Book - 48 - Dr. 6

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

PRELIMINARY Survey

VADNAIS CUT-OFF

From Rice St. To Vadnais Blvd.

Road Acc't. No.

Date Filed 2-32 File P.S.

Kadrois BLVD. —

LATITUDE & DEPARTURE CHART.

Proj. Rd. 6 From Rice To Kadrois Blvd.

Sta.	Dist.	Deflection L.	Deflection R.	Course	Latitude +N	Latitude -S	Departure +E	Departure -W	Totals Latitude	Totals Departure
					C		S			
0+00.										
	100.00			East		0.	100.00			
1+00.			21°00'						0	100.00 ✓
	360.75			S.69°00'E		129.28	336.79			
4+58.75		21°02'							-129.28	+436.79 ✓
	662.15			N89°58'E	0.38		662.15			
11+18.90		15°26'							-128.90	+1098.94 ✓
	342.95			N74°32'E	91.46		330.53			
14+60.70			15°22'						- 37.44	+1429.47 ✓
	1299.43			N89°54'E	2.17		1299.43			
27+59.00		23°30'							- 35.17	+2728.90 ✓
	1438.69			N66°24'E	575.98		1318.56			
41+90.83			59°24'						+540.81	+4047.26 ✓
	1477.93			S.54°12'E		864.53	1198.69			
55+49		68°20'							-323.72	+5245.95 ✓
	243.85			N57°28'E	131.14		205.59			
57+32.33									-192.58	+5451.54

X Section Notes

Vadnais Cut-off.

Sta.	+	H.I.	—	Elev	
BM	0.24	925.37		925.13	
0+00					923.52
+17			Top Shoulder		23.3
+21			Toe Slope		22.4
+50					20.7
1					19.1
+50					15.2
T.P.	0.08	911.66	13.79	911.58	
2					10.5
+50					903.4
T.P.	2.40	900.50	13.56	898.10	
3					897.0
+50					90.7
T.P.	3.80	891.57	12.73	887.77	
4					85.2
+12			Toe Slope		84.0
+41					88.2

- Cold asphalt — Sat. A.M. 12/17/31

Left & Right.

Spike in P.P. Owasso Blvd ½ Rice St.

1.6/50 1.75/30 1.85 2.1/30 2.1/50

2.2/50 1.8/30 2.1 2.4/30 2.4/50

2.5/50 2.8/20 3.0 3.3/19 2.8/50

3.8/50 4.4/27 4.5 4.6/25 4.4/50

7.5/50 7.2/29 6.3 6.3/37 5.8/50

11.8/50 11.4/30 10.2 9.5/34 9.2/50

2.6/50 2.4/31 1.2 +0.8/27 +2.2/50 = over H.I.

10.7/50 10.0/33 8.3 6.7/29 5.5/50

5.2/50 4.3/29 3.5 2.6/26 2.4/44 0.7/50

11.4/50 10.6/29 9.8 8.8/27 5.3/34 x2 5.0/41 4.9/50 ± Cl.

7.0/50 7.0/22 6.4 6.2/6 0.3/15 x 0.0/22 +0.2/30 5.7/39 6.1/50

Edge Swamp → 8.5/50 8.4/17 7.6 1.4/10 x 0.8/17 1.0/23 8.0/34 8.5/50

9.6/50 9.6/33 8.2/10 3.4 x 3.0/7 2.8/14 8.5/25 8.5/50

Sta.	+	H.I.	−	Elev	
		891.57			
5					885.7.
+50					84.2.
6					83.6.
+50					82.8.
7					82.3.
+50					81.8.
8					81.6.
B.M.	3.97	886.42	9.12	882.45	882.77 N.G.
+50					81.4.
9					81.2.
+50					81.2.
10					81.1.
B.M.	4.41	886.86	3.97	882.45	
+50					81.2.
BM			4.99	881.87	
11					81.4.

