2
+14	℄ Trail			5.9	05.4
+50				4.4	06.9
B.M.				1.95	809.37
1028				4.1	07.2
+35	℄ Road			4.1	07.2
+50				3.7	07.6
1029				4.4	06.9
T.P.	8.23	815.74	3.81	807.51	
1030				7.4	08.3
+50				6.5	09.2

6/20/26

Bottom of Ditch

Rt.

5.2 5.1 8.7 8.7 5.1 4.0 3.4
50 16 8 6 5.2 21 37 50

Bottom of Ditch

5.0 6.6 5.7 9.1 9.1 5.6 6.1 4.8 4.1
50 15 7 1 9.1 1 9 32 40 50

Bottom of Ditch

5.2 6.8 9.0 9.0 6.2 4.8 4.6
50 8 6.4 5 7 14 44 50

Bottom of Ditch

802.8 = Elev. of Main Wall at Sta. 10+26.74.

5.2 6.5 7.3 7.3 9.5 8.3 5.8
50 14 7.0 7 13 14 21 50

Bottom of Ditch

℄ Trail

70' Rt. 45' Rt.

3.7 4.3 7.5 9.7 9.2 9.2 9.0 8.5
50 30 6.3 18 31 32 36 43 50

Bottom of Ditch

℄ Rd.

5.0 5.7 5.1 6.0 6.7 6.9 7.1 12.4 12.4
64 50 14 5.0 4 5 18 38 50 52

℄ Rd.

3.6 3.7 3.5 4.9 7.0 8.0
50 29 8 4.4 22 46 50

Spk. in 12" Co. Pk. 40' Lt. Sta. 1028 100' ℄ Rd.

3.3 3.2 3.8 4.3 4.1 4.4 4.7 6.2
50 40 30 16 2 4.1 13 32 50

℄ Rd.

3.6 3.7 4.6 5.3 5.4
50 35 3.7 24 37 50

Above H.I.

℄ Road.

+0.9 +0.5 +0.5 0.0 2.9 4.8 5.4
79 50 44 38 32 4.4 28 50

5.9 6.8 7.9 8.2
50 29 7.4 30 50

℄ Road.

12 1.6 4.7 7.6 8.2
100 90 50 6.5 30 50

Sta.	+	H.I. 815.74	−	Rod	Elev.
1031				7.0	808.7
+05				7.0	08.7
+07				5.7	10.0
1032				4.5	11.2
+37				4.0	11.7
1033				3.7	11.8
1034				3.8	11.9
1035				3.4	12.3
T.P.	5.04	817.77	3.01	812.73	
1036				4.8	13.0
1037				4.7	13.1
1038				6.6	11.2
1039				6.0	11.8
1040				6.4	11.4
1041				6.1	11.7
T.P.	1.98	816.47	3.28	814.49	

5/20/27

Lt. Rt.

1.4 3.2 5.4 5.8 7.1 6.9 7.6
75 50 25 13 10 7.0 23 50

5.1 5.5 7.1 7.7
44 28 5.7 32 50

to Rt.

2.5 2.7 3.5 3.8 3.9 5.4 6.2
105 94 85 50 15 4.5 25 50

Top of Hill

3.4 2.9 2.8 3.2 4.7 5.7
50 37.8 33 22 4.0 37 50

T. R.

3.3 4.2 3.5 3.1 3.1 3.6 3.4 4.3 4.8
50 45 41 37.8 33 51 19 3.7 31 50

3.5 3.5 4.4 4.4 3.4 2.9 2.9 3.3 3.8 4.2
50 47 44 43 40 37.8 33 30 3.8 26 50

2.8 2.8 4.1 4.1 3.2 2.7 2.8 3.3 5.6 4.1
50 48 44 40 37.8 33 30 3.4 22 50

5.0 5.7 5.7 5.2 4.6 4.6 5.0 4.9 5.0 6.4 6.8
50 45 43 40 37.8 33 31 19 4.8 23 33 50

T. R.

4.9 5.7 3.1 4.5 4.5 5.0 4.5 5.2 6.2 6.2 6.2
50 43 40 37.8 33 24 15 4.7 14 24 39 50

4.9 4.5 4.5 4.9 6.4 6.6 6.6
50 37.8 33 31 22 6.4 24 50

T. R.

4.5 4.1 4.1 4.6 5.5 5.4 6.0
50 37.8 33 27 22 6.0 21 50

4.6 3.9 3.9 4.7 6.2 6.4 6.1
50 41 37 31 22 6.4 24 50

T. R.

3.9 3.9 4.4 5.6 6.4 5.4 5.2
52 47 43 34 17 6.1 34 50

Spk. in PR 100 Lt. Sta. 1040+90.

