

Book #46-Dr #8

MAINT. SURVEY
VADNAIS LAKE BLVD.

From Rice Str.
To Centerville Rd.
RD. $\frac{1}{2}$ No 6

Office of Ramsey Co. Engineer
ST. PAUL, MINN.

Date Filed 12-2-24

File No. "13"

Vadnais Lake Blvd.

Road # 6

Rice St. to Centerville Road.

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L. Levels.	" 25	" 34
X-Sections	" 35	" 50
Drainage	" 51	" 52
For Mon. ties	Pages 3, 6, 9,	

By W.H. Carlson

1924

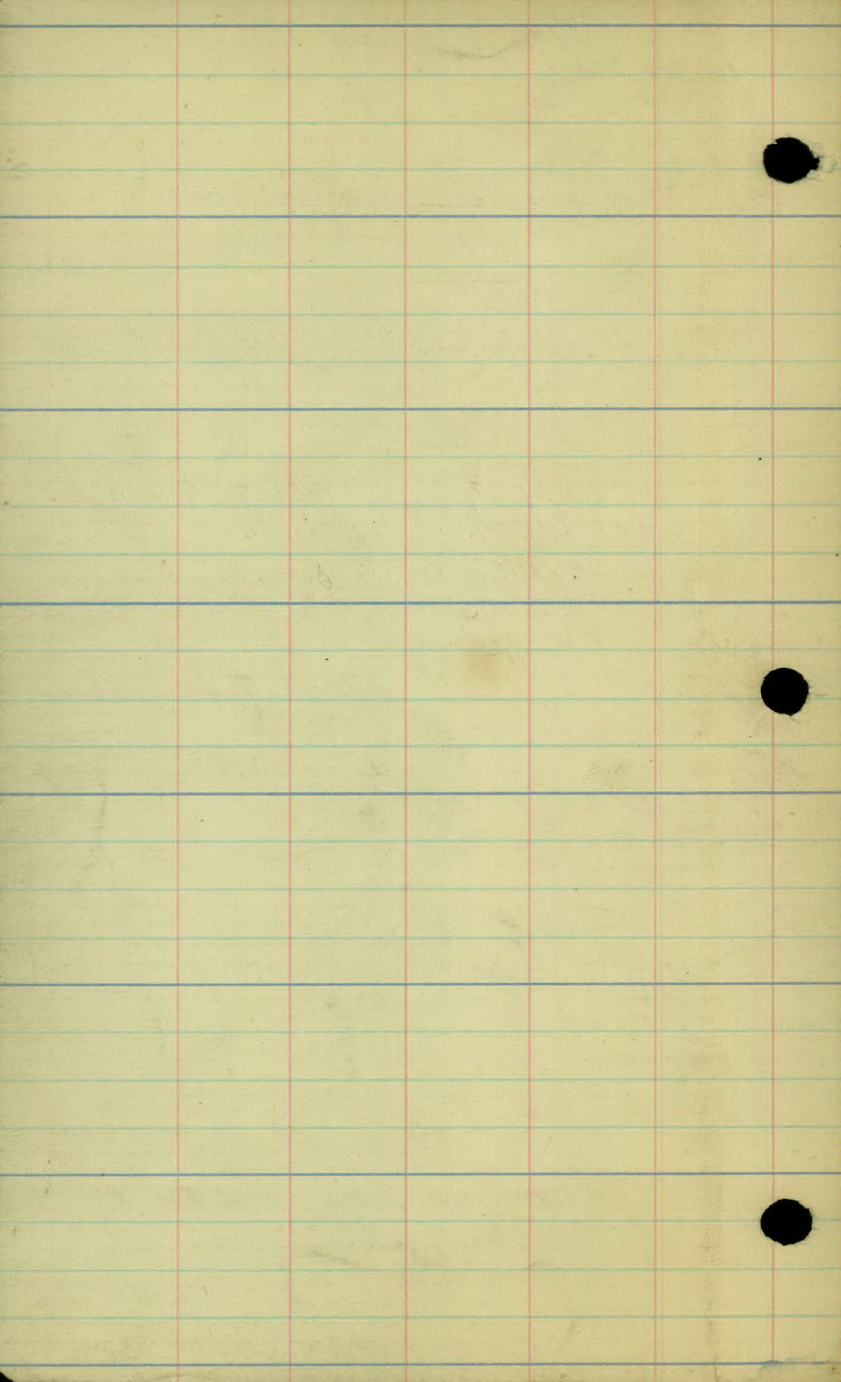
Additional Align Page (11-A)
" Topog Page (24-A) to (24-D)
Aug-1925

Office of Ramsey Co. Engineer
ST. PAUL, MINN.

Date Filed 12-2-24

File No. 73

Vadnais Blvd.



Alignment

Vadnais Lake Blvd.

Road # 6

Rice St. to Centerville Road.

Station	Point	Lt.	Rt.	Bear.
---------	-------	-----	-----	-------

5.55°14'E ✓

6+28. ⁶⁷ ✓	P.T.	18°05'	23° C.R.
-----------------------	------	--------	----------

6+00 ¹⁹		14°17'	Δ 36°-10'
--------------------	--	--------	-----------

5+50 ⁷⁶		9°02'	P.I. 5+53.3
--------------------	--	-------	-------------

5+00 ⁷⁶		3°17'	T. 81.88 ✓
--------------------	--	-------	------------

4+71.42 ✓	P.C.	0°00'	L. 157.25 ✓ R. 250.79'
-----------	------	-------	---------------------------

N. 88°36'E

0+00 - Sec. Line & Rice St.

(Recorded Dist.)
2395.37 to Center of Sec. 31
N. 89° 24' E.

Station	Point	Lt.	Rt.	Bear.
---------	-------	-----	-----	-------

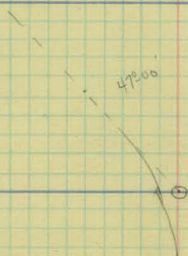
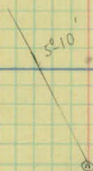
N. 72° 36' E ✓

15+65.18 ✓	P.T.	22° 35'		2° C.L.
15+00		12° 51.9		Δ 5° 10'
14+50		12° 59		P.I. 14+36.1
14+00		0° 55.9		T. 129.25 ✓
13+50		0° 25.9		L. 258.38 ✓

13+06.85 ✓ P.C.

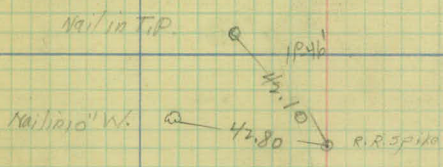
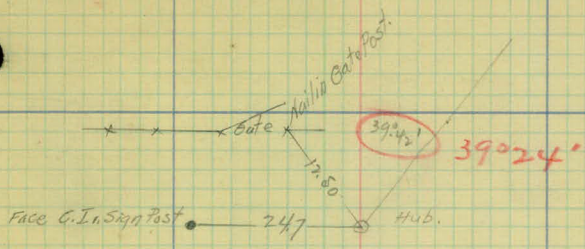
N. 77° 46' E ✓

10+36.39	10+36.43	P.T.	23° 30'	
10+00		20° 57'		14° C.L.
9+50		17° 29		Δ 47° 00'
9+00		13° 57		P.I. 8+79.1
8+50		10° 27		T. 178.42' 178.38
8+00		6° 57.1		L. 335.71 ✓
7+50		3° 27.1		
7+00.68	7+00.72	P.C.		



Hill Edge Borrow Pit.

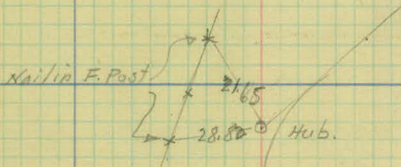
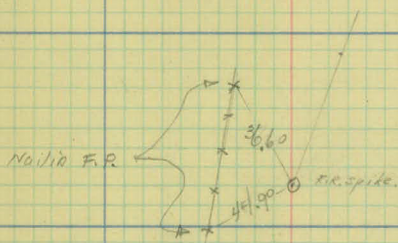
Station	Point	Lt	Rt.	Bear
				$S 88^{\circ} 31' E$ ✓
24+19.63 ✓	P.T.		$19^{\circ} 42'$	
24+00			$18^{\circ} 08'$	$16^{\circ} C.R.$
23+50			$14^{\circ} 08'$	$A 39^{\circ} 24'$
				P.I. 23+02
23+00			$10^{\circ} 08'$	Tan. 128.62 ✓
22+50			$6^{\circ} 08'$	L. 246.25 ✓
22+00			$2^{\circ} 08'$	
21+73.38 ✓	P.C.		$0^{\circ} 00'$	
				<u>$N 52^{\circ} 05' E$</u> ✓
21+28.81 ✓	P.T.	$5^{\circ} 53.5'$		$7^{\circ} C.L.$
21+00		$3^{\circ} 52.5'$		$A 112 46'$
20+50		$2^{\circ} 37.5'$		P.I. 20+45.1
20+00		$12 22.5'$		T. 84.39 ✓
19+60.71 ✓	P.C.			L. 168.10 ✓
				<u>$N 63^{\circ} 51' E$</u> ✓
19+00 ✓	P.T.	$4^{\circ} 22.5'$		$5^{\circ} C.Lt.$
18+50		$3^{\circ} 07.5'$		$A 8^{\circ} 45'$
18+00		$1^{\circ} 52.5'$		P.I. 18+12.71
17+50		$0^{\circ} 37.5'$		T. 87.71 ✓
17+25 ✓	P.C.	$0^{\circ} 00'$		L. 175. $^{\circ}$ ✓



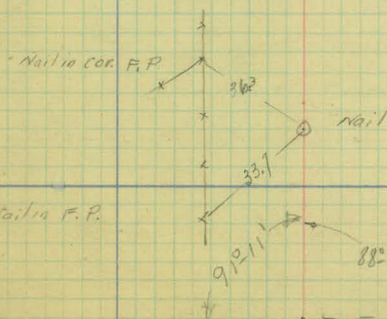
Station Point L R Bear.

5.11°-07'E

31+30.63 ✓	P.T.	10°-30'	21° C.R.
31+00		7°-17'	Δ 21°-00'
30+50		2°-02'	P.I. 30+81.48'
30+30.63 ✓	30+30.75 P.C.C.	0°-00'	T. 50.85 ✓
30+00		25°-30'	L. 100.00 ✓
29+50			5.32°-07'E ✓
29+30.63 ✓	29+30.75 P.C.	17°-42'	51° C.R.
29+00		4°-57'	Δ 51°-00'
28+50		0°-00'	P.I. 29+86.08
28+30.63 ✓	28+30.75 P.C.	2°-42'	T. 55.45 55.33
28+00		2°-14.5'	L. 100.00 ✓
27+50.63 ✓	P.C.	1°-29.5'	5.83°-07'E ✓
27+00		0°-44.5'	3° C.R.
26+37.3	Sec. Line.	0°-00'	Δ 5°-24'
			P.I. 28+40.7
			T. 90.07 ✓
			L. 180.00 ✓
			5.88°-31'E ✓



N. 89° - 48' E.



Nail in F.P.



N. 0° N.E.

C. Sec 31. North

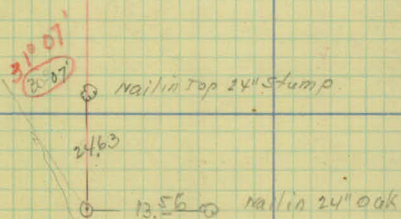
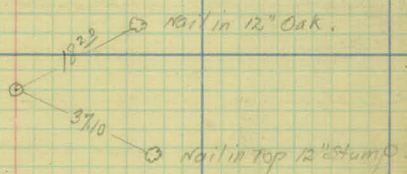
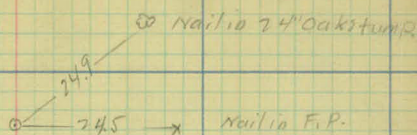
90° 31' 1/2

Station	Point	Lt.	Rt.	Bear
				<u>5.70° 48' E</u> ✓
41+21.29 ✓	P.T.	72° 16'		
41+00		6° 33'		7° C. Lt.
40+50		42° 49'		Δ 142° 32'
40+00		32° 03'		P.I. 40+18.1
39+50		12° 18'		T. 104.37 104.74
39+13.67 ✓	P.C.	0° 00'		L. 207.62 ✓

				<u>5.562° 16' E</u> ✓
39+08.31 ✓	P.T.	72° 01'		
39+00		6° 46'		6° C. L
38+50		5° 16'		Δ 142° 02'
38+00		32° 46'		P.I. 37+92
37+50		22° 16'		T. 117.58 ✓
37+00		0° 46'		L. 233.89 ✓
36+74.42 ✓	P.C.	0° 00'		

				<u>5.422° 14' E</u> ✓
33+91.27 ✓	P.T.	152° 33.5'		
33+90.59 ✓	P.T.	122° 43'		14° C. Lt.
33+50		9° 43'		Δ 312° 07'
33+00		52° 43'		P.I. 32+82.55
32+50		22° 13'		T. 114.24 ✓
31+62.31 ✓	P.C.	0° 00'		L. 222.06 ✓