SHOOTING Lt ℄ Rt

9.6	9.2	10.2	10.2	6.4	5.9	6.7	10.0	10.0	9.2	9.4
50	19	16	13	9		6	11	15	19	50
9.8	10.0	12.5	10.5	7.5	7.4	7.5	10.2	10.4	9.7	9.6
50	17	16	14	7		5	10	14	15	50
9.7	10.0	10.7	10.7	10.2	8.0	8.3	10.3	10.8	9.8	9.8
50	17	16	14	13	11	9	9	14	15	50
10.2	10.0	11.0	11.0	9.3	8.8	9.2	10.4	11.2	10.0	10.0
50	17	16	13	10		7	10	14	15	50
10.4	10.4	11.4	11.4	9.7	9.3	9.6	10.7	11.4	10.4	10.4
50	17	16	13	10		7	9	15	16	50
10.6	10.8	11.6	11.4	10.3	9.8	10.0	11.0	11.6	10.8	10.9
50	17	16	11	10		7	9	14	15	50
10.9	10.8	11.6	11.4	10.4	10.0	10.6	11.6	11.6	10.8	11.0
50	16	15	10	9		8	10	14	16	50

Spot in 12" Birch 42 Lt 8+43

6.0	5.8	6.1	6.6	5.5	5.0	5.4	6.2	6.6	6.0	6.0
50	16	15	10	9		8	9	16	17	50
6.4	5.8	6.8	6.5	5.7	5.2	5.8	6.0	7.0	6.2	6.2
50	17	16	10	9		8	9	15	17	50
6.2	6.1	6.8	6.7	5.6	5.2	6.0	6.6	7.0	6.2	6.0
50	16	15	9	8		8	9	14	16	50
5.8	6.0	7.2	6.9	5.8	5.3	5.6	6.6	7.1	6.4	6.3
50	16	15	10	7		8	9	15	16	50
7.0	7.1	7.6	7.4	6.2	5.7	6.1	7.2	7.6	7.0	7.0
50	16	15	9	7		7	9	16	17	50

Spot in 15" Will. 35 Lt - 12 + 55.

7.7	6.8	7.7	7.0	6.0	5.5	5.3	6.1	7.0	7.7	6.7	7.0
50	13	12	6	5		5	17	12	20	21	50

Sta.	+	H.I.	−	Elev
11 + 50	×	886.86		879.7.
12				79.9.
+50				80.0.
+74				82.1.
+80				85.3.
T.P.	12.95	898.49	1.32	885.54
13				85.2.
+50				85.9.
14				86.3.
+19				88.0.
+30				92.5.
+40				93.7.
+50				894.9.
T.P.	13.14	911.30	0.33	898.16
15				900.3.

Clear. Cold 10°F

68/50 70/6 74/5 7.2 57/3 47/12 54/22 64/23 75/30 68/31 67/50

70/50 70/25 7.0 67/13 46/17 42/24 47/33 70/37 76/50

72/50 72/25 6.9 58/14 44/27 28/35 24/41 27/50

68/50 62/30 57/19 4.8 24/16 22/31 14/46 16/50

64/50 56/33 47/14 1.6 21/26 20/42 14/50

166/50 127/35 13.3 133/26 125/50

127/50 130/38 125/10 12.6 130/25 135/50

131/50 130/37 122/31 94/23 92/13 120/5 12.2 124/25 125/50

125/50 117/31 66/21 66/8 10.5 110/11 114/15 44/42 40/50

115/50 112/33 57/21 49/5 6.0 38/2 31/34 25/50

90/50 37/23 48/21 42/3 4.8 34/3 32/28 28/50

38/50 34/19 30/ 3.6 37/2 28/3 22/38 15/50

(9)

124/50 122/18 114/13 11.0 120/8 108/9 95/24 72/50

Sta.	+	H.I.	—	Elev
1		911.30		
+50				905.5.
+75				07.0.
16				06.2.
+50				902.1.
	7.20	905.54	12.96	898.34
17				897.5.
+50				895.5.
18				95.3.
+50				899.1.
T.P.	11.42	916.10	0.86	904.68
19				903.9.
+50				08.9.
T.P.	12.60	927.60	1.10	915.00
20				14.3.
+50				18.0.
21				22.6.
B.M.	6.11	929.78	3.93	923.67 923.68?

Coffee offered Crew 11:45 by Ohmme.

$\frac{2.5}{50}$ $\frac{3.0}{15}$ $\frac{5.8}{11}$ $\frac{5.5}{7}$ 5.8 $\frac{5.8}{9}$ $\frac{2.5}{14}$ $\frac{2.0}{50}$

$\frac{1.6}{50}$ $\frac{2.4}{21}$ $\frac{3.3}{20}$ 4.3 $\frac{4.6}{11}$ $\frac{3.3}{14}$ $\frac{3.0}{50}$

$\frac{2.8}{50}$ $\frac{4.2}{11}$ 5.1 $\frac{5.2}{12}$ $\frac{5.0}{50}$

$\frac{6.8}{50}$ $\frac{8.6}{23}$ 9.2 $\frac{9.6}{12}$ $\frac{10.2}{14}$ $\frac{10.4}{50}$