Sta.	+	H.I.	−	Rod.	Elev
		816.47			
1042				5.8	810.7
1043				4.3	12.2 (14.2)
1044				5.4	11.1
+13				4.4	11.9
+28	P.R.			5.2	11.3
+35				5.4	11.1
+50				6.4	10.1
T.P.	4.76	817.28	3.95	812.52	
1045				8.7	08.4
+50				8.7	08.4
1046				5.9	11.4
1047				4.2	13.1
1048				1.8	16.0
T.P.	5.07	821.84	0.51	816.77	
+50				4.5	17.3
1049				4.6	17.2
+50				5.7	16.1

5/21/46

Lt. Rt.

5.9 6.0 5.8 5.7 5.5
50 23 27 50

T.R.

2.6 2.5 3.1 4.5 4.5 4.9 4.3 5.0
108 103 100 89 50 30 4.8 12 50

4.3 4.4 5.7 5.9
50 25 5.4 24 50

L. R.

5.0 5.4 5.6 5.6
50 25 5.4 31 50

6.3 7.1 8.4 11.0 8.8
50 27 12 8.9 25 50

5.6 6.0 8.0 10.3 11.7 11.2
50 34 14 8.9 24 39 50

4.2 5.0 6.1 7.4 9.2 10.0
50 20 12 5.9 26 43 50

2.3 3.5 5.0 4.8 8.3
50 21 4.2 9 15 50

1.4 1.5 2.3 1.4
50 22 1.3 30 50

4.8 4.8 5.0 5.5
50 29 4.5 28 50

3.8 3.8 6.0 7.0
50 24 4.6 19 30

4.2 3.7 4.9 6.6 7.3 9.4
50 38 18 5.7 11 32 50

Sta.	+	H.I.	−	Rod.	Elev.
		821.84			
1050				5.8	816.0
+50				6.5	15.3
1051				6.3	15.5
B.M.	1.03	817.50	3.37	818.47	
1052				4.1	15.4
+54				4.5	15.0
1053				5.5	14.0
1054				8.6	10.9
T.P.	4.28	814.72	7.06	810.44	
1055				6.2	08.5
1056				8.3	06.4
+33				7.4	07.3
1057				7.6	07.1
1058				4.9	09.8
T.P.	5.32	815.17	4.87	809.85	
+50				5.5	09.7

5/21/24

Lt.

4.4 4.7 5.5 7.5 9.6 11.0
50 45 11 5.8 19 39 50

Elev. 818.0 of foundation of building in Lt.

3.8 4.9 6.6 9.3 11.7
50 24 7 6.5 27 50

4.4 5.5 8.7 11.8
50 22 6.3 26 50

Spk. in 18" Oak 40 Lt. Sta. 105 1760

1.5 1.7 2.9 4.4 6.5 8.8
50 34 14 4.1 10 32 50

1.8 2.9 4.3 5.0 7.3 9.6
50 14 10 7.5 9 25 50

Top of foundation Lt Sta. 105 2480

1.5 2.1 3.0 3.7 5.4 6.0 9.4 12.1
818.2 top of foundation House 50 51 15 9 5.5 9 30 50

814.7 = Elev. at foundation House on Lt. 105 3780.

4.2 6.0 6.7 8.0 9.5 12.5 16.0
50 33 16 11 8.4 5 27 50

815.2 Elev. foundation House on Lt 105 4780.

1.5 3.0 3.8 5.7 8.4 11.0 13.6
50 37 20 13 6.2 13 32 50

814.4 = Elev. foundation House Lt. 105 5780.

3.4 4.5 5.1 6.4 6.6 9.8 15.4
50 34 22 14 2 8.3 12 50

3.7 5.1 6.5 8.9 11.5 15.7
50 21 14 7.4 1 17 50

814.7 Elev. foundation House Lt 105 6780.

3.3 4.5 5.7 11.7 16.0
50 27 13 7.6 14 50

816.5 = Elev. foundation House Lt 105 7780.