5.112° 07' E ✓



W.H.C.
Wishusen
Pearson.
Frank

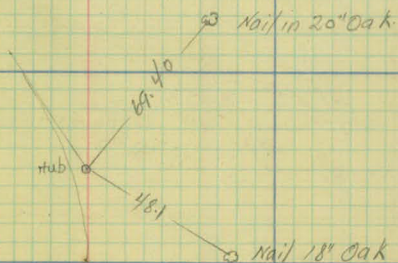
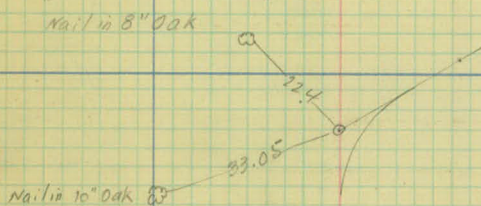
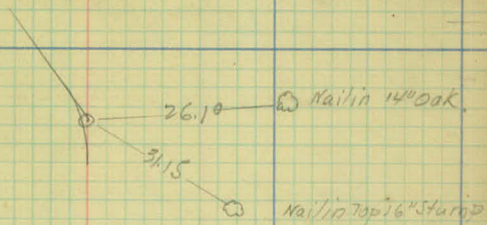
Oct. 1, 1929

Station	Point	L	R	Bear.
				<u>S-50°32'E</u>
51+06.95 ✓		5°49'		
51+00		5°38.6'		5° G. Lt.
50+50		4°23.6'		Δ 11°38'
50+00		3°08.6'		P.I. 49+91.05
49+50		1°53.6'		T. 116.77 ✓
49+00		0°38.6'		L. 232.67 ✓
48+74.28 ✓		0°00'		

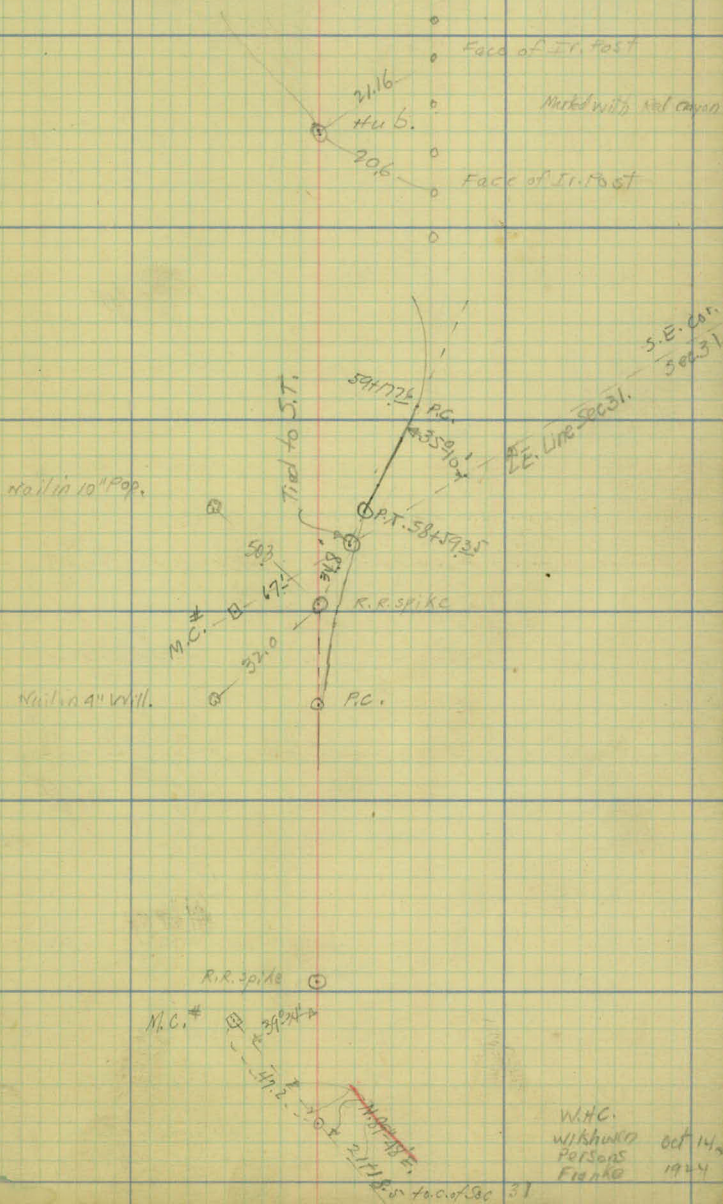
				<u>S-38°54'E</u>
47+27.25 ✓	P.T.		32°50'	43° C. R.
47+00 ^{0.65}			26°59'	Δ 65°40'
46+50 ^{0.90}			16°14'	P.I. 46+62.5
46+00 ^{0.90}			3°29'	T. 87.98 ✓
45+74.52 ✓	P.C.		0°00'	L. 152.73 ✓

				<u>N 75°26'E</u>
44+97.54 ✓	P.T.	16°53'		
				22° G. Lt.
44+50		11°39.2'		Δ 33°46'
				P.I. 44+23.6
44+00		6°09.2'		T. 79.54 ✓
				L. 153.48 ✓
43+44.06 ✓	P.C.	0°00'		

S 70°48'E ✓



Station	Point	Lt.	Rt.	Bear.
				<u>S 86°-28'E</u>
60+48.38 ✓	P.T.	25°45'		42° C.L.
60+00		172 1/6 %		Δ 51°-30'
				P.I 59+85
59+50		6°46.2'		T. 67.24 ✓
				Lq. 122.62 ✓
59+17.76 ✓	P.C.	0°-00'		
				<u>S-34°58'E</u>
58+59.35 ✓	P.T.	13°16'	26° C.R.	
				A 26°-32'
58+00		5°33'		P.I 58+09.7
				T. 52.4 ✓
57+57.3 ✓	P.C.	0°-00'		L. 102.05 ✓
				<u>S-61°-30' ✓</u>
54+52.10 ✓	P.T.	5°29'		
54+00		4°-10.8'		5° C.L.T.
53+50		2°-55.8'		Δ 10°-58'
53+00		1°-40.8'		P.I 53+42.8
52+50		0°-25.8'		T. 110.03 ✓
52+32.77 ✓	P.C.	0°-00'		L. 219.33 ✓
52+28.7	<u>see Line</u>			<u>S-50°-32'E ✓</u>



W.H.C.
 Wiskulko
 Persons
 Franko
 Oct 14,
 1924

Station	Point	Lt.	Rt.	Bear.
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72+00	P.O.T.			
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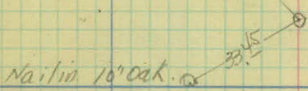
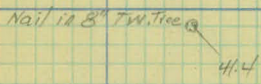
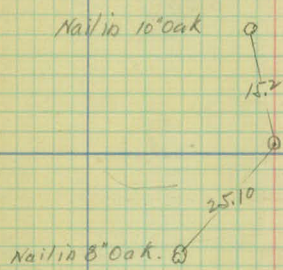
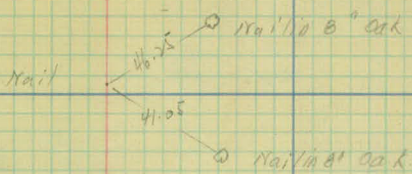
N. 79° 26' E.

69+36.00 ✓	P.T.	10° 53'		
69+00		7° 48.2'		
68+50		8° 18.2'	6° C.R.	
68+00		6° 48.2'	Δ 21° 46'	
67+50		5° 18.2'	P.I. 67+56.9	
67+00		3° 48.2'	T. 183.68 ✓	
66+50		3° 18.2'	L. 362.78 ✓	
66+00		2° 48.2'		
65+73.22 ✓	P.C.	0° 00'		

N. 57° 40' E.

62+74.37 ✓	P.T.	17° 56'		
62+50 .17		15° 00.5'	24° C.Lt.	
62+00 .78		9° 00.5'	Δ 35° 52'	
61+50 .78		3° 00.5'	P.I. 62+02.75	
61+24.93 ✓	P.T. C	0° 00'	T. 77.82 ✓	
			L. 147.44 ✓	

S. 86° 28' E.



Station Point L R. Bear.
N 36° 06' E

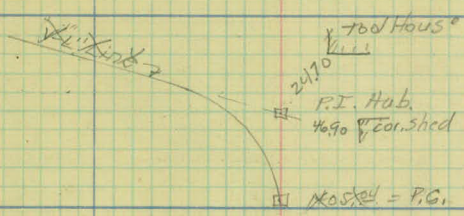
82+50.79	P.T.	29° 03.5'	29° C.I.
82+00		21° 41.6'	Δ 58° 07'
81+50		14° 26.6'	P.I. 81+61.35
81+00		7° 11.6'	T. 110.96
80+50.39	P.C.	0° 00'	L. 200.4
			R. 199.7

79+45.35 = 0+00 "V" "L" Line

S. 85° 47' E.

76+44.4	P.T.	7° 23.5'	
76+00		6° 17.4'	
75+50		5° 02.4'	5° C.R.
75+00		3° 47.4'	Δ 142 47'
74+50		2° 32.4'	P.I. 74+97.15
74+00		1° 17.4'	T. 148.71
73+48.44	P.C.	0° 00'	L. 295.67

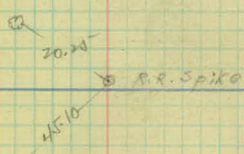
N. 79° 26' E



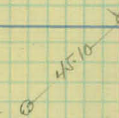
W.H.C.
C.W.S. Aug 24, 75
M.G.
R.G.

revision - to connect
with Centerville Rd.

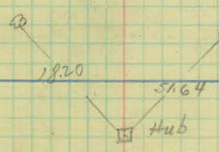
Nail in 16" Oak.



Nail in 12" Oak.



Nail in 10" Oak.



Nail in 6" Poplar

51.64

W.H.C.
Wilshusen
Persons
Franks
Soukup

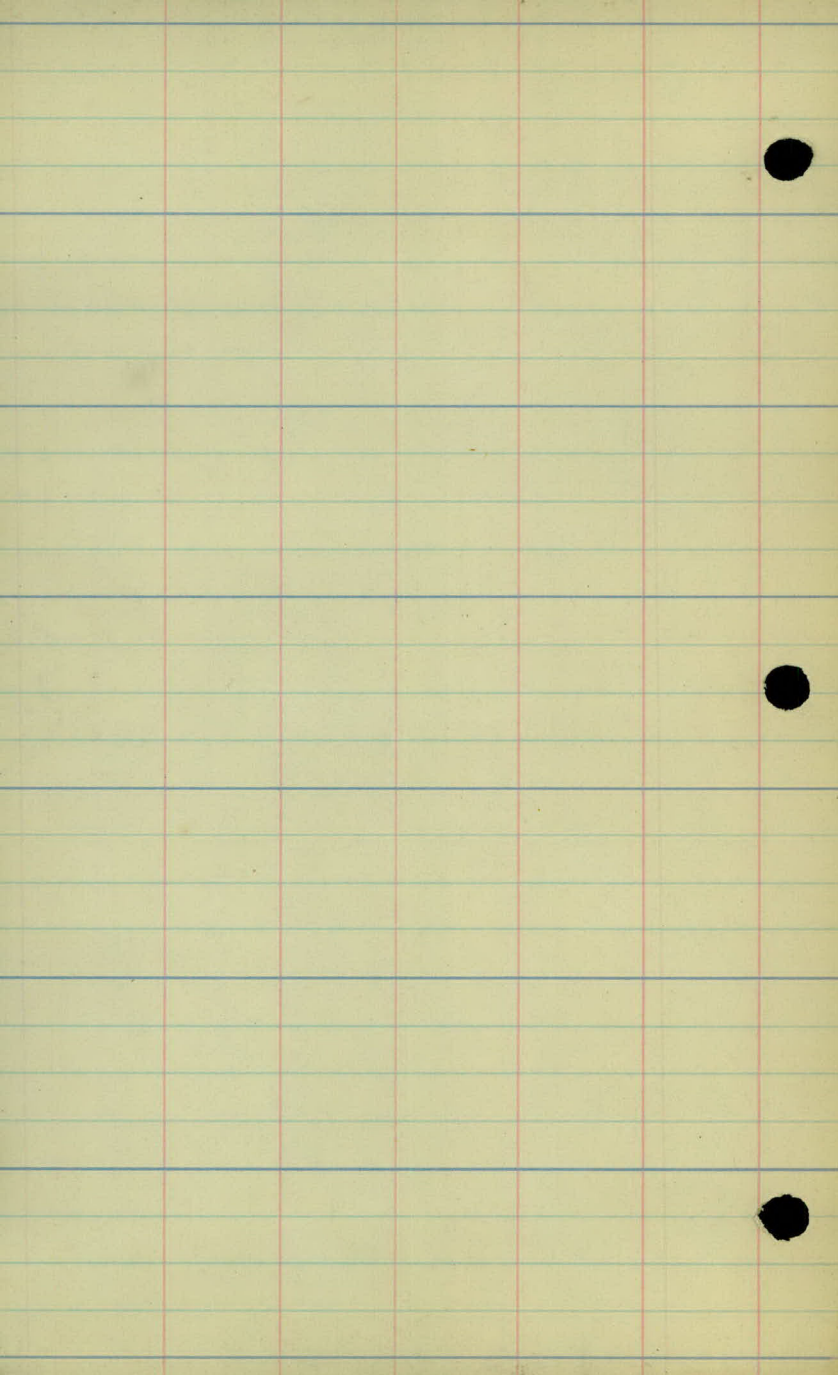
Nov. 20, 1924

station Point Lt. & Rt. Bear.

90+66.81 = End of Vadnais Lake Blvd.
92+74.23 - RT. Centerville Road.

89+82.15	P.T.	13°-26'	15°-0. RT.
89+50		11°-01.2'	Δ 26°-52'
89+00		7°-16.2'	P.I. 88+94.53
88+50		3°-31.2'	T. 91.49
88+03.04	P.C.	0°-00'	L. 179.11 R. 383.06

N 36° 06' E



Art. Topog.