Top State Sta. 17+00

$\frac{5.7}{50}$ $\frac{7.0}{25}$ 8.0 $\frac{8.0}{11}$ $\frac{8.8}{14}$ $\frac{9.4}{50}$

$\frac{8.7}{50}$ $\frac{9.7}{21}$ 10.0 $\frac{9.0}{4}$ $\frac{9.3}{12}$ $\frac{11.0}{16}$ $\frac{11.5}{50}$

$\frac{9.3}{50}$ $\frac{9.7}{4}$ 10.2 $\frac{8.9}{4}$ $\frac{8.9}{12}$ $\frac{10.6}{17}$ $\frac{11.5}{38}$ $\frac{11.8}{50}$

$\frac{6.6}{50}$ $\frac{6.4}{13}$ 6.4 $\frac{6.4}{12}$ $\frac{7.2}{15}$ $\frac{7.7}{50}$

$\frac{14.1}{50}$ $\frac{13.0}{13}$ 12.2 $\frac{12.1}{12}$ $\frac{12.1}{15}$ $\frac{11.7}{16}$ $\frac{11.2}{29}$ $\frac{10.0}{50}$

$\frac{10.8}{50}$ $\frac{9.4}{29}$ $\frac{8.0}{50}$ 7.2 $\frac{6.7}{13}$ $\frac{7.3}{16}$ $\frac{5.7}{17}$ $\frac{4.8}{29}$ $\frac{2.6}{50}$

Top State 20+00 (15)

$\frac{16.7}{50}$ $\frac{15.7}{40}$ $\frac{14.3}{13}$ 13.3 $\frac{13.2}{12}$ $\frac{13.6}{15}$ $\frac{12.3}{16}$ $\frac{11.0}{31}$ $\frac{8.5}{50}$

$\frac{14.2}{50}$ $\frac{13.4}{35}$ $\frac{12.2}{15}$ $\frac{11.2}{6}$ 9.6 $\frac{9.6}{15}$ $\frac{7.6}{17}$ $\frac{5.5}{30}$ $\frac{3.5}{50}$

$\frac{11.1}{50}$ $\frac{8.6}{20}$ $\frac{6.9}{6}$ $\frac{4.8}{2}$ 5.0 $\frac{5.0}{14}$ $\frac{3.4}{15}$ $\frac{2.0}{33}$ $\frac{1.4}{50}$

Mont. Ctr Sec. 31 – 30-22

Sta	+	H.I. 929.78	−	Elev
21+50				925.4.
22				25.8.
+50				25.5.
23				25.1.
+50				25.0.
24				24.9.
+50				24.3.
25				22.4.
+50				18.8.
T.P.	8.19	926.54	11.43	918.35
26				17.2.
+50				21.5.
27				21.2.
+30				20.0.

LEFT & RIGHT

7.4/50	6.2/30	5.0/6	4.4	4.7/12	3.8/13	3.6/33	3.2/50
4.0/50	4.0/21		4.0	4.4/20	4.2/50		
4.7/50	4.7/31	4.3/9	4.3	4.7/13	4.7/50		
4.7/50	4.4/14		4.7	4.7/16	4.7/50		
4.8/50	5.0/20		4.8	4.9/23	5.0/50		
5.3/50	5.6/40	4.9/14	4.9	4.9/25	5.3/50		
6.6/50	6.0/30		5.5	5.4/20	5.4/50		
10.4/50	9.4/34	7.8/10	7.4	7.4/12	6.4/36	6.2/50	
15.5/50	13.8/35	11.8/13	11.0	10.2/4	9.4/22	8.0/50	
15.5/50	11.1/20	9.4/14	9.3	7.8/3	6.4/21	4.2/50	
7.3/50	6.4/42	5.1/13	5.0	4.5/25	4.0/50		
5.6/50	5.3/25		5.3	5.3/18	6.1/42	6.7/50	
7.5/50	8.0/27	7.2/2	6.5	5.8/20	5.2/50		

Sta.	+	H.I.	−	Elev	
		926.54			
28					922.2
+50					19.1
T.P.	0.73	915.49	11.78	914.76	
29					13.2
+50					903.8
T.P.	0.55	904.22	11.82	903.67	
+50					
30					872.0
T.P.	7.52	898.19	13.55	890.67	
+33					
T.P.	0.55	885.13	13.61	884.58	
+33					80.5
B.M.			1.67	883.46	
+50					79.4
31					77.5
+56					77.1
32					77.1
B.M.			2.33	882.80	
+50					77.1

LEFT & RIGHT

9.2/50 5.4/20 4.3 2.7/27 2.3/50

19.4/50 13.8/32 9.8/14 7.4 5.2/26 4.4/50

16.3/50 13.0/38 8.0/23 2.3 +2.4/25 +5.2/50 = over H.I.