0.7 2.9 4.4 7.2 9.6 10.6
50 35 17 4.9 17 38 50

1.1 2.7 4.0 4.5 8.6 11.4
50 26 21 7 5.5 24 50

Sta.	+	H.I.	−	Rod.	Elev.
		815.17			
1059				7.1	808.1.
B.M.				5.43	809.54
+80				12.5	02.7.
T.P.	5.23	807.91	12.49	802.68	
1060				7.6	800.3.
+30				11.7	796.2.
+52				28.6	779.3.
+73				9.0	798.9.
+82				7.4	800.5.
1061				6.1	01.8.
T.P.	9.95	816.32	1.54	806.37	
+50				10.9	05.4.
1062				9.6	06.7.
+39				14.7	801.4.
T.P.	5.84	809.48	12.70	803.64	
1063				10.6	798.9.

5/21/26

LT.

1.7	3.6	4.4	5.0			9.0	11.8	14.0	
50	30	24	18	7.1		18	37	50	

5 to K in 12 0 aK 50 2 LT 544, 1059794

6.2	6.8	9.8				20.3	23.0		
50	41	18	12.5			37	50		

0.4	1.8	4.2				10.9	16.5	25.1	
50	33	18	7.6			17	37	50	

3.0	4.8	8.0				34.1	37.2	44.7	50.5	53.2
50	33	14	11.7			19	40	63	82	100

21.7	34.3	26.3	27.0			24.2	22.2	28.6	33.3
50	38	25	15	28.6		16	31	50	70

3.3	8.2	9.7	12.8	9.0		10.7	13.4	14.9
50	37	27	10	4	9.0	18	34	50

2.4	4.8	6.4				10.6	12.4	14.0
50	24	10	7.4			23	38	50

0.0	0.7	2.6	5.0			7.9	11.7
50	41	19	8	6.1		17	50

4.5	4.6	5.3	5.9			12.8	13.8	16.6	17.7
50	32	27	7	10.9		13	18	43	50

4.0	5.3	4.7	7.1			12.2	15.3	18.5	18.0	21.8
50	24	17	4	7.6		7	23	34	46	50

4.2	4.8	7.2	9.4	12.6		18.0	20.7	23.6
50	41	34	24	11	14.9	19	34	50

2.6	7.1					13.5	18.1
50	18				10.6	20	50

Sta.	+	H.I.	−	Rod.	Elev.
		809.48			
+00				12.2	797.3
1064				11.7	97.8
+31				12.4	96.9
+40				13.8	95.7
+48	E. Road			15.4	94.1
+50				15.5	94.0
+63				15.8	93.7
1065				14.0	95.5
+30				10.7	798.8
T.P.	8.01	814.73	2.76	806.72	
+50				14.2	800.5
1066				10.8	03.9
+50				8.5	06.2
1067				7.3	07.4
T.P.	5.47	814.97	5.23	809.50	
+83				6.4	08.4
B.M.				9.73	805.24
1068				9.0	06.0

5/24/24

Lt. 50 6.7 9.7 / 50 37 17 12.2

Rt. 14.7 17.7 / 28 50

2 Rod.

7.1 7.7 8.1 8.3 9.7 / 50 45 34 29 19 11.7

14.7 16.0 17.7 / 28 40 50

2 Rd.

7.9 9.4 12.9 13.8 / 50 30 18 7 13.8

14.3 16.7 19.3 / 14 33 50

2 Rd. 2 Rd.

7.3 11.3 13.1 15.1 / 50 25 21 4 15.8

17.3 18.4 20.7 22.3 22.3 / 8 17 34 50 55

6.1 8.6 11.4 13.3 / 50 34 11 7 14.0

16.0 21.0 20.5 / 12 47 50

3.2 6.8 6.8 7.6 / 50 43 27 15 10.7

12.5 14.4 15.5 / 18 39 50

11.0 11.0 10.0 11.2 / 46 46 33 16 14.2

17.3 22.5 / 19 50

7.7 9.6 11.5 8.9 9.7 / 50 47 25 18 8 10.8

15.5 19.8 / 29 50

1.5 5.5 / 30 21 8.5

13.2 17.3 / 29 50

1.6 4.7 5.8 / 50 27 7 7.3

13.2 15.8 / 18 50

Nail in Tree S 106 ft 4

0.6 2.4 / 50 31 6.4

7.3 12.0 13.3 / 15 41 50

Spk. in 12" Tree 35 Ft. Sta. 1067 +50.