Vadnais Lake Blvd
Road #6
Rice St. to Centerville Road.

500

400

300

200

100

000

- 100

G.R. 102

G.R. 120

13

+11. G.R. 106

+71-G.R. 110

G.R. 114

G.R. 114

+71-G.R. 111

+68^{Bag}-G.R. 121

Open Field

Cultivated

+76 End Rec 25'

9' 11"

+27-Reg Small Trees 1'

9' 11"

Timber

Priv Grounds

10' 12"

+48 Int. 21.59.12'

+30-10' Oak 31'

+73-20' 10'

+13 Oak 10.39

+031-8' Oak 30'

+094-E. 13.48

2.4 Pavement

-0+145 E. 13.48

-0+31-F

x x x x x x x x

Pas fare.

17100

11100

10100

9100

8100

7100

6100

5100

Lake Bed

Hay Meadow.

+10

10'

9'

+50

Marsh

+100 - E.G.R. 12.6

+10 - E.G.R. 12.6
Lake Bed

E.R. 11.4

+60 - E.G.R. 10.

+50 - E.G.R. 10.6

E.R. 11.2

+10 - E.G.R. 9.4

+10 - E.G.R. 9.4

19100

18100

+80-

X. CUL.

24" X 28' C.M. - with Wing Walls.

Concrete Wing Walls Lt. & Rt.

For Detail See

Drainage Notes.

17100

16100

15100

14100

13100

12100

2500

2400

2300

406- Ent

2200

438 E Riv Ent Rt

2100 Int of Road

2000

1900

F. 31'

F. 36'

16

F. 31'

F. 37'

cultivated

+27-F. 230'

F. 28

F. 37'

-194 F. Int. 30'

+102-F. 34'

F. 31'

-192-F. 39043'

+10-F. 31'

+11-F. A 21'

+105-10" Pop 31'

+139-6" Pop. 28'

+72-8" Pop. 24'

+53-12" Pop 21'

F. 56'

+25-T. R. 9'

+160-12' Tree 36'

+10-F. Rd. 16

+15-E. Brush

+10-9 Rd. 38

+62-7. P. 35'

+60-9 Rd. 54'

32+00

31+00

+83- Int. Drive

30+00

29+00

28+00

27+00

26+00

F. 32'

+99-144000626

+36-F.A. 27'

F. 29'

+91-1240008

171

10' Stump

F. 35'

Reforested Land.

+40-B.F. 46'

+41-F. End. 40'

+39-277083

+10-F.A. 37'

+37-F.A. 33'

F. 32'

+67-F. Int. 32'

cultivated straight.

F. 28' 17
+36-2440008 & F.-28
Reforested Land.

+91-F. Int. 28'

+59-F.A. 29'

Cultivated

back stumps

straight

+87-F.A. 32'

Cultivated

F. 36'

39400

38400

37400

36400

35400

34400

33400

F. 28'

F. 32'

18

+57-18"stp 20'
+50-F. 29'

+50-F. 29'

F. 30'

+98-20"stp 25'

F. 25'

+90-12"Oak 25'
+78-12"stp 14'

+50-F. 31'

+50-F. 24'

F. 32'

F. 25'

+96-12"Oak 25'

+50-F. 31'
+44-4"Oak 28'

+50-F. 27
+47-8"stp-22'

+12-18"stp. 22'
F. 31'

+03-8"Oak W
F. 25

+13-8"stp. 17'

+03-71.5g. 14'
F. 27

Small stps + bush.

9' 10'

F. 22'

+63-10"stp 22'

F. 28'
+99-20"stp. 19

+50-8"stp. 15'

F. 23'

F. 32'

+8-F. 18"stp 22'

+43-12"Oak 33'
+40-F. 32'

+12-24"Oak 22'

+45-26' F.
+43-20"Oak 26'

+m. 24"stp. 24'

Reforested land

Reforested land.

46+00

45+00

44+00

43+00

42+00

41+00

40+00

F. 26'

+50-F. Δ 39'

+70-F. Δ 37'

F. 30'

F. 25'

+69-F. Δ 22'

F. Δ +42-23'

F. 29'

+50-F. 31'

F. 28'

+50-F. 28'

F. 30'

+50-F. 32'

F. 32'

+50-F. 31'

8'

12' 8"

7' 10"

10' 9"

7' 8"

2' 10"

2' 9"

F. 22' 15" step 18

19

+52-F. 22'

+50-F. 22'

+78-F. Δ 20'

F. 22' +99-10" step 18

F. 23'

+82-24" 00k 75'

+43-F. 28'

F. 27'

+50-F. 22'

F. 22'

+65-24" step 18

+50-F. 22'

F. 21'

POT
Hole

+60-24" step 20

+50-F. 23'

+55-F. 26'

+50-F. 19'

+36-24" step 22'

Scattered 12" Oaks
Reforested Land

Reforested Land - Scattered 12" Oaks

53400

52400

51400

50400

49400

48400

47400

Timber⁶
Brush

Timber⁶
Brush

20

+35-E.F. 29'

F.-27'

+76-30"stp. 18'

+74-12"stp. 18'

+22-10"stp. 18'

F. 22'

+50-F. 19'

F.-16'

+50-F. 18'

F.-20'

+54-6"stp. 15'

+05-24"stp. 18'

F. 21'

+62-24"stp. 17'

+07-16"oak 26'

Reforested Land
Scattered Oak & Brush

9 10

9 10

9 10

7 12

8 9

9 9

Reforested Land
Scattered Oak & Brush

+24-E.F. 28'

+18-4"oak 24'

F. 27'

+69-28"stp. 24'

+50-6"Tree 26'

+35(2) 10"stp. 17'

+07-10"stp. 15'

F. 26'

+80-24"stp. 23'

+50-F. 27'

F. 28'

+50-F. 28'

+18-18"oak 27'

+03-12"stp. 23'

F. 25'

+26-12"stp. 17'

+24-10"stp. 20'

F. 23'

+80-12"stp. 23'

60400

59400

58400

57400

56400

+73 E Culv. For Detail See Drainage Notes.

55400

+58 E Priv Drive Lt.

54400

F. 20.4

F. 26

21

+40-F. 18.7

+40-F. 29.4

F. 17

F. 21

+40-F. 17

+50-F. 32

F. 5.5 High

F. 29

+96-80g. J. F. 19.7

F. 6.1 High

+58-7" Pop. 24

+65-30g. J. F. 27.6

Iron Posts
Mountain

W. 10.05

405
[unclear]
[unclear]

Small Poplar
[unclear]
[unclear]

+40-14" Pop. 22
+30-12" Pop. 20

+41-18" Pop. 15

+69-18" Oak 34

+34-10" Oak 28

Maple

+39-5g. 27
+38-5g. 31

+33-30" Oak 28

Vadnais Lake Shore 20'

Small Trees & Bush

12" x 16" Cal.

67400

66400

65400

64400

63400

62400

61400

scattered oaks.

Timber & Brush

+114-18" oak - 28'

Brush

+119-8" Pop 15'
+106-6" Tree 15'

6' High.
+122 E. F. 27'
+105-8" oak 28'
F. 27'

+54-16" Oak 21'
+144-Ent. 5.5 Tr. Fern. 25'

+28-6" Tree 16'
F. 23'

+109-10" Oak - 19'
F. 27'
+47-13" oak 19' 1/2' Bush
+41-14" Pop. 31' +142 oak 17'
+134-8" Oak 17' +120-11" Birch 14'
+128-10" Tree 16' 1/2' +104-10" oak 14'
+120-14" Pop. 31'
+104-16" Pop. 31'
+104-18" Pop. 31'
F. 33'

= 25.5

+89-12" oak 20'
+82-14" Pop 30'
+60-12" Pop 28'
+13-12" oak 18'
+33-4" Tr. Fern 25'

+94-4" oak 20' - 25.6
+78-12 Tr. Fern 24.5

Ente

7400

7300

7200

7100

Int. Priv. Drive Ry.

7000

6900

6800

485-6" BD 16"

+30-30'' 8p 2V'
+30-10'' 2p 28'

Small Trees & Brush

33
Scattered Oak

Scattered oaks

scattered oak

cont'd next Page.

$$79 + 45.35 = 0100 \text{ XL-XIX.}$$

79400

78400

NT-8 12" x 52' a.m.

77400

76400

75400

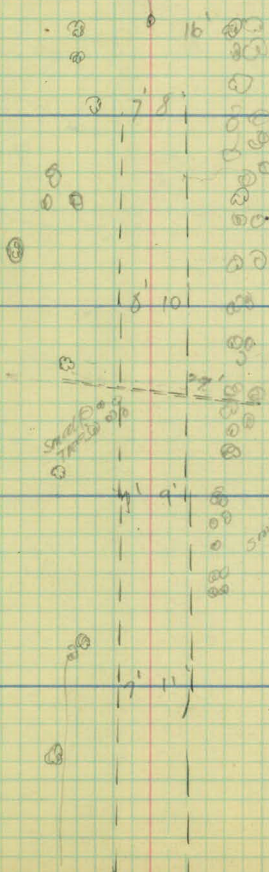
Note: for ~~add~~ Topography
 the ~~frank~~ dates of
 the ~~the~~ ~~the~~

① 1405.25 = P.C.

+44-12" Oak 18'
 +30-18" Oak 18' L
 +21-14" Oak 15'
 +90-16" Oak 21'
 +56A" Oak 20'

+65-24" Oak 22'
 +14-18" Oak 24'

+20-7" Oak 17'
 +17-30" Oak 20'



Pop. 18' Oak -

Pop. 20'

Pop. 20'

Pop. 17'

Pop. 38'

82+50

82+00

81+50

81+00

29° C. LT.

80+50

80+00

Scale 1"=50'

79+50

79+00

G.R. 17

24-A

G.R. 19'

+92-Lake Sign 18'

G.R. 23

G.R. 26'

G.R. 18.5

+37-Ice Shute 22'

+20-A G.R. 14'

G.R. 13

+82-Corshed 22'

+71-A G.R. 14.1'

+62-B G.R. 16'

+55-12" Oak 14'

+78-Ice Shute 10'

+64-Cor. 15'

+24-55'

+88-104 Ice Ho 22'

+62-End Small Pop

86+00

85+50

85+00

84+50

84+00

83+50

83+00

83+50

G.R. 17

24-B

G.R. 17

G.R. 17

G.R. 17

Lake Shore

Timber

Timber

Timber

89+00

88+50

88+00

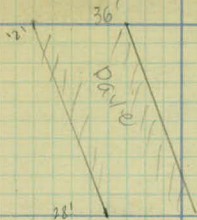
87+50

87+00

86+50

86+00

see Elevation Road
for connection



G.R. 35'

G.R. 20'

ditch to Lake

+44 = A.G.R. 17'

+80 (39 ft.)
24" concrete culv.

G.R. 26'

+82 = A.G.R. 13'

+70 = M.H. 31'

see center of Rd for conn.

+62 (center of Rd)

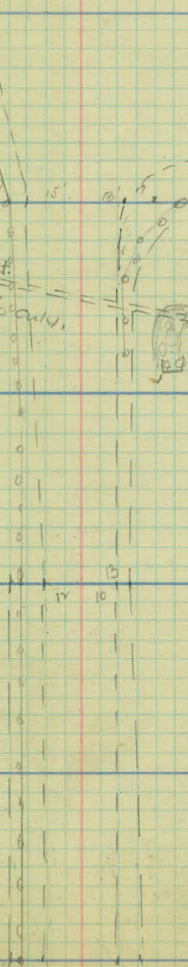
+17 = B.G.R. 41'

+55 = rubble butt 21'

2-Line concrete culv.

G.R. 16'

+60 = Lake sign 17'



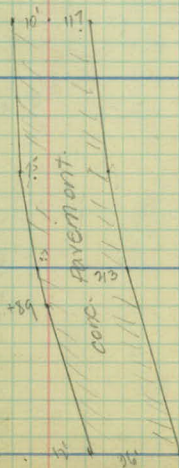
90+66.81 = End Vadnais Lake Blvd
97+74.23 R.T. Centerville Road.