11.7 6.5/25 2.7/50

13.3/50 6.7/24 (0.4)

24.4/50 23.5/36 18.4/19 12.2 5.2/25 0.0/50

(17.7) 8.0/25 0.0/50

7.5/50 5.1/27 4.6

7.6/50 6.4/14 5.7 4.2/20 0.0/41 +3.3/50 over H.I.

8.6/50 8.4/25 7.6 7.0/25 6.0/50

8.9/50 8.4/26 8.0 7.2/29 7.0/50

~~8.9~~/50 ~~8.2~~/2 8.0 7.5/25 7.0/50

Spk in 18" Oak 14 o/c Pl 32 + 00

9.0/50 8.0/2 8.0 2.7/26 6.4/50

Sta.	+	H.I. 885.13	−	Elev
33				877.5
~~+50~~				
+50				79.4
+81				81.1
~~T.P.~~	~~13.80~~	~~898.65~~	~~0.28~~	~~884.85~~
34				83.8
T.P.	13.80	898.65	0.28	884.85
+50				90.7
35				94.8
+50				96.7
T.P.	12.76	908.64	7.77	895.88
36				899.0
+50				902.6
T.P.	10.97	917.27	7.34	906.30
37				08.8
+ 50				12.6
38				12.2
B.M.			9.16	908.11
+50				09.4

LEFT & RIGHT

8.4/50 8.4/25 7.6 7.0/10 5.4/24 5.0/46 7.5/50

8.0/50 7.2/25 5.7 4.5/9 4.2/50

6.0/50 5.2/27 3.5/15 4.0 2.4/25 1.7/50

over H.I.

5.0/50 5.0/47 3.0/35 2.4/18 1.3 +0.8/19 +0.4/50

13.4/50 12.2/33 8.0 5.4/25 3.3/50

8.0/50 2.0/33 3.9 1.8/30 1.0/50

3.2/50 2.3/25 2.0 1.6/30 2.2/50

12°F

Top Spk. 35+37° PC. 12-15-31

10.0/50 10.0/28 9.6 9.5/25 10.5/50

5.4/50 5.1/44 5.7/39 5.8/26 6.0 6.3/33 7.1/50

F

8.4/50 8.7/36 8.5/18 8.5 9.0/10 10.2/21 12.2/50

4.6/50 4.3/26 4.7 6.0/27 7.0/50

8.8/50 7.2/41 6.2/22 5.1 6.5/26 7.7/50

Spike in 4" Ozk 45 ft. 38+70

10.6/50 8.2/37 7.8/20 7.9 9.1/25 10.2/50

Sta.	+	H.I.	−	Elev
		917.27		
39				907.9.
+50				909.9.
T.P.	1.05	905.75	12.57	904.70
40				899.7.
+50				900.3.
41				898.6.
+50				93.5.
+80				91.0.
42				892.7.
+50				901.0.
T.P.	11.38	916.45	0.68	905.07
43				10.1.
+35				12.4.
+60				10.5.
44				06.5.
T.P.	3.50	906.40	13.55	902.90

12-15-31

LEFT & RIGHT

10.6/50	9.5/37	9.1/21	9.4	10.0/21	13.3/50	
13.1/50	12.8/39	12.1/24	12.4	14.0/22	14.7/38	16.2/50
5.5/50	6.2/25		6.1	5.6/12	6.0/34	6.6/50
4.6/50	5.0/22		5.5	6.5/23	7.7/50	
5.6/50	6.5/23		7.2	8.0/26	8.8/50	
9.0/50	10.3/34	12.0/12	12.3	12.8/30	13.0/50	
Low Point. 10.3/50	12.8/22		14.8	15.8/26	15.8/50	
10.0/50	12.1/21		13.1	14.0/21	15.3/50	
2.7/50	3.4/24		4.8	6.0/28	7.7/50	
7.5/50	5.7/23		6.4	7.0/23	7.4/50	
7.8/50	5.6/22		4.1	4.3/17	4.0/50	
10.2/50	9.2/34	7.0/15	6.0	4.4/27	3.6/50	
16.8/50	13.8/45	11.5/20	10.0	8.0/23	5.4/50	

Sta.	+	H.I. 906.40	−	Elev	
44+50					902.4.
45					899.0.
+50					97.7.
46					97.9.
+50					97.4.
47					97.0.
B.M.			Hol	902.35	902.41
+35					96.4.
+69					95.7.
+90					95.2.
48					94.9.
T.P.	5.44	898.77	13.07	893.33	
+50					92.9.
49					90.4.
B.M.	0.98	889.48	10.71	888.50	
+50					88.1.