1.7 3.2 6.0 / 50 30 13 7.0

14.2 19.7 / 24 50

Sta.	+	H.I.	−	Rod.	Elev.
		814.97			
+09				6.7	808.3
+50				7.1	07.9
1069				9.3	05.7
T.P.	4.05	809.33	9.69	805.28	
+32				6.3	803.0
+54				14.0	795.3
+61				13.9	95.4
+64				13.9	795.4
+84				5.1	804.2
1070				5.0	04.3
T.P.	10.50	818.11	1.72	807.61	
+54				7.3	10.8
1071				5.8	12.3
1072				6.4	11.7
+50				7.5	10.4
T.P.	2.95	813.76	7.30	810.81	
+65				5.2	08.6
1073				5.5	08.3
+15				6.7	07.1
+15				7.8	06.0

5/24/24

LT

1.2/50	3.3/24	6.7	10.6/25	14.6/50	
0.3/50	0.4/44	4.0/23	7.1	12.2/30	14.6/50
6.6/50	8.3/19	9.3	10.2/18	12.1/41	13.2/50
4.6/50	5.9/24	6.3	5.4/9	6.7/28	8.4/50
6.8/50	11.1/28	13.7	16.1/22	20.6/38	24.0/50
5.1/50	4.0/19	5.1	8.5/31	10.9/43	13.9/50
3.8/50	3.6/31	5.0	9.3/34	11.3/50	
3.4/50	4.9/25	7.3	9.5/25	12.7/50	
2.3/50	4.0/25	5.8	8.9/30	12.0/50	
2.6/50	4.4/25	6.4	8.3/32	10.6/50	
5.5/50	6.8/30	7.5	8.9/30	11.1/50	
		5.2			
1.4/50	3.4/22	5.5	7.6/27	9.9/50	

RT.

Sta.	+	H.I.	-	Rod.	Elev.
		813.76			
+19				7.7	806.1
+24				5.9	07.9
+30				5.2	08.6
1074				5.9	07.9
+50				6.7	07.1
+88				7.9	05.9
+97				9.3	04.5
1075				10.6	03.2
+08 32				10.1	03.7
+14	℄ Road			9.7	04.1
+30				8.7	05.1
B.M.			5.15	808.61	808.66 = 113.28

5/24/26

Lt. Rt.

Bottom of Ditch. Bottom of Ditch.

5.4 13.4
50 50

803.1 = Outlet Elev. of Cross Drain Rt 1073+28.

2.3 4.3 6.4 8.5 10.1 13.8
50 15 5.2 16. 37 44 50

2.2 3.7 8.8 11.2
50 29 5.9 25 50

802.7 Outlet Elev. Cross Drain Rt. Sta. 1074+50. (℄ Road)

2.7 4.9 8.5 9.9 14.4 14.2 14.3
50 28 6.7 19 24 29 40 50

(℄ Road)

2.2 4.5 5.6 9.4 11.4 11.6 11.8 12.7 13.3
50 42 17 7.9 5 6 18 30 38 50

(℄ Road

2.5 4.5 4.9 6.8 10.1 10.8 11.0 13.7
30 43 29 10 4 10.6 11 23 30

(℄ Road

2.5 4.5 6.6 9.6 10.2 10.4 11.2 14.0
50 41 13 9 10.1 5 16 25 50

(℄ Road.

8.4
13

Spk. in 30" Tree 102' Rt. Sta. 1176 Proj. #25-58.

LATITUDE & DEPARTURE CHART.

Proj. S.T.H. #52 From ..... To .....