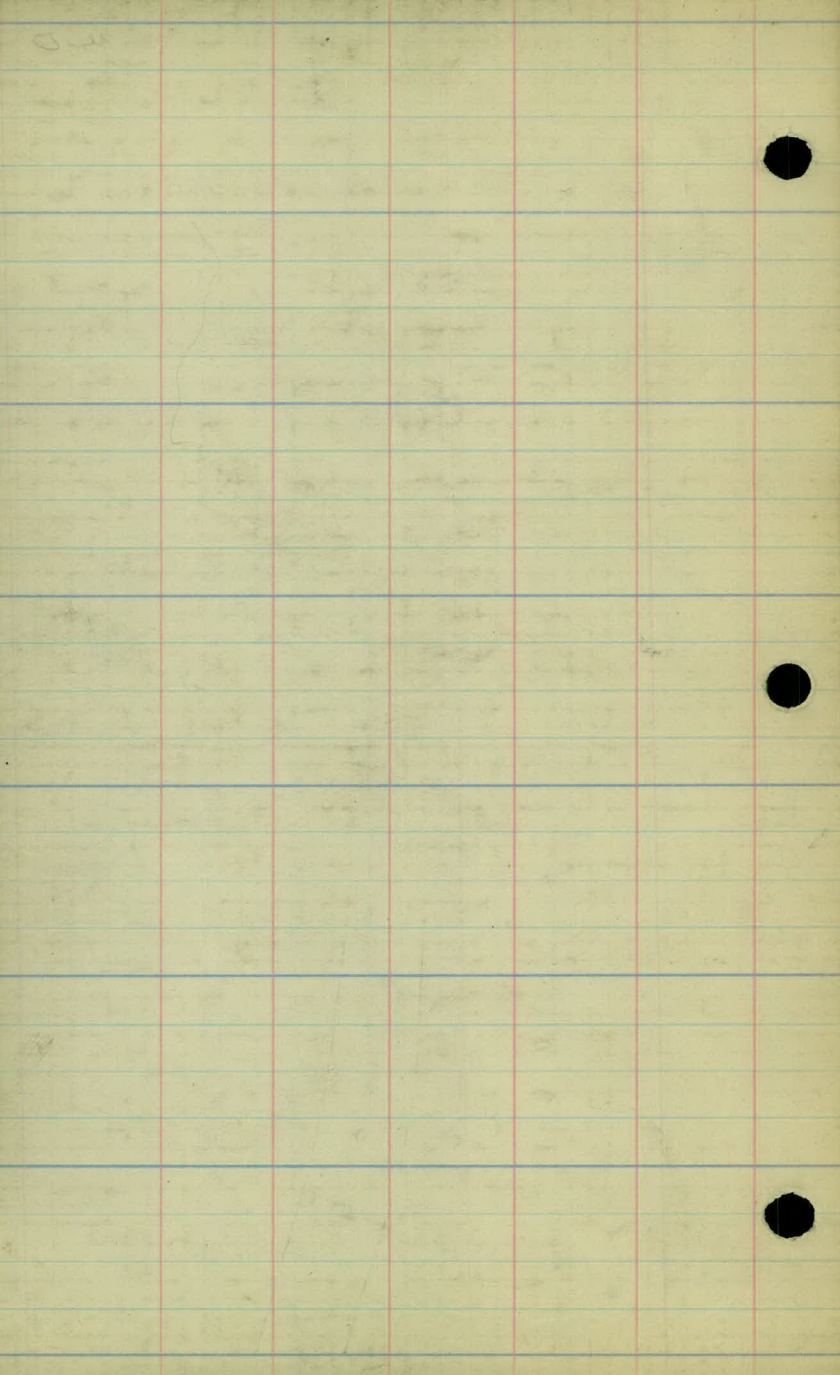
90+50

90+00

89+50

see centerline Road for
connection





Center Line Levels

Vadnais Lake Blvd.

Road #6

Rice St. to Centerville Road.

Station	+	H.I	-	Elev.
B.M.	3.63	928.76		925.13
T.P.	5.93	930.72	3.97	924.79
T.P.	5.15	932.05	3.82	926.90
B.M.	7.53	932.05	7.53	924.52

ctoo	Rice St. Pavement		4.25	927.80
ct09.4			4.32	927.73
ct50			7.3	924.8
T.P.	1.05	923.18	9.92	922.13
1			2.0	921.2
+50			4.9	918.3
2			7.8	915.4
+50			10.4	912.8
T.P.	0.37	910.71	12.84	910.34
3			0.9	909.8
+50			4.3	906.4
4			7.2	903.5
+50			10.5	900.2
4+71			12.1	898.6
T.P.	0.75	899.30	12.16	898.55
5			2.8	896.5
+50			6.4	892.9
6			9.3	890.0
+28.67			10.5	888.8

-10.24
 +24.24
 +24.24
 925.13
 -10.24
 914.89
 +24.24
 939.13
 24.41

50.24

W.H.C. } 76
 Wisthusen } Nov. 24, 1924
 Persons } cold
 Franke }

Lake Imp. B.M. #64, R.R. spike in Lt. Pole, Swasso Blue River

Nail in 12" Oak Lt. Sta. 1735

Rt.		Lt.	
$\frac{4.05}{100}$	$\frac{4.20}{100}$	$\frac{4.50}{100}$	$\frac{4.70}{100}$

E. Edge Pavement.

Station	+	H.I	-	Elev.
		899.30		
6+50			11.3	888.0
7			12.5	886.8
+50			13.1	886.2
T.P.	4.31	890.71	12.90	886.40
8			4.7	886.0
+50			4.7	886.0
9			4.8	885.9
+50			4.6	886.1
10			4.6	886.1
+36.39			4.8	885.9
11			4.6	886.1
12			4.7	886.0
13			4.5	886.3
+50			4.4	886.3
14			4.5	886.2
+50			4.5	886.2
15			4.7	886.0
+50			4.7	886.0
T.P.	3.76	889.76	4.71	886.00
16			4.0	885.8
+50			4.2	885.6
17			4.2	885.6
+50			4.5	885.3
18			4.8	885.0

1761
 - 1761
 + 861
 889.30
 889.76
 889.76
 889.76

1761

Station	+	H.I	-	Elev.
		889.76		
18+50			4.8	885.0.
19			4.7	885.1.
+50			4.5	885.3.
20			4.5	885.3.
+50			4.5	885.3.
21			4.8	885.0.
+50			4.4	885.4.
B.M.	10.22	894.23.	5.75	884.01.
22			8.8	885.4.
+50.			7.8	886.4.
23			5.3	888.9.
+50			2.0	892.2.
T.P.	10.28	903.67.	0.84.	893.39.
24			8.7	895.0.
+50			6.3	897.4.
25			3.6	900.1.
+50			1.3	902.4.
T.P.	13.11	916.43.	0.35	903.32.
26.			11.4	905.0.
+50			2.5	907.9.
27			5.8	910.6.
+50			3.5	912.9.
28			0.8	915.6.
T.P.	12.09	927.41.	1.11	915.32.

+ 45.70
 - 2.05
 + 37.65
 + 889.76
 + 37.65
 927.41

45.70

8.05

Nail in 12' Tree 20' L. 21' W.

Station	+	H.I	-	Elev.
		927.41.		
28+50			9.2	918.2.
29			7.1	920.3.
+50			6.3	921.1.
30			5.2	922.2.
+50			4.6	923.8 922.8
31			3.4	924.0.
+50			2.1	925.3.
32			1.3	926.1.
T.P.	3.34	929.69.	1.06	926.35.
+50			3.2	926.5.
33			3.5	926.2.
+50			2.4	927.3.
34			3.4	926.3.
+50			4.5	925.12
35			5.5	924.2.
+50			6.4	923.3.
36			7.6	922.1.
+50			8.5	921.2.
37			9.6	920.1.
+50			10.8	918.9.
B.M.	1.50	919.27.	11.92	917.77.
38			1.4	917.9.
+50			2.3	917.0.
39			3.4	915.9.

$$\begin{array}{r}
 927.41 \\
 - 12.89 \\
 + 4.94 \\
 \hline
 919.27
 \end{array}$$

Nail 10" Oak Rt. Sta. 37+96

station	+	H.I	-	Elev.
---------	---	-----	---	-------

919.27

39 + 50			4.9	914.4
40			6.5	912.8
+ 50			8.1	910.6
41			10.7	908.6
+ 50			13.3	906.0
T.P.	1.20	907.80	12.67	906.60
42			2.7	905.1
+ 50			3.7	904.1
43			4.2	903.6
+ 50			4.3	903.5
44			4.6	903.2
+ 50			4.9	902.9
45			5.3	902.5
+ 50			5.4	902.4
46			5.4	902.4
+ 50			5.6	902.2
47			6.2	901.6
+ 50			6.4	901.4
48			6.7	901.1
T.P.	1.85	902.77	6.88	900.92
+ 50			1.9	900.9
49			2.0	900.8
+ 50			2.5	900.3
50			2.9	899.9

919.27
 16.50
 902.77
 19.55
 3.05
 16.50

3.05

19.55

station	+	H.I	-	Elev.
		902.77		
50+50			3.6	899.2
51			4.1	898.7
+50			4.5	898.3
52			4.8	898.0
+50			5.2	897.6
53			5.7	897.1
+50			6.5	896.3
54			8.3	894.5
+50			10.7	892.1
55			13.1	889.7
T.P.	1.10	891.53	12.34	890.43
B.M.	3.02	891.53	3.02	888.51
+50			4.0	887.5
56			5.9	885.6
+50			6.8	884.7
57			7.1	884.4
+50			7.2	884.3
58			7.2	884.3
+50			7.4	884.1
59			7.6	883.9
T.P.	5.31	889.42	7.42	884.11
+50			5.5	883.9
60			5.2	884.2
+50			4.5	884.9

$$\begin{array}{r}
 902.77 \\
 - 22.78 \\
 \hline
 879.99 \\
 + 13.35 \\
 \hline
 893.34
 \end{array}$$

9.43

22.78

Top E. end culv.

Spike in 30" Tree Rt. Sta. 55+33 (Same as Water Dept.)

Station	+	H.I	-	ERV.
		889.42		
61			4.5	884.9.
+50			4.6	884.8.
62			4.1	885.3.
+50			3.2	886.3.
63			1.7	887.7.
T.P.	9.40	897.91	0.91	888.51.
+50			8.7	888.2. 889.2
64			7.2	890.7.
+50			5.6	892.3.
65			3.7	894.2.
+50			1.6	896.3.
T.P.	11.85	909.59	0.17	897.74
66			11.5	898.1.
+50			9.9	899.7.
67			8.3	901.3.
+50			6.3	903.3.
68			4.4	905.2.
+50			2.4	907.2
69			0.5	909.1.
T.P.	7.53	916.90	0.22	909.37.
+50			6.0	910.9.
70			4.2	912.7.
+50			3.6	913.3.
71			4.0	912.9.

889.42
 21.48
 910.90
 228.78
 -13.8
 214.98
 228.78

228.78

130

Top stake 63/00

Top stake sta 66

Station	+	H.I	-	Elev.
		916.90		
71+50			4.3	912.6.
72			4.3	912.6.
+50			4.6	912.3.
73			5.6	911.3.
+50			7.8	909.1.
74			10.2	906.7.
+50			12.5	904.4.
T.P.	0.96	905.07.	12.79	904.11.
75			3.3	901.8.
+50			6.0	899.1.
76			8.3	896.8.
+44			10.3	894.8.
77			12.1	893.0.
T.P.	5.99	898.71	12.35	892.72.
+50			6.8	891.9.
78			6.8	891.9.
+50			6.7	892.0.
79			6.0	892.7.
+45.35 = 0.00			5.0	893.7.
0+50			3.7	895.0.
B.M.			2.42	896.29.
B.M.			3.72	894.99.

For additional Levels see "V-L" line finals.
 Check Levels - next page.

$$\begin{array}{r} 27.56 \\ 8.95 \\ \hline 206.1 \end{array}$$

$$\begin{array}{r} 916.90 \\ - 106.1 \\ \hline 810.80 \end{array}$$

27.56

Top Stake 77+00

R.R. spike in the N.W. cor. Ice House, Rt. Sta. 0+42 - V-L Line (marked B.M. "H")
 2 Nails in the N.W. cor. Ice House Rt. Sta. 0+42 = B.M. used on V-L Line ^{x-sec. it} turn 15

check Levels

	I	H.I	—	Elev.
B.M.	0.71	897.00		896.29
T.P.	11.50	907.94	0.56	896.44
T.P.	8.97	916.71	0.20	907.74
T.P.	0.57	904.34	12.94	903.77
T.P.	0.21	892.03	12.52	891.82
T.P.	3.34	888.26	7.11	884.92
T.P.	6.33	890.67	3.92	884.74
B.M.			2.13	888.54
B.M.	10.19	898.70		888.51
T.P.	9.46	907.48	0.68	898.02
T.P.	7.02	910.37	4.13	903.35
T.P.	10.47	920.08	0.76	909.61
T.P.	10.75	930.62	0.21	919.87
B.M.			12.87	917.75
"	12.87	930.64		917.77
T.P.	1.46	922.79	9.31	921.33
T.P.	0.50	910.64	12.65	910.14
T.P.	0.32	898.38	12.58	898.06
T.P.	3.35	889.77	11.96	886.42
B.M.	5.76	889.77	5.76	884.01
T.P.	4.76	890.82	3.71	886.06
T.P.	11.94	900.47	2.29	888.53
T.P.	12.29	912.47	0.29	900.18
T.P.	12.27	924.66	0.08	912.39
B.M.	5.12	929.64	0.14	924.52
T.P.	2.65	929.04	3.25	926.39
B.M.			3.91	925.13

W.H.C.

Wilshusen Nov.

Persons 35

Fronke 1929

R.R. Spike N.W. corner Ice House.