LEFT & RIGHT

℄ Rd.
6.7/50 7.4/31 5.2/26 4.0 2.9/23 1.7/50

℄
9.7/50 8.2/42 7.6/27 8.5/12 8.0/10 7.4 6.4/25 5.4/50

℄
11.4/50 10.0/35 8.3/29 6.1/14 8.1 9.0/3 8.3/26 7.3/50

12.5/50 10.0/24 9.0/19 8.5 9.0/9 8.4/30 7.7/50

50' To Edge of Lk. 8.0/44 10.5/34 9.0/23 8.0/14 9.4/12 9.0 9.2/19 7.2/24 6.4/32 6.1/50

℄ Rd.
Same Slope 46' To Lake. 11.4/43 3.0/20 3.0/16 9.4/7 9.4 9.1/8 9.7/25 3.7/34 4.2/50

SE. Cor. Mont. 22' Lt Sta 46+91 P.C.
Slope To 43=Lk. 1.0/21 1.0/17 10.0/5 10.0 ℄ 9.6/10 10.0/28 2.5/39 3.2/50

℄ Rd.
Slope To Lk. 43=Lk 9.0/24 3.6/23 2.8/16 10.8/6 10.7 10.3/9 10.8/24 10.4/29 3.3/41 3.3/46 4.2/50

℄ Rd.
Slope To Lk. 43=Lk 12.0/29 5.0/27 4.6/19 11.5/8 11.2 11.0/7 11.5/20 11.7/39 13.4/41 14.2/50

Slope To Lk 43 12.0/28 5.5/26 2.5/20 12.0/8 11.5 11.3/8 11.8/20 12.8/40 14.5/50

5 Edge Lk. 17.1/52 7.5/42 1.4/32 1.3/30 3.4/21 6.0/17 6.6/13 5.9 6.6/13 7.0/19 6.0/24 5.8/40 8.5/44 9.5/50

Lk. 17.1/50 7.5/39 7.4/23 8.8/20 9.0/18 8.4 8.7/9 9.4/13 9.4/22 7.7/23 6.8/43 6.0/50

Edge Lk Ice 8.2/60 3.0/47 1.4/29 1.8/24 ℄ Rd. 1.1/10 1.4 1.5/2 2.5/6 1.7/19 2.0/24 4.0/35 6.2/40 6.1/50

Sta.	+	H.I.	—	Elev
		889.48		
+71				886.8.
50				83.5.
+50				79.4.
51				78.7.
+50				79.2.
52				78.9.
+50				78.1.
53				80.0.
+12		Top Sh.		83.1.
B.M.	3.23	888.96	3.75	885.73
+50				83.8.
54				83.1.
+50				84.2.
55				84.7.

LEFT & RIGHT

3.6/50 2.5/31 2.7/24 2.7/14 ℄Rd 2.7

4.2/4 5.6/11 7.3/25 8.7/50

Edge Lk.

2.9/50 7.5/47 3.5/42 2.9/32 3.5/29 ℄Rd 3.3/17 3.6/4 6.0

8.3/7 10.0/20 10.2/50

Edge Lk. ℄Rd Toe Sh.

8.0/52 3.8/47 3.6/37 4.7/36 4.5/23 5.0/10 10.1

10.8/5 10.8/50

8.0/66 4.2/59 4.0/46 5.2/43 ℄Rd 5.0/30 5.5/16 10.0/8 10.8

10.8/50

6.8/51 5.8/49 ℄Rd 5.3/36 5.6/24 9.8/15 10.3

10.7/25 11.0/50

Edge Lk 5.5/50 ℄Rd 5.2/43 6.4/28 8.6/23 10.0/11 10.6

=92 ft Lt. 11.0/50

5.2/50 5.2/38 ℄Rd 6.5/23 10.7/16 11.4

11.8/25 11.5/50

Edge Lk. 6.4/79 4.4/63 4.8/60 6.4/40 5.6/35 ℄Rd 5.6/32 6.6/23 9.5

11.6/5 12.1/11 11.5/29 11.2/50

4.3/50 4.9/35 6.4/31 5.7/27 ℄Rd 5.4/16 6.4

11.4/11 10.7/30 11.0/50

Set in 24" P.o 4' Lt - 5.1 + 1.5

Y.S. → 7.5/40 7.0/35 4.3/29 4.0/16 5.8/13 5.2

4.9/4 6.2/19 9.8/24 10.4/50

Edge Lk. Shore.