Sta.	Dist.	Deflection L.	Deflection R.	Course	Latitude + N	Latitude - S	Departure +E	Departure -W	Totals Latitude	Totals Departure
P.O.J 959+13.6										
	2621.4			N. 28° 55' E	2294.6		1267.5			
985+35			36° 30'						2294.6	1267.5
	3684.89			N. 65° 25' E	1532.96		3350.9			
1021+93.9		51° 25'							3827.6	4618.4
	3694.03			N. 14° 00' E	3584.3		893.7			
1058+61.85			21° 33'						7411.9	5512.1
	1612.27			N. 35° 33 E	1311.7		937.4			
1074+67.5			44° 42'						8723.6	6449.5
	469.42			N. 80° 15' E	79.5		462.6			
End 1079+23.64									8803.1	6912.1

Compiled by H.J.G.
Checked by C.W.S.
4-1-26

eln

2-9-28

RE-X-SECTIONS

PROJ. 27-52

STA. 1032+00 - 1039+00

					℄ GRADE	G.R.
B.M.	1.95	819.00		817.05		
1032					813.3	5.7
1033					812.7	6.3
1034					812.1	6.9
	4.37	816.68	6.69	812.31		
1035					811.6	5.1
+50	INTERSECTION OF DRAW AND ROAD				811.4	5.3
	4.30	816.61	4.37	812.31		
1036					811.2	5.4
1037					811.1	5.5
1038					811.0	5.6
1039					811.0	5.6
+34	℄ of Ditch. Δ-104°-47' 6" Back Tangent.				811.04	5.6
	6.54	818.85	4.30	812.31		
B.M.			1.80	817.05		

9-2-28

Lt. ℄ Rt.

812.0

Spl's in 12" Tree 168 47 54 10 27 30.

811.5

5.6	5.8	5.6	6.9	7.0	5.4	C0.3	5.7	7.2	7.5	6.6	7.0	6.4	6.0
100	35	21	18	15	12	5.4	15	17	21	23	54	100	150

811.8 811.2

6.4	6.9	6.9	6.7	7.8	7.2	6.2	C0.5	6.1	7.4	7.8	6.2	6.6	7.2	6.5
100	75	30	21	17	15	12	5.2	15	18	21	24	50	100	150

810.3 810.5

8.1	8.3	7.6	9.2	9.2	8.2	7.0	C0.3	6.9	8.3	8.5	7.5	7.7	7.6	7.0
100	49	23	21	17	15	12	6.6	14	17	20	23	39	100	150

809.5 809.8

5.8	6.4	6.7	7.2	7.0	5.0	C0.3	4.7	6.9	6.6	5.8	5.8	5.9	5.8	5.4
100	46	34	17	14	12	4.8	15	18	21	23	57	71	100	130

809.1 809.8 ℄ Draw

5.8	6.3	6.0	6.6	7.6	7.6	5.4	C0.2	5.3	6.9	6.9	6.8	6.9	6.7	6.0	6.3	5.4
100	49	37	20	18	16	12	5.1	15	18	21	28	36	59	70	100	150

809.6 809.6 ℄ Draw

6.0	6.0	5.5	5.9	6.4	7.0	5.4	C0.2	5.4	7.0	7.0	6.1	6.5	6.9	7.8	6.7	6.3	6.3
100	57	36	23	19	16	13	5.2	15	18	20	23	45	63	75	91	100	150

808.8 809.7 ℄ Draw

5.6	6.2	6.2	5.7	6.1	7.2	7.8	5.2	C0.5	5.4	6.5	7.2	6.5	6.8	6.8	7.3	7.8	7.3
100	69	46	32	22	19	14	12	5.0	15	18	21	28	40	100	137	150	170

809.2 809.3 Top of Ice. ℄ Draw

5.1	5.7	5.7	7.4	7.1	5.1	C0.4	5.3	7.2	7.3	6.0	5.7	6.3	6.6	7.0	7.4	8.6	8.7	8.9
100	52	32	19	14	11	5.0	14	18	21	25	52	100	142	200	275	350	425	500

808.9 809.6 ℄ Draw

5.7	6.0	6.4	7.7	5.2	5.4	C0.9	5.3	6.8	7.0	6.6	6.7	6.8	6.6	6.7	6.6	8.5	8.3	8.7
100	57	32	19	16	12	5.4	13	17	21	25	57	110	150	200	257	350	377	500

809.7 ℄ Draw

C0.6	5.3	5.5	6.9	6.8	6.6	6.8	7.4	7.6	7.7	7.9	7.7
50	12	16	18	37	50	100	150	200	250	300	350

02500