Spike in 30" Tree Rt. Sta. 55+33

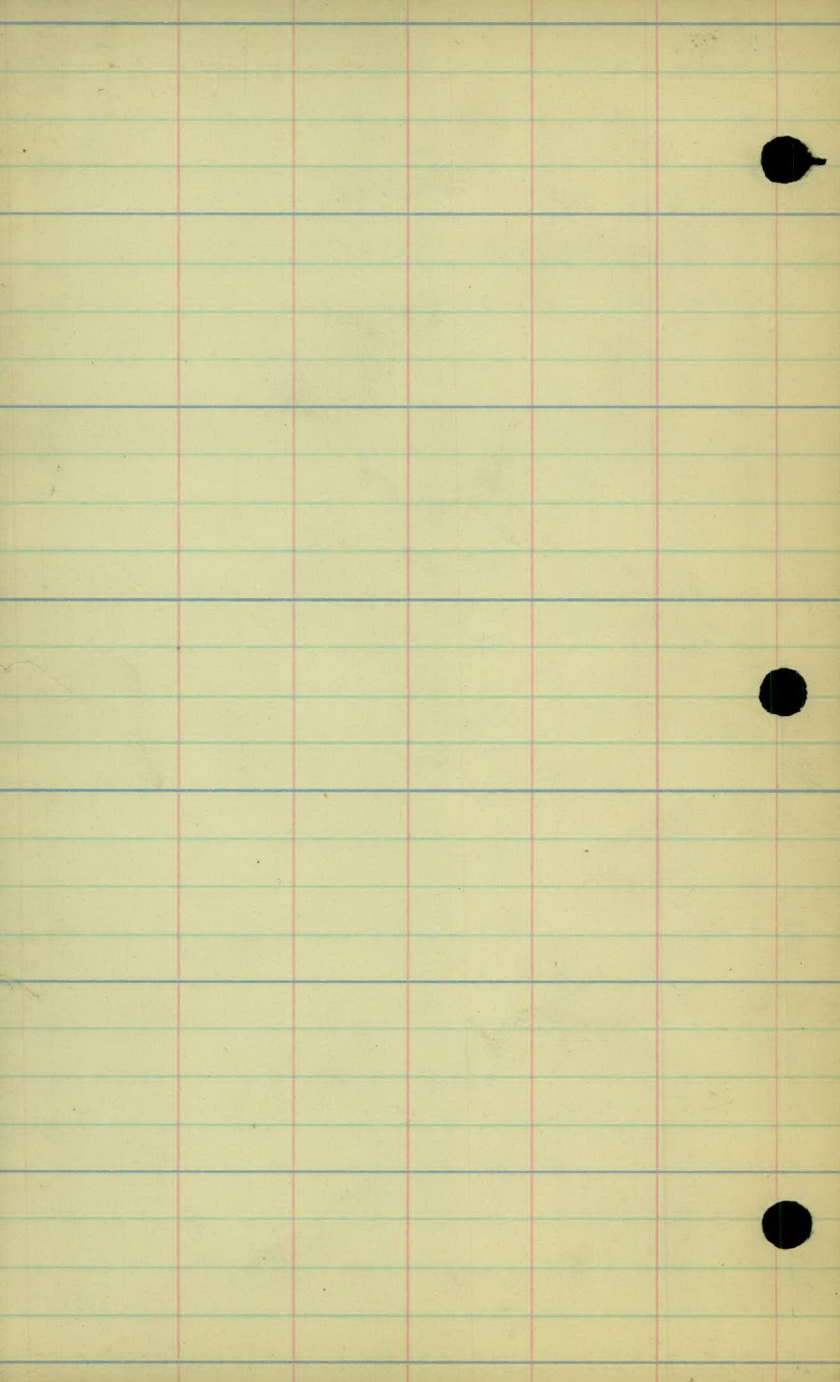
Ab

Nail in 16" Oak Rt. Sta. 37+96

Nail in 12" Tree 20' Lt. 21+50

Nail in 12" Oak Lt. Sta. 1+35

Lake Imp. B.M. #64 R.R. Spike in W. Pk., Onassee Blvd & Rice St.



Cross-Sections.

Vadnais Lake Blvd.

Road #6

Rice St. to Centerville Road.

Station		Elev.
4+50		900.2
4+00		903.5
3+50		906.4
3+00		909.8
2+50		912.8
2+00		915.4
1+50		918.3
1+00		921.2
0+50		924.8
0+20	-0.8	926.9
0+09.4		927.73
0+00		927.80
-0+14.5	-0.20	927.60

27.			L	R+,			
-9.0	-8.1	-9.5	18	-0.4	-5.8	-9.8	-10.3
33	21	11		13	21	27	33

$\frac{-5.8}{33}$ $\frac{-6.2}{25}$ $\frac{-5.4}{19}$ $\frac{-0.9}{11}$ 37 $\frac{-0.7}{11}$ $\frac{-6.0}{19}$ $\frac{-5.0}{25}$ $\frac{-8.1}{33}$

$$\begin{array}{ccccccccc} -0.3 & -0.3 & -2.3 & -1.8 & -0.8 & & & -0.5 & -2.1 & -3.0 \\ 33 & 32 & 27 & 14 & 11 & 18 & & 13 & 19 & 40 \end{array}$$
$$\begin{array}{ccccccccc} +5.2 & +5.2 & -0.4 & -2.0 & -0.9 & 8.0 & -0.2 & -0.9 & -1.7 & -2.3 & +1.0 & +5.0 \\ \frac{45}{32} & \frac{32}{22} & \frac{22}{16} & \frac{16}{10} & \frac{10}{8} & & \frac{8}{8} & \frac{8}{14} & \frac{14}{16} & \frac{16}{26} & \frac{26}{37} & \frac{37}{47} \end{array}$$
$$\begin{array}{cccccccccccc} +3.2 & +3.2 & -1.3 & -1.7 & -0.6 & 100 & -0.2 & -1.3 & -0.7 & +2.8 & +2.8 \\ \hline 37 & 31 & 24 & 14 & 4 & & 8 & 16 & 25 & 30 & 33 \end{array}$$
$$\begin{array}{cccccc} 10.4 & +0.3 & -2.0 & -2.0 & -1.4 & -0.3 \\ \hline 33 & 29 & 26 & 18 & 12 & 6 \end{array} \quad \text{SP} = \begin{array}{cccc} -0.7 & -0.8 & -0.5 & -0.5 \\ \hline 13 & 21 & 22 & 33 \end{array}$$
$$\begin{array}{r} -0.3 \\ \hline 33 \end{array} \quad \begin{array}{r} -0.8 \\ \hline 21 \end{array} \quad \begin{array}{r} 0.0 \\ \hline 12 \end{array} \quad \begin{array}{r} 1/2 \end{array} \quad \begin{array}{r} 0.0 \\ \hline 12 \end{array} \quad \begin{array}{r} 0.0 \\ \hline 33 \end{array}$$
$$\begin{array}{r} -0.1 \\ 33 \end{array} \quad \begin{array}{r} 34 \end{array} \quad \begin{array}{r} -0.2 \\ 33 \end{array}$$

-0.1	33.0	$+0.2$
33		33

$$\begin{array}{r} 0.0 \\ 33 \end{array} \quad \begin{array}{r} 350 \\ 33 \end{array} \quad \begin{array}{r} 0.0 \\ 33 \end{array}$$

Station.

Elev

10+36.39 ✓

885.9

10+00 ✓

886.1

9+50 ✓

886.1

9+00 ✓

885.9

8+50 ✓

886.0

8+00 ✓

886.0

7+50 ✓

886.2

7+00

886.8

6+50

-2.0

888.0

6+00

890.0

5+50

892.9

5+00

896.5

47.

2

Rt.

37

$$\begin{array}{r} -4.0 \\ 33 \end{array} \quad \begin{array}{r} 4.5 \\ 31 \end{array} \quad \begin{array}{r} -3.6 \\ 19 \end{array}$$

-0.6	-4.5	-4.7	-3.3	-4.2	-4.5
11	19	24	27	32	33

$$\begin{array}{r} -4.7 \\ 33 \end{array}$$

2

$$\begin{array}{r} \checkmark \quad \checkmark \quad \checkmark \quad \checkmark \quad \checkmark \\ -0.7 \quad -3.5 \quad -4.4 \quad -3.4 \quad -4.7 \\ \hline 11 \quad 18 \quad 25 \quad 28 \quad 33 \end{array}$$
$$\begin{array}{r} -4.9 \\ 33 \end{array} \quad \begin{array}{r} -4.7 \\ 25 \end{array} \quad \begin{array}{r} -3.4 \\ 17 \end{array} \quad \begin{array}{r} -1.2 \\ 13 \end{array}$$

47

$$\begin{array}{ccccc} \checkmark & \checkmark & \checkmark & \checkmark & \checkmark \\ -0.6 & -4.0 & -4.3 & -3.1 & -4.0 \\ 12 & 18 & 20 & 28 & 34 \end{array}$$
$$\begin{array}{r} 5.3 \\ 33 \end{array} \quad \begin{array}{r} -3.7 \\ 16 \end{array}$$
$$\begin{array}{ccccc} \checkmark & \checkmark & \checkmark & \checkmark & \checkmark \\ -0.5 & -3.2 & -3.6 & -3.0 & -3.0 \\ \hline 12 & 18 & 30 & 31 & 33 \end{array}$$
$$\begin{array}{r} -5.2 \\ 33 \end{array} \quad \begin{array}{r} -4.3 \\ 16 \end{array}$$
$$-\frac{0.2}{15} \quad -\frac{2.1}{18} \quad -\frac{2.5}{24} \quad -\frac{3.9}{28} \quad -\frac{4.0}{38} \quad -\frac{3.1}{39}$$
$$\begin{array}{r} -5.1 \\ 33 \end{array} \quad \begin{array}{r} -4.8 \\ 15 \end{array} \quad \begin{array}{r} -0.1 \\ 8 \end{array}$$

49

$$\begin{array}{ccccc} -0.3 & -4.7 & -4.3 & -2.7 & -2.1 \\ \hline 15 & 29 & 34 & 37 & 40 \end{array}$$

$\frac{-5.5}{33} \quad \frac{-5.3}{19} \quad \dots$

4.3

$$\frac{-0.4}{13} \quad \frac{-4.0}{21} \quad \frac{-4.0}{28} \quad \frac{-2.0}{29} \quad \frac{-2.0}{31}$$
$$\frac{-6.1}{33} \quad \frac{-4.8}{20} \quad -$$

34

$$\begin{array}{ccccc} -0.6 & -5.0 & -5.3 & -3.3 & -4.0 \\ \hline 12 & 22 & 27 & 18 & 33 \end{array}$$
$$\begin{array}{r} -7.3 \\ 33 \end{array}$$

5.

$$\frac{-0.5}{11} \quad \frac{-2.6}{18} \quad \frac{-6.0}{33}$$
$$\begin{array}{r} -8.0 \\ 33 \end{array} \quad \begin{array}{r} -7.5 \\ 24 \end{array} \quad \begin{array}{r} -6.0 \\ 1 \end{array}$$

3.3

$$\begin{array}{r} -0.6 \\ 12 \end{array} \quad \begin{array}{r} -6.9 \\ 23 \end{array} \quad \begin{array}{r} -8.1 \\ 33 \end{array}$$
$$\begin{array}{r} -8.0 \\ \underline{23} \end{array} \quad \begin{array}{r} -6.4 \\ \underline{27} \end{array} \quad \begin{array}{r} -4.7 \\ \underline{16} \end{array} \quad \begin{array}{r} -0. \\ \underline{9} \end{array}$$

५१

$$\begin{array}{r} -0.5 \\ \hline 10 \end{array} \quad \begin{array}{r} -9.1 \\ \hline 24 \end{array} \quad \begin{array}{r} -10.1 \\ \hline 33 \end{array}$$
$$\begin{array}{r} -10.5 \\ \hline 33 \end{array} \quad \begin{array}{r} -9.3 \\ \hline 25 \end{array} \quad \begin{array}{r} -0.6 \\ \hline 12 \end{array}$$

21

-0.7	-8.3	-9.9
11	22	33

Station		Elev.
150	✓	885.6
16+00	✓	885.8
150	✓	886.0
15+00	✓	886.0
14+50	✓	886.2
14+00	✓	886.2
13+50	✓	886.3
13+00	✓	886.3
12+50	✓ 0.0	886.0
12+00	✓	886.0
11+50	✓ -0.2	885.9
11+00	✓	886.1
10+75	✓ -0.3	885.8

✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
LT ₁	✓	✓	✓	✓	✓	✓	✓	✓	✓
-5.4 33	-4.8 22	-4.0 15	-0.6 9	4.4	-0.4 13	-4.8 20	-5.6 27	-0.6 33	38
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
-5.6 33	-4.5 17	-0.8 11	4.3	-0.7 13	-4.7 21	-5.0 33			
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
-5.3 33	-4.9 18	-0.7 10	4.1	-0.5 13	-4.2 21	-5.0 33			
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
-5.6 33	-4.6 17	-0.5 10	4.0	-0.2 13	-3.2 21	-4.5 33			
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
-5.9 33	-4.7 18	-0.5 11	3.8	-0.6 14	-4.0 20	-5.3 33			
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
-5.5 33	-4.7 26	-3.3 19	-0.7 13	4.5	-0.5 11	-3.6 17	-4.8 25	-5.5 33	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
-5.2 33	-4.7 29	-2.7 21	-2.4 17	-0.8 12	4.2	-0.6 12	-4.1 20	-5.1 33	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
-5.4 33	-3.3 30	-4.0 28	-4.0 25	-2.3 18	-0.2 14	4.5	-0.6 10	-3.7 17	-4.9 24
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
-4.8 33	-4.8 25	-1.7 17	-0.4 14	4.3	-0.5 10	-3.0 16	-4.6 25	-5.1 33	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
-4.9 33	-4.4 24	-2.7 18	-0.5 14	4.7	-0.6 10	-4.4 19	-4.9 24	-3.8 25	-5.1 33
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
-4.5 33	-3.5 20	-0.7 14	-0.3 9	4.8	-0.5 11	-3.8 19	-4.3 25	-3.7 27	-5.1 33
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
-3.9 33	-3.8 23	-0.7 17	-0.5 10	4.6	-0.6 9	-4.1 16	-5.2 23	-2.3 26	-3.9 33
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
-3.6 33	-3.0 29	-1.4 23	0.0 13	-0.2 9	4.9	-0.6 10	-2.8 15	-3.3 20	-4.5 25

station		Elev.
21+73	✓ +0.0	885.4
21+50	✓	885.4
21+00	✓	885.0
20+64	✓ -0.1	885.2
20+30	✓ 0.0	885.3
20+00	✓	885.3
19+60	✓ +0.3	885.4
19+00	✓	885.1
+50	✓	885.0
18+00	✓	885.0
+77	✓ -0.2	885.1
+50	✓	885.3
17+00	✓	885.6