7.5/28 6.6/19 4.1/16 3.8/4 5.8/2 5.9

4.8/13 5.6/31 9.1/37 9.8/42 9.7/50

7.5/27 3.1/21 3.0/9 3.4/7 4.8/3 4.8

4.2/11 5.0/27 8.7/35 9.0/50

7.5/34 2.8/28 3.0/16 5.0/11 4.5/9 4.3

4.1/17 8.3/25 8.7/31 9.4/50

Sta	+	H.I.	−	Elev	
		888.96			
+50					884.7.
T.P.	7.41	892.25	4.12	884.84	
56					84.9.
+50					86.0.
57					87.5.
+32.5	End project.				88.5.
B.M.			3.08	889.17	
+82					90.0.
58+32					91.5.
+51					92.3.
B.M.	0.34	889.51		889.17	
B.M.	13.16	898.89	3.79	885.72	885.73
T.P.	13.75	911.39	0.75	898.14	
B.M.			9.03	902.36	902.35
T.P.	9.02	910.26	10.15	901.24	
B.M.			2.13	908.13	908.11
T.P.	0.61	901.02	9.85	900.41	
T.P.	13.53	914.27	0.28	900.74	
T.P.	9.89	923.76	0.40	913.87	
B.M.			0.09	923.67	923.67

Lt & Ct.

W.S. and Lake Shore → 7.53 3.0 3.0 4.9 4.8 / 40 34 18 13 9 4.3 — 4.5 8.0 8.4 / 17 23 50

1081 9.1 6.3 6.0 9.4 9.4 8.3 / 53 45 39 25 16 11 9 7.4 — 7.0 7.4 5.2 / 22 36 50

1081 9.1 5.8 5.5 8.5 8.5 7.0 / 57 46 41 27 21 13 10 6.3 — 6.0 6.7 6.0 5.6 2.0 1.0 / 20 23 27 35 45 50

1081 9.3 6.0 6.0 7.0 6.0 / 59 46 40 29 24 15 4.8 — 4.8 4.6 5.2 4.3 3.7 0.0 / 11 15 19 21 28 38

1081 9.0 6.0 5.8 5.5 4.8 / 58 44 39 27 17 15 3.8 — 4.0 3.5 3.9 2.5 2.2 0.0 / 10 12 17 22 29 36

Spk in 14" Pop 14' Rt Sta 57+35

2.3

0.8

0.0

Spk in 14" Pop 14' Rt Sta 57+35'