L+				R+			
-2.8	-1.8	-0.7	-0.2	-0.8	-2.0	-1.8	
33	18	14	9	12	19	33	
2.5	-1.6	-0.4		-0.6	-1.5	-1.4	
33	14	9		12	17	33	
-2.2	-1.4	-0.4		+0.2	0.0	-2.4	-3.5
33	11	9		7	16	21	33
-3.2	-1.9	-1.1		-0.3	-0.8	-4.2	-4.9
33	12	10		8	16	16	33
-4.3	-3.3	-2.6	-2.0	-0.5	-2.1	-2.7	
33	16	23	16	10	18	33	
-4.1	-3.2	-0.3		-0.7	-5.5	-5.2	-3.2
33	17	11		13	20	24	33
5.1	-4.1	-0.5		-0.6	-5.1	-6.3	
33	18	10		13	20	33	
-5.1	-4.0	-3.8	-0.3	-0.6	-5.6	-6.4	
33	21	18	9	13	21	33	
-5.0	-4.4	-0.7		-0.7	-6.2	-6.7	
33	18	10		12	21	33	
5.1	-4.1	-0.3		-0.4	-6.0	-6.5	
33	18	12		10	20	33	
-5.0	-4.8	-3.2	0.0	-0.6	-5.6	-6.2	-6.4
33	18	19	12	10	17	23	33
-5.2	-4.6	-3.9	-0.5	-0.3	-5.4	-5.6	
33	22	17	11	10	19	33	
-5.5	-5.4	-4.1	-0.6	-0.2	-5.8	-5.7	
33	24	16	10	13	21	33	

station		Elev.
26+50	✓	907.9
26+00	✓	905.0
25+50	✓	902.4
25+00	✓	900.1
24+50	✓	897.4
24+00	✓	895.0
23+76	✓ +1.6	893.8
23+50	✓	892.2
23+20	✓ +1.3	890.2 ✓
23+00	✓	888.9
22+80	✓ +1.4	887.8
22+50	✓	886.4
22+00	✓	885.4

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{+35}{33}$ $\frac{+33}{25}$ $\frac{+93}{21}$ $\frac{-94}{19}$ $\frac{-14}{16}$ $\frac{-94}{8}$ 47

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{+34}{30}$ $\frac{+34}{24}$ $\frac{-93}{20}$ $\frac{-11}{18}$ $\frac{-95}{12}$ 26

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{+20}{33}$ $\frac{+18}{22}$ $\frac{00}{19}$ $\frac{-10}{17}$ $\frac{-95}{13}$ 120

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{+07}{33}$ $\frac{+02}{23}$ $\frac{-05}{17}$ $\frac{-13}{16}$ $\frac{-07}{12}$ 43

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{+05}{33}$ $\frac{+04}{28}$ $\frac{-93}{25}$ $\frac{00}{14}$ $\frac{-99}{13}$ $\frac{-95}{10}$ 70

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-52}{33}$ $\frac{-35}{27}$ $\frac{-08}{19}$ $\frac{-10}{13}$ $\frac{-06}{10}$ 4

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-11.0}{33}$ $\frac{-11.0}{30}$ $\frac{-5.4}{25}$ $\frac{-1.1}{11}$ $\frac{-0.2}{7}$ 00

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-94}{33}$ $\frac{-9.4}{28}$ $\frac{-7.9}{20}$ $\frac{-1.1}{10}$ $\frac{-0.5}{8}$ 16

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-8.2}{33}$ $\frac{-6.7}{20}$ $\frac{-0.9}{12}$ 35

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-44}{33}$ $\frac{-5.5}{30}$ $\frac{-4.2}{20}$ $\frac{-1.0}{13}$ 43

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-7.5}{36}$ $\frac{-1.8}{22}$ $\frac{-93}{11}$ $\frac{00}{5}$ 60

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{23}{39}$ $\frac{-30}{29}$ $\frac{-0.1}{22}$ $\frac{00}{8}$ 21

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-24}{33}$ $\frac{-1.5}{19}$ $\frac{-0.3}{15}$ 84

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-10}{12}$ $\frac{-1.7}{16}$ $\frac{+3.9}{22}$ $\frac{+4.5}{33}$ 40

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-07}{12}$ $\frac{-1.2}{16}$ $\frac{00}{17}$ $\frac{+3.6}{22}$ $\frac{+4.0}{33}$

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-06}{14}$ $\frac{-1.1}{17}$ $\frac{102}{18}$ $\frac{+30}{23}$ $\frac{+3.5}{35}$

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-05}{13}$ $\frac{-1.4}{18}$ $\frac{00}{19}$ $\frac{+2.9}{23}$ $\frac{+3.4}{33}$

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-05}{14}$ $\frac{-1.2}{16}$ $\frac{-0.1}{20}$ $\frac{-0.1}{21}$ $\frac{+3.6}{31}$ $\frac{+3.8}{33}$

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-07}{15}$ $\frac{-1.7}{19}$ $\frac{00}{21}$ $\frac{+1.7}{27}$ $\frac{+3.5}{30}$ $\frac{+3.6}{33}$

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-02}{9}$ $\frac{-10}{16}$ $\frac{-1.9}{20}$ $\frac{00}{21}$ $\frac{+4.7}{30}$ $\frac{+4.6}{40}$

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-0.1}{9}$ $\frac{-1.5}{19}$ $\frac{4.5}{20}$ $\frac{+4.7}{23}$ $\frac{+6.5}{36}$ $\frac{+7.0}{46}$

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-0.5}{9}$ $\frac{-1.1}{15}$ $\frac{+3.2}{19}$ $\frac{+9.0}{34}$ $\frac{+9.0}{50}$

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-1.0}{14}$ $\frac{-0.4}{21}$ $\frac{+2.2}{42}$ $\frac{+11.1}{52}$

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-0.3}{16}$ $\frac{00}{25}$ $\frac{-0.5}{28}$ $\frac{+13.6}{46}$ $\frac{+13.6}{55}$

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-02}{12}$ $\frac{-0.3}{28}$ $\frac{-1.3}{35}$

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-07}{10}$ $\frac{-1.0}{20}$ $\frac{-1.5}{33}$

W.H.G.
 Wilschusen Nov. 26 21
 Persons
 Franke

Station		Elev.
33+00	✓	926.2
32+50	✓	926.5
32+00	✓	926.1
31+50	✓	925.3
31+00	✓	924.0
30+50	✓	<u>923.8</u> 922.8
30+00	✓	922.2
29+50	✓	921.1
29+00	✓	920.3
28+50	✓	918.2
28+00	✓	915.6
27+50	✓	912.9
27+00	✓	910.6

✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
$\frac{-0.4}{33}$	$\frac{-0.2}{18}$	$\frac{-0.9}{14}$	$\frac{-0.7}{8}$	47	RT.	$\frac{-0.1}{10}$	$\frac{-0.2}{15}$	$\frac{-0.7}{18}$	$\frac{+0.5}{20}$	$\frac{+0.0}{33}$

✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
$\frac{-1.0}{33}$	$\frac{-1.0}{30}$	$\frac{-0.8}{11}$	$\frac{-0.8}{6}$	54	$\frac{+0.3}{6}$	$\frac{0.0}{12}$	$\frac{-0.1}{18}$	$\frac{-0.2}{19}$	$\frac{-0.4}{22}$	$\frac{+0.3}{23}$	$\frac{+0.8}{33}$

✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
$\frac{-2.5}{33}$	$\frac{-1.9}{28}$	$\frac{-1.2}{15}$	$\frac{-0.7}{7}$	58	$\frac{+0.1}{9}$	$\frac{-0.4}{18}$	$\frac{+0.8}{20}$	$\frac{+1.0}{33}$		

✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
$\frac{-2.8}{33}$	$\frac{-2.0}{25}$	$\frac{-0.8}{22}$	$\frac{-1.0}{17}$	$\frac{-0.6}{13}$	66	$\frac{-1.8}{9}$	$\frac{0.0}{11}$	$\frac{-0.2}{12}$	$\frac{-1.2}{16}$	$\frac{-0.8}{33}$

✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
$\frac{-0.2}{33}$	$\frac{-0.4}{23}$	$\frac{-0.7}{18}$	$\frac{-0.0}{15}$	74	$\frac{-0.8}{8}$	$\frac{-1.0}{15}$	$\frac{-1.0}{26}$	$\frac{-1.0}{36}$		

✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
$\frac{-1.0}{32}$	$\frac{-0.5}{21}$	$\frac{+0.8}{11}$		82	$\frac{-0.4}{8}$	$\frac{+0.3}{10}$	$\frac{+0.8}{33}$			

✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
$\frac{-1.3}{33}$	$\frac{-1.9}{19}$	$\frac{-1.3}{17}$	$\frac{-0.6}{13}$	88	$\frac{-0.4}{7}$	$\frac{-0.6}{13}$	$\frac{+0.4}{15}$	$\frac{+1.8}{33}$		

✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
$\frac{-1.1}{32}$	$\frac{-0.8}{18}$	$\frac{-1.2}{15}$	$\frac{-1.2}{12}$	$\frac{-0.5}{11}$	67	$\frac{-0.5}{16}$	$\frac{0.0}{18}$	$\frac{+0.3}{33}$		

✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
$\frac{-1.3}{33}$	$\frac{-0.5}{20}$	$\frac{-0.9}{18}$	$\frac{-0.3}{10}$	77	$\frac{-0.5}{8}$	$\frac{-1.0}{15}$	$\frac{-0.5}{16}$	$\frac{+0.6}{21}$	$\frac{+0.7}{33}$	

✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
$\frac{+1.5}{33}$	$\frac{+2.0}{20}$	$\frac{+0.2}{17}$	$\frac{-0.6}{13}$	$\frac{-0.5}{9}$	98	$\frac{-0.4}{8}$	$\frac{-0.6}{14}$	$\frac{+2.5}{19}$	$\frac{+2.8}{33}$	

✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
$\frac{+3.7}{33}$	$\frac{+2.7}{22}$	$\frac{+0.6}{18}$	$\frac{-0.2}{14}$	$\frac{-0.8}{13}$	$\frac{-0.4}{8}$	49	$\frac{-0.3}{7}$	$\frac{-0.7}{13}$	$\frac{+3.2}{19}$	$\frac{+4.0}{22}$	$\frac{+4.6}{33}$

✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
$\frac{+4.3}{33}$	$\frac{+2.9}{25}$	$\frac{+0.1}{19}$	$\frac{0.0}{15}$	$\frac{-0.1}{14}$	$\frac{-0.2}{7}$	76	$\frac{-0.4}{6}$	$\frac{-1.0}{12}$	$\frac{0.0}{15}$	$\frac{+3.0}{22}$	$\frac{+3.2}{33}$

✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
$\frac{+3.2}{33}$	$\frac{+3.1}{25}$	$\frac{0.0}{20}$	$\frac{-0.5}{16}$	$\frac{-1.4}{14}$	$\frac{-0.4}{9}$	98	$\frac{-0.3}{6}$	$\frac{-1.4}{15}$	$\frac{-0.2}{17}$	$\frac{+3.3}{21}$	$\frac{+3.9}{33}$

Station		Elev.
39+50	✓	910.4
39+00	✓	915.9
38+50	✓	917.0
38+00	✓	917.9
37+50	✓	918.9
37+00	✓	920.1
36+50	✓	921.2
36+00	✓	922.1
35+50	✓	923.3
35+00	✓	924.2
34+50	✓	925.2
34+00	✓	926.3
33+50	✓	927.3

✓ $\frac{+2.1}{33}$	✓ $\frac{+1.6}{18}$	✓ $\frac{-0.4}{14}$	✓ $\frac{-0.4}{10}$	✓ 20	✓ $\frac{-0.6}{10}$	✓ $\frac{-0.9}{15}$	✓ $\frac{-1.3}{18}$	✓ $\frac{-1.2}{27}$	✓ $\frac{-1.5}{33}$	✓ 42	
✓ $\frac{+0.9}{33}$	✓ $\frac{+0.8}{19}$	✓ $\frac{-0.3}{17}$	✓ $\frac{-0.4}{11}$	✓ 66	✓ $\frac{-0.5}{8}$	✓ $\frac{-1.2}{14}$	✓ $\frac{-1.8}{24}$	✓ $\frac{-2.2}{33}$			
✓ $\frac{+0.5}{33}$	✓ $\frac{+0.5}{26}$	✓ $\frac{-0.7}{23}$	✓ $\frac{-1.2}{19}$	✓ $\frac{-0.6}{13}$	✓ 55	✓ $\frac{-1.0}{10}$	✓ $\frac{-1.3}{13}$	✓ $\frac{-2.2}{24}$	✓ $\frac{-3.3}{33}$		
✓ $\frac{-1.3}{33}$	✓ $\frac{-1.0}{25}$	✓ $\frac{-1.9}{23}$	✓ $\frac{-2.0}{19}$	✓ $\frac{-1.3}{17}$	✓ $\frac{-0.6}{12}$	✓ 47	✓ $\frac{0.0}{6}$	✓ $\frac{-0.7}{12}$	✓ $\frac{-1.0}{13}$	✓ $\frac{-1.4}{25}$	✓ $\frac{-1.4}{33}$
✓ $\frac{-5.7}{33}$	✓ $\frac{-3.6}{17}$	✓ $\frac{-1.1}{12}$	✓ 36	✓ $\frac{-0.5}{12}$	✓ $\frac{-1.6}{14}$	✓ $\frac{-1.4}{16}$	✓ $\frac{-0.2}{17}$	✓ $\frac{+0.4}{29}$	✓ $\frac{+0.8}{33}$		
✓ $\frac{-6.0}{33}$	✓ $\frac{-2.6}{17}$	✓ $\frac{-0.8}{13}$	✓ 25	✓ $\frac{-0.7}{9}$	✓ $\frac{-0.6}{15}$	✓ $\frac{+0.9}{17}$	✓ $\frac{+1.9}{24}$	✓ $\frac{+2.7}{33}$			
✓ $\frac{-2.8}{33}$	✓ $\frac{-1.2}{14}$	✓ $\frac{-0.3}{12}$	✓ 64	✓ $\frac{-0.7}{10}$	✓ $\frac{-0.9}{14}$	✓ $\frac{+0.4}{17}$	✓ $\frac{+1.0}{26}$	✓ $\frac{+1.2}{33}$			
✓ $\frac{-3.7}{33}$	✓ $\frac{-3.1}{29}$	✓ $\frac{-2.3}{17}$	✓ $\frac{-0.8}{13}$	✓ 55	✓ $\frac{-0.5}{10}$	✓ $\frac{-0.9}{15}$	✓ $\frac{-0.4}{20}$	✓ $\frac{+0.5}{33}$			
✓ $\frac{-2.1}{33}$	✓ $\frac{-2.5}{29}$	✓ $\frac{-2.0}{15}$	✓ $\frac{-0.8}{13}$	✓ 42	✓ $\frac{-0.5}{10}$	✓ $\frac{-0.4}{13}$	✓ $\frac{-0.9}{14}$	✓ $\frac{-0.8}{25}$	✓ $\frac{-0.5}{33}$		
✓ $\frac{-1.8}{33}$	✓ $\frac{-1.1}{15}$	✓ $\frac{-0.6}{13}$	✓ $\frac{-0.4}{9}$	✓ 34	✓ $\frac{-0.3}{9}$	✓ $\frac{-0.2}{12}$	✓ $\frac{-0.8}{15}$	✓ $\frac{-0.9}{26}$	✓ $\frac{-0.9}{33}$		
✓ $\frac{-1.7}{33}$	✓ $\frac{-1.0}{16}$	✓ $\frac{-0.6}{14}$	✓ $\frac{-0.5}{8}$	✓ 67	✓ $\frac{-0.4}{9}$	✓ $\frac{-0.7}{16}$	✓ $\frac{-0.2}{18}$	✓ $\frac{+0.5}{27}$	✓ $\frac{+0.6}{33}$		
✓ $\frac{-1.0}{33}$	✓ $\frac{-0.1}{16}$	✓ $\frac{-0.9}{15}$	✓ $\frac{-0.6}{11}$	✓ 35	✓ $\frac{-0.4}{10}$	✓ $\frac{-0.5}{14}$	✓ $\frac{+3.0}{18}$	✓ $\frac{+3.6}{32}$			
✓ $\frac{+1.2}{33}$	✓ $\frac{+1.0}{26}$	✓ $\frac{+1.7}{21}$	✓ $\frac{+1.3}{20}$	✓ $\frac{-0.4}{16}$	✓ $\frac{-0.6}{9}$	✓ $\frac{-0.9}{15}$	✓ $\frac{+1.8}{19}$	✓ $\frac{+2.1}{28}$	✓ $\frac{+2.5}{33}$		

station		Elev.
45+35	✓ -0.1	902.4 .
45+00	✓	902.5 .
44+50	✓	902.9 .
44+00	✓	903.2 .
43+44	✓ 00	903.6 .
43+00	✓	903.6 .
42+50	✓	904.1 .
42+00	✓	905.1 .
41+60	✓ -1.3	906.3 .
41+25	✓ -1.0	907.6 .
41+00	✓	908.6 .
40+50	✓	910.6 .
40+00	✓	912.8 .

41					42	43				
$\frac{-0.6}{33}$	$\frac{-0.5}{25}$	$\frac{-0.3}{18}$	$\frac{-0.7}{14}$	$\frac{-0.3}{9}$	17	$\frac{-0.5}{11}$	$\frac{-0.9}{15}$	$\frac{+0.7}{18}$	$\frac{+0.9}{25}$	$\frac{+0.9}{33}$
$\frac{+1.2}{33}$	$\frac{+1.2}{25}$	$\frac{+0.9}{16}$	$\frac{-0.7}{14}$	$\frac{-0.6}{9}$	46	$\frac{-0.5}{13}$	$\frac{-1.1}{15}$	$\frac{-0.4}{17}$	$\frac{-0.6}{23}$	$\frac{-0.7}{33}$
$\frac{+4.2}{33}$	$\frac{+3.8}{23}$	$\frac{+3.0}{17}$	$\frac{-0.0}{13}$	$\frac{-0.6}{11}$	78	$\frac{-0.9}{10}$	$\frac{-0.2}{16}$	$\frac{-1.4}{19}$	$\frac{+0.3}{22}$	$\frac{-0.1}{27}$
$\frac{+4.6}{33}$	$\frac{+4.6}{29}$	$\frac{+4.6}{29}$	$\frac{-0.2}{15}$	$\frac{-0.7}{11}$	75	$\frac{-0.3}{12}$	$\frac{-1.0}{14}$	$\frac{-0.3}{18}$	$\frac{-1.5}{27}$	$\frac{-2.3}{33}$
$\frac{+0.8}{33}$	$\frac{0.0}{17}$	$\frac{-0.9}{15}$	$\frac{-0.7}{9}$	72	$\frac{-0.2}{9}$	$\frac{-0.6}{12}$	$\frac{-2.2}{16}$	$\frac{-3.2}{22}$	$\frac{-3.4}{33}$	
$\frac{-1.6}{33}$	$\frac{-1.3}{15}$	$\frac{-0.5}{13}$	$\frac{-0.4}{9}$	72	$\frac{-0.4}{10}$	$\frac{-2.3}{15}$	$\frac{-3.1}{22}$	$\frac{-3.2}{33}$		
$\frac{-2.1}{33}$	$\frac{-1.4}{15}$	$\frac{-0.6}{13}$	$\frac{-0.4}{9}$	46	$\frac{-0.6}{10}$	$\frac{-1.4}{13}$	$\frac{-1.6}{20}$	$\frac{-2.0}{33}$		
$\frac{-1.9}{33}$	$\frac{-1.3}{14}$	$\frac{-0.3}{11}$	56	$\frac{-0.7}{10}$	$\frac{-2.3}{15}$	$\frac{-4.3}{21}$	$\frac{-5.5}{33}$			
$\frac{-2.9}{33}$	$\frac{-2.0}{15}$	$\frac{-0.7}{14}$	$\frac{-0.5}{10}$	44	$\frac{-0.9}{11}$	$\frac{-2.9}{17}$	$\frac{-4.6}{22}$	$\frac{-5.1}{33}$		
$\frac{-2.1}{33}$	$\frac{-1.2}{16}$	$\frac{-0.4}{13}$	$\frac{-0.6}{9}$	31	$\frac{-0.6}{9}$	$\frac{-0.7}{13}$	$\frac{-3.0}{18}$	$\frac{-3.1}{25}$	$\frac{-5.2}{33}$	
$\frac{-0.8}{33}$	$\frac{-0.3}{14}$	$\frac{-0.6}{9}$	21	$\frac{-0.5}{10}$	$\frac{-0.4}{13}$	$\frac{-2.0}{16}$	$\frac{-3.7}{27}$	$\frac{-4.5}{33}$		
$\frac{+0.9}{33}$	$\frac{+0.3}{14}$	$\frac{-0.3}{12}$	$\frac{-0.6}{9}$	18	$\frac{-0.3}{11}$	$\frac{-0.4}{15}$	$\frac{-1.7}{19}$	$\frac{-2.8}{25}$	$\frac{-3.7}{33}$	
$\frac{+2.2}{33}$	$\frac{+1.0}{15}$	$\frac{-0.3}{12}$	$\frac{-0.5}{8}$	97	$\frac{-0.3}{12}$	$\frac{-0.7}{17}$	$\frac{-1.2}{21}$	$\frac{-1.5}{25}$	$\frac{-0.9}{26}$	$\frac{-1.5}{33}$

Station		Elev.
51+00	✓	898.7 .
50+50	✓	899.2 .
50+00	✓	899.9 .
49+50	✓	900.3 .
49+00	✓	900.8 .
48+65	✓ -0.2	900.7 .
48+50	✓ ↘	900.9 .
48+00	✓	901.1 .
47+50	✓	901.4 .
47+00	✓	901.6 .
46+50	✓	902.2 .
46+00	✓	902.4 .
45+75	✓ 0.0	902.4 .

✓ -3.7 33	✓ -2.1 18	✓ -0.6 14	✓ 2	✓ 72	✓ 29	✓ -0.5 10	✓ -1.0 14	✓ -0.6 15	✓ -0.1 26	✓ 0.0 33	✓ 44
✓ -6.6 33	✓ -5.3 27	✓ -2.5 19	✓ -2.0 15	✓ -0.8 12	✓ 68	✓ -0.4 10	✓ -1.1 16	✓ +0.5 19	✓ +1.5 29	✓ +1.5 33	
✓ -10.7 33	✓ -4.6 19	✓ -2.7 14	✓ -0.6 11	✓ 60	✓ -0.8 15	✓ -0.8 17	✓ +1.9 20	✓ +2.6 28	✓ +2.8 33		
✓ -11.7 33	✓ -4.6 18	✓ -2.4 14	✓ -0.8 10	✓ 57	✓ -0.6 14	✓ +0.1 18	✓ +2.8 22	✓ +4.1 29	✓ +4.5 33		
✓ -9.5 33	✓ -2.1 23	✓ -1.8 20	✓ -0.8 14	✓ -0.4 11	✓ 32	✓ -0.4 9	✓ 0.0 14	✓ +2.7 17	✓ +3.8 24	✓ +5.0 33	
✓ -3.5 33	✓ -1.8 20	✓ -0.8 21	✓ -0.6 16	✓ -0.3 17	✓ 52	✓ -0.5 10	✓ -0.8 12	✓ +0.6 15	✓ +1.6 20	✓ +2.5 33	
✓ -6.4 33	✓ -3.1 19	✓ -0.5 15	✓ -0.3 10	✓ 50	✓ -0.6 9	✓ -0.5 13	✓ +0.6 16	✓ +1.1 23	✓ +1.5 33		
✓ -4.0 33	✓ -2.7 24	✓ -1.7 17	✓ -0.6 14	✓ -0.4 10	✓ 60	✓ -0.6 9	✓ -0.8 18	✓ -0.3 16	✓ +0.2 16	✓ +0.2 33	
✓ -1.9 33	✓ -1.0 22	✓ -0.3 14	✓ -0.3 9	✓ 57	✓ -0.6 11	✓ -0.4 14	✓ +0.7 17	✓ +1.2 25	✓ +1.6 33		
✓ -1.1 33	✓ -0.5 16	✓ -0.3 18	✓ -0.1 10	✓ 54	✓ -0.5 7	✓ -0.4 13	✓ +1.2 15	✓ +1.1 22	✓ +1.5 33		
✓ +0.6 33	✓ +1.0 30	✓ -0.7 27	✓ -0.3 21	✓ -0.2 13	✓ +0.2 7	✓ -1.0 8	✓ -0.8 12	✓ +1.0 15	✓ +1.1 23	✓ +1.1 33	
✓ -1.7 33	✓ -1.7 30	✓ -0.9 24	✓ +0.1 20	✓ -1.0 17	✓ -0.4 14	✓ -0.7 8	✓ -0.8 12	✓ +0.8 14	✓ +1.4 22	✓ +1.4 33	
✓ -2.0 33	✓ -1.4 26	✓ 0.0 17	✓ -0.4 15	✓ 48	✓ -0.7 12	✓ -1.0 18	✓ +0.6 18	✓ +1.5 24	✓ +1.5 33		

Station		Elev.
55+63	✓ -1.4	887.0 ✓
55+35	✓ -1.3	888.4 ✓
55+00	✓	889.7 ✓
54+52	✓ +2.3	892.0 ✓
54+45	✓ +0.4	892.4 ✓
54+00	✓	894.5 ✓
53+75	✓ -0.7	895.5 ✓
53+52	✓ -0.9	896.2 ✓
53+00	✓	897.1 ✓
52+50	✓	897.6 ✓
52+32	✓ -0.3	897.7 ✓
52+00	✓	898.0 ✓
51+50	✓	898.3 ✓

4 2 RT 45

-1.5	-0.3	-0.4	27	-0.8	-2.7	-4.0	-5.7
33	15	10		12	16	27	33

-0.8	-0.3	-0.6	-0.4	88	-0.4	-0.5	-1.5	-1.2	-1.4	-3.6
33	18	15	9		9	12	16	20	25	33

0.0	+0.0	-0.5	-0.4	75	-0.4	-0.7	-1.5	-1.6	+0.2	+0.4
33	18	17	9		9	13	15	26	29	33

+1.5	+4.2	+3.2	+1.7	-0.4	-0.6	52	-0.4	-1.2	-2.1
42	35	33	21	19	10		9	16	33

2.0	+4.5	+4.5	+3.3	+1.7	-0.6	-0.4	47	-0.4	-0.7	-0.9	+1.9	+1.6	+2.4
43	35	33	32	22	19	10		8	13	16	20	29	33

0.0	+3.0	+5.1	+5.5	-0.4	-0.5	115	-0.4	-0.5	+5.1	+5.4	+1.4	-1.5
40	37	32	26	18	11		9	16	24	30	31	35

0.0	+4.0	+6.0	+6.0	-0.3	-0.6	104	-2.6	-0.6	+2.2	-2.1
40	36	33	26	17	10		10	19	24	33

-3.0	+2.0	+7.3	0.0	-0.7	97	-0.4	-0.6	+2.5	+5.1	+5.5	+8.5
35	33	27	17	11		11	18	23	29	33	37

-0.2	+2.5	+2.1	+1.8	+0.4	-0.4	88	-0.4	-0.7	0.0	+6.2	+6.0
37	29	26	18	14	9		11	18	20	28	33

-3.0	+2.7	+2.8	+3.7	-0.3	-0.6	84	-0.5	-0.7	+3.0	+5.3
45	33	26	22	15	19		10	15	21	33

0.0	+0.2	+1.0	+1.7	-0.1	-0.9	-0.6	82	-0.3	+1.4	+1.8	+1.8
33	27	25	20	17	15	9		13	19	27	33

-1.6	-1.3	-0.6	-1.0	-0.5	74	-0.4	-0.8	+0.3	+0.2	+0.2
33	27	17	15	9		10	15	18	27	33

-3.3	-1.8	-1.7	-0.6	-0.3	77	-0.5	-0.8	-1.0	-0.5	-0.5
33	13	18	14	10		9	14	17	26	33

station

Elev.