" " 24" " 40' Lt 51+15

S.E. cor. Mont. M.C. on E and W ¼ Line Sec. 31

Spk in 14" Oak 45' Rt 38+70

S.W. cor Mont Ctr Sec. 31-

12-3-31

Weber
Skoglun
Wilke
Bell
Steinman

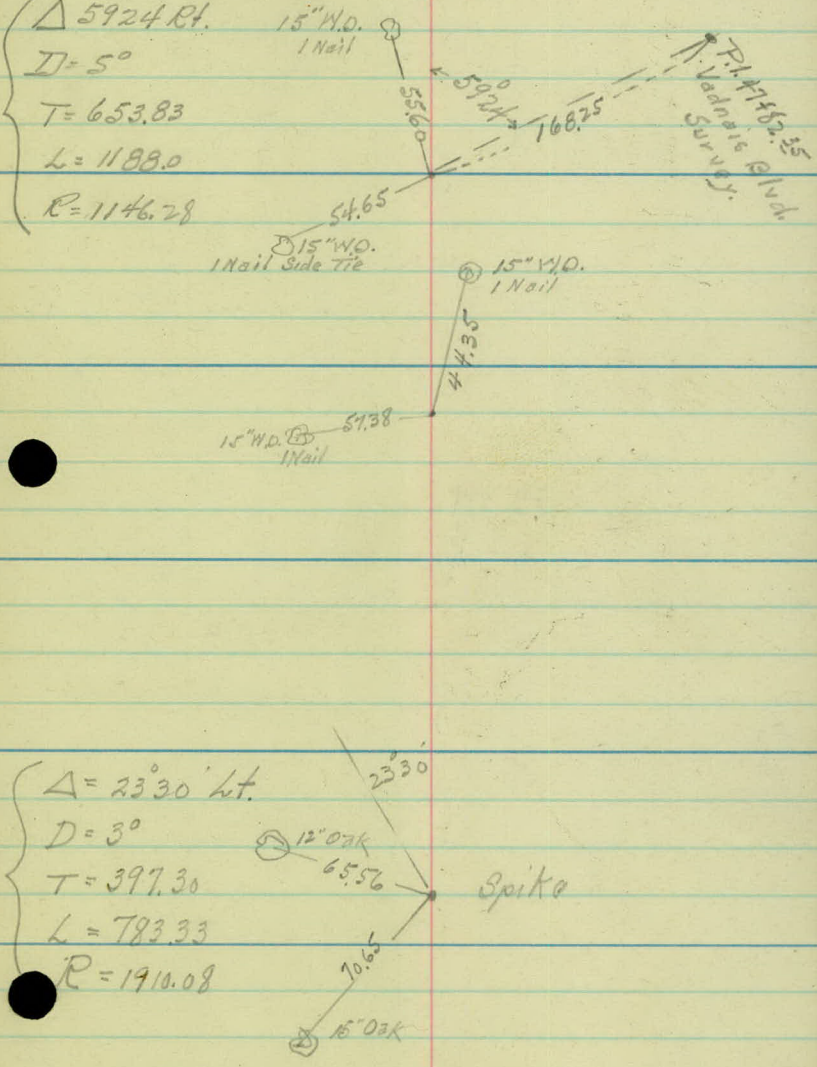
Transit Notes For

New Location of proposed line from Rice St. To Vadnais Blvd.

Sta. 23+68.5 To 47+27.2

47+27.02 P.T.		29°42'
47		29°01'30"
46		26°31'30"
45		24°01'30"
44		21°31'30"
43		19°01'30"
42		16°31'30"
+92.85 P.I.		
41		14°01'30"
40		11°31'30"
39		9°01'30"
38		6°31'30"
37+50 Point on Sub Tan.		
37		4°01'30"
36		1°31'30"
35+39.02 P.C.		
+51.38 P.T.	11°45'	
31	10°59'	
30	9°29'	
29	7°59'	
28	6°29'	
27+65.35 P.I. (Orig.)	23°30' Lt.	
27	4°59'	
26	3°29'	
25	1°59'	
24	0°29'	
23+69.05 P.C.		

= 52+65.92 Vadnais Blvd Survey.



12-4-31

Weber
Stooglun
Wilke
Bell
Steinman

℄ Levels

New Location from Sta.
24+68.5 To 47+27.22

				Elev.	
BM	4.63	928.31 ✓		923.68	
23+68.5 P.C.			3.3	25.0 ·	
24			3.4	24.9 ·	
25			5.8	22.5 ·	
26			11.4	16.9 ·	
+50			7.4	20.9 ·	
27			6.8	21.5 ·	
+36			9.7	18.6 ·	
28			7.0	921.31 ·	
T.P	0.13	917.02 ✓	11.42		916.89 ✓
29			6.6	10.4 ·	
T.P	0.13	903.70 ✓	13.45		903.57 ✓
30			13.1	890.6 ·	
T.P	0.83	891.25 ✓	13.28		890.42 ✓
+29			10.8	880.45 ·	
31			13.8	877.45 ·	
32			13.9	877.35 ·	
33			13.5	877.75 ·	
34			7.7	883.55 ·	
T.P	13.20	903.52 ✓	0.93		890.32 ✓
35			9.0	894.5 ·	
36			4.7	898.8 ·	
T.P	13.67	916.79 ✓	0.40		903.12 ✓
37			8.5	908.3 ·	
+50			4.5	912.3 ·	
38			4.8	912.0 ·	
39			9.1	907.7 ·	

S.W. cor Mont. Ctr. Sec. 31 T23 R3v

Edge of Low Land.

N. Edge of Low Land.

		916.79		
39+32			10.0	906.80
T.P.	0.15	903.45	13.49	903.30
40			3.8	899.65
41			4.8	898.65
+80			12.6	890.85
42			11.0	892.45
T.P.	13.27	915.69	1.03	902.42
43			6.0	909.7
+36			3.3	912.4 High.
44			9.0	906.7
T.P.	0.56	904.05	12.70	903.49
45			5.0	899.05
46			6.1	897.95
47			7.0	897.05
+27	P.T.		7.5	896.55
B.M.			1.68	902.37 902.41

Mont "M.C."

BM

957.78

SECo. Bot Step.
Hom. and A^2 To Hinge "B"

~~Hamline and A2 To Hamline "B"~~

~~S.E. cor Bot Step~~

Topog.

Vadnais

Cut-off.

32

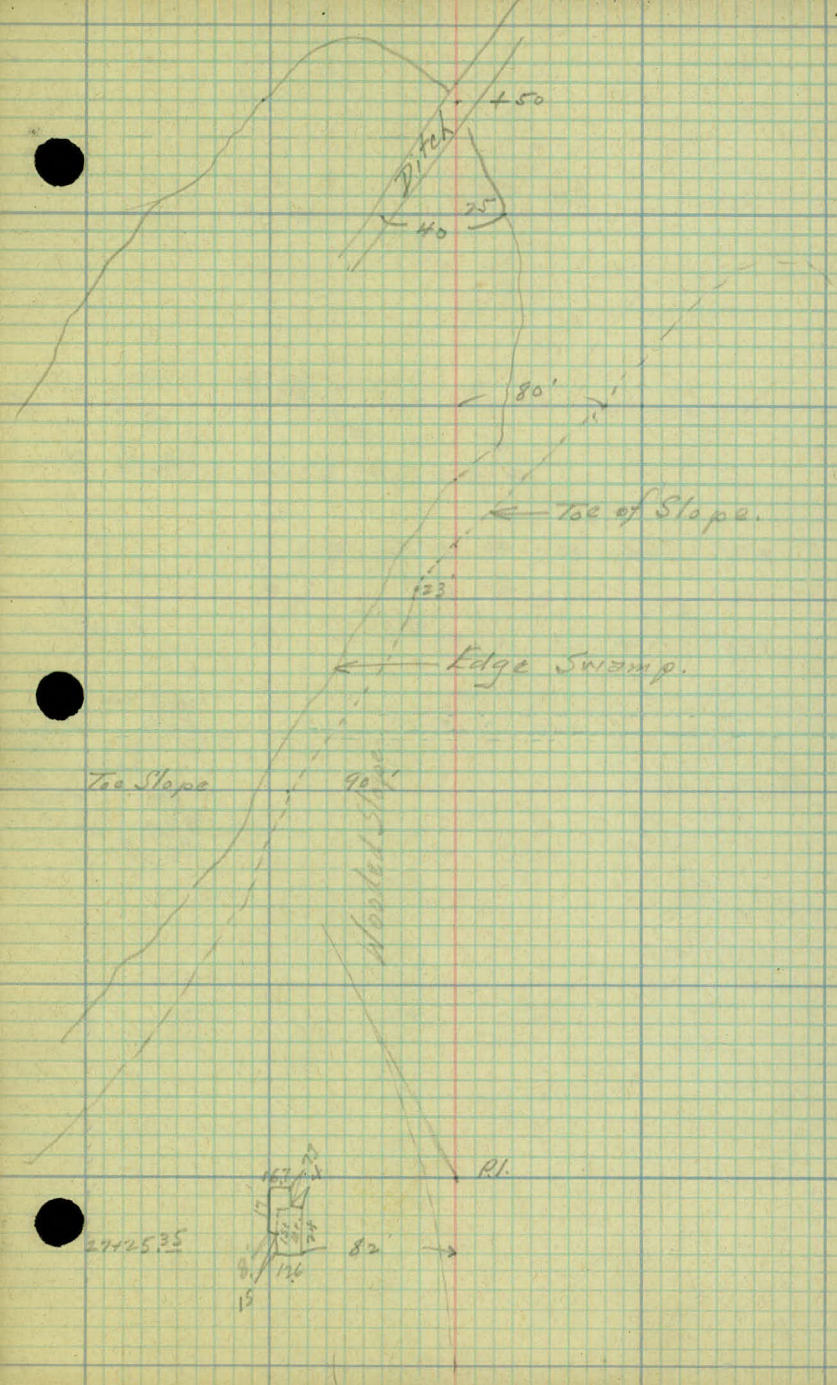
31

30

29

28

27+65 3/5


+50
Ditch
40
35°
80'
Toe of Slope.
123'
Edge Swamp.
Toe Slope
90'
Wooded Slope
RI.
82'
27+25.35

36

35

34

Reforested Area.

Pasture