61+00 ✓

884.9 .

60+40

+0.6

884.8 .

60+00 ✓

884.2 .

59+50 ✓

883.9 .

59+00 ✓

883.9 .

58+50 ✓

884.1 .

58+00 ✓

884.3 .

57+57 ✓

0.0

884.3 .

57+34 ✓

-0.1

884.3 .

57+00 ✓

884.4 .

56+50 ✓

884.7 . ✓

56+00 ✓

885.6 . ✓

55+80 ✓

+0.6

886.2 . ✓

47.						46				
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
$\frac{+1.2}{33}$	$\frac{+1.2}{21}$	$\frac{-0.2}{18}$	$\frac{-1.3}{15}$	$\frac{-0.4}{11}$	57	$\frac{-0.7}{9}$	$\frac{-1.0}{13}$	$\frac{-4.1}{18}$	$\frac{-4.5}{25}$	$\frac{-4.5}{33}$
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
$\frac{-4.2}{36}$	$\frac{+1.1}{31}$	$\frac{+1.1}{17}$	$\frac{-0.8}{15}$	44	$\frac{-0.2}{10}$	$\frac{-0.6}{17}$	$\frac{-4.6}{25}$	$\frac{-4.6}{33}$		
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
$\frac{-2.3}{33}$	$\frac{+1.2}{26}$	$\frac{+1.2}{14}$	$\frac{-0.8}{11}$	50	$\frac{-0.2}{13}$	$\frac{-0.2}{19}$	$\frac{-4.5}{32}$			
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
$\frac{-2.0}{33}$	$\frac{+1.1}{28}$	$\frac{+1.1}{15}$	$\frac{-0.5}{13}$	$\frac{-0.4}{9}$	50	$\frac{0.0}{12}$	$\frac{-0.6}{19}$	$\frac{-4.6}{26}$	$\frac{-5.0}{33}$	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
$\frac{+0.6}{33}$	$\frac{+1.2}{31}$	$\frac{+0.4}{18}$	$\frac{-1.1}{16}$	$\frac{-1.0}{14}$	$\frac{-0.3}{10}$	54	$\frac{-0.6}{14}$	$\frac{-4.6}{20}$	$\frac{-6.4}{28}$	$\frac{-6.4}{33}$
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
$\frac{+0.9}{33}$	$\frac{+1.0}{28}$	$\frac{-2.3}{19}$	$\frac{-1.8}{17}$	$\frac{-0.5}{15}$	50	$\frac{-0.7}{7}$	$\frac{-1.8}{12}$	$\frac{-5.4}{18}$	$\frac{-6.0}{33}$	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
$\frac{+1.3}{40}$	$\frac{+1.3}{33}$	$\frac{-1.0}{25}$	$\frac{-1.8}{22}$	$\frac{-0.6}{18}$	$\frac{-0.1}{13}$	44	$\frac{-0.7}{7}$	$\frac{-2.0}{12}$	$\frac{-2.9}{13}$	$\frac{-5.0}{19}$
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
$\frac{+1.3}{33}$	$\frac{+1.3}{27}$	$\frac{-2.7}{21}$	$\frac{-2.5}{18}$	$\frac{-0.9}{14}$	$\frac{-0.3}{10}$	52	$\frac{-0.5}{12}$	$\frac{-3.9}{17}$	$\frac{-4.9}{33}$	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
$\frac{+1.4}{33}$	$\frac{+1.3}{23}$	$\frac{-1.8}{18}$	$\frac{-2.1}{16}$	$\frac{-1.0}{13}$	$\frac{-0.3}{8}$	53	$\frac{-0.6}{12}$	$\frac{-4.4}{18}$	$\frac{-5.3}{33}$	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
$\frac{-0.6}{33}$	$\frac{+0.9}{29}$	$\frac{+0.5}{15}$	$\frac{-0.3}{13}$	$\frac{-0.4}{8}$	52	$\frac{-0.8}{12}$	$\frac{-4.8}{19}$	$\frac{-5.0}{33}$		
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
$\frac{-4.0}{33}$	$\frac{-1.5}{30}$	$\frac{+0.4}{27}$	$\frac{+0.9}{16}$	$\frac{-0.4}{13}$	48	$\frac{-0.8}{9}$	$\frac{-0.8}{15}$	$\frac{-5.1}{22}$	$\frac{-6.2}{33}$	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
$\frac{-3.3}{33}$	$\frac{-3.3}{37}$	$\frac{+0.4}{26}$	$\frac{+0.4}{14}$	$\frac{-0.4}{13}$	$\frac{-0.5}{10}$	40	$\frac{-0.5}{14}$	$\frac{-4.6}{20}$	$\frac{-6.1}{33}$	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
$\frac{-4.5}{33}$	$\frac{-4.5}{28}$	$\frac{-1.2}{27}$	$\frac{0.0}{22}$	$\frac{+0.2}{16}$	$\frac{-0.3}{14}$	54	$\frac{-0.4}{9}$	$\frac{-0.5}{14}$	$\frac{-5.1}{21}$	$\frac{-6.2}{33}$

Nov 28, 1924

Station		Elev.
67+50	✓	903.3 .
67+00	✓	901.3 .
66+50	✓	899.7 .
66+00	✓	898.1 .
65+50	✓	896.3 .
65+00	✓	894.2 .
64+50	✓	892.3 .
64+00	✓	890.7 .
63+50	✓	888.2 889.2 ⁴⁷ ₅
63+00	✓	887.7 .
62+50	✓	886.3 .
62+00	✓	885.3 .
61+50	✓	884.8 .

✓ ✓ 27. ✓ ✓ ✓ ✓ 47
 $\frac{-6.1}{33}$ $\frac{-0.6}{19}$ $\frac{-0.8}{17}$ $\frac{-0.6}{9}$ 128 $\frac{-0.4}{10}$ $\frac{-0.4}{14}$ $\frac{+7.4}{26}$ $\frac{+9.3}{33}$ $\frac{+10.0}{40}$

✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-6.4}{33}$ $\frac{-1.7}{24}$ $\frac{-1.1}{17}$ $\frac{-0.4}{13}$ 146 $\frac{-0.5}{10}$ $\frac{+0.6}{16}$ $\frac{+1.5}{23}$ $\frac{+2.5}{33}$ $\frac{+2.8}{40}$

✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-5.5}{33}$ $\frac{-1.4}{27}$ $\frac{-1.1}{21}$ $\frac{-1.8}{18}$ $\frac{-1.6}{15}$ $\frac{-0.6}{10}$ 59 $\frac{-0.4}{11}$ $\frac{-0.1}{16}$ $\frac{+0.7}{19}$ $\frac{+4.8}{24}$ $\frac{+8.1}{37}$

✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-9.7}{33}$ $\frac{-0.7}{22}$ $\frac{-0.3}{16}$ $\frac{-0.7}{13}$ 75 $\frac{-0.2}{12}$ $\frac{-0.2}{19}$ $\frac{+6.9}{28}$ $\frac{+10.0}{40}$

✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-9.0}{33}$ $\frac{-6.3}{31}$ $\frac{-5.8}{29}$ $\frac{-2.1}{20}$ $\frac{-0.7}{7}$ 92 $\frac{-0.3}{10}$ $\frac{-0.2}{16}$ $\frac{-0.5}{19}$ $\frac{+5.6}{28}$ $\frac{+2.0}{33}$ $\frac{+8.1}{40}$

✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-2.5}{33}$ $\frac{-5.0}{30}$ $\frac{-2.8}{25}$ $\frac{-1.0}{19}$ $\frac{-0.8}{8}$ 46 $\frac{-0.6}{9}$ $\frac{-0.6}{15}$ $\frac{-1.0}{17}$ $\frac{-0.4}{21}$ $\frac{+2.2}{26}$ $\frac{+4.7}{33}$

✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-7.1}{33}$ $\frac{-5.8}{32}$ $\frac{-3.5}{26}$ $\frac{-1.3}{20}$ $\frac{-0.8}{15}$ $\frac{-0.4}{10}$ 65 $\frac{-0.6}{9}$ $\frac{-0.4}{14}$ $\frac{-0.8}{18}$ $\frac{+2.2}{23}$ $\frac{+4.2}{33}$

✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-6.2}{33}$ $\frac{-4.4}{32}$ $\frac{-1.5}{25}$ $\frac{-1.3}{17}$ $\frac{-0.4}{13}$ $\frac{-0.3}{11}$ 82 $\frac{-0.1}{9}$ $\frac{-0.4}{12}$ $\frac{-0.4}{16}$ $\frac{+1.9}{27}$ $\frac{+3.1}{33}$

✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-1.8}{33}$ $\frac{-1.8}{21}$ $\frac{-1.4}{17}$ $\frac{-0.7}{12}$ $\frac{-0.5}{8}$ 96 $\frac{-0.4}{10}$ $\frac{0.0}{14}$ $\frac{0.0}{21}$ $\frac{+1.2}{25}$ $\frac{+1.4}{31}$ $\frac{+2.3}{33}$

✓ ✓ ✓ ✓ ✓ ✓
 $\frac{-1.0}{33}$ $\frac{-1.3}{27}$ $\frac{-2.0}{25}$ $\frac{-1.8}{14}$ $\frac{-1.0}{12}$ $\frac{-0.7}{7}$ 2.0 $\frac{0.0}{10}$ $\frac{-0.3}{15}$ $\frac{-0.2}{18}$ $\frac{-0.2}{20}$ $\frac{+0.9}{23}$ $\frac{+1.0}{30}$ $\frac{+1.5}{33}$

✓ ✓ ✓ ✓ ✓ ✓
 $\frac{+0.6}{33}$ $\frac{+0.6}{31}$ $\frac{-2.2}{23}$ $\frac{-2.3}{14}$ $\frac{-1.8}{12}$ $\frac{-1.0}{7}$ 45 $\frac{+0.5}{13}$ $\frac{+2.1}{18}$ $\frac{-0.5}{20}$ $\frac{+0.4}{23}$ $\frac{+1.2}{33}$

✓ ✓ ✓ ✓ ✓ ✓
 $\frac{+1.1}{33}$ $\frac{-2.0}{26}$ $\frac{-2.0}{24}$ $\frac{-3.2}{16}$ $\frac{-2.5}{13}$ $\frac{-1.0}{6}$ 54 $\frac{+0.2}{11}$ $\frac{+0.2}{17}$ $\frac{-0.4}{20}$ $\frac{-0.1}{25}$ $\frac{+0.3}{33}$

✓ ✓ ✓ ✓ ✓ ✓
 $\frac{+1.3}{33}$ $\frac{+1.3}{27}$ $\frac{-0.3}{23}$ $\frac{-1.5}{17}$ $\frac{-0.8}{12}$ 57 $\frac{-0.5}{11}$ $\frac{-1.0}{15}$ $\frac{-4.1}{22}$ $\frac{-4.2}{33}$

station		Elev.
73+48	✓ - 2.0	909.3 .
73+00	✓	911.3 .
72+50	✓	912.3 .
72+00	✓	912.6 .
71+50	✓	912.6 .
71+00	✓	912.9 .
70+60	✓ +0.5	913.4 .
70+22	✓ +0.5	913.2 .
70+00	✓	912.7 .
69+26	✓ +0.3	910.4 .
69+00	✓	909.1 .
68+50	✓	907.2 .
68+00	✓	905.2 .

Lt					Rt				
$\frac{-1.1}{33}$	$\frac{+0.8}{22}$	$\frac{-1.1}{17}$	$\frac{-0.7}{14}$	94	$\frac{-0.5}{8}$	$\frac{-0.4}{14}$	$\frac{+4.1}{20}$	$\frac{+3.5}{33}$	
$\frac{-2.0}{33}$	$\frac{-1.1}{28}$	$\frac{-0.8}{19}$	$\frac{-1.6}{16}$	74	$\frac{-0.4}{8}$	$\frac{-0.6}{14}$	$\frac{+2.3}{19}$	$\frac{+1.9}{33}$	
$\frac{-3.8}{33}$	$\frac{-1.2}{24}$	$\frac{-0.6}{14}$	64	$\frac{-0.6}{10}$	$\frac{-0.7}{14}$	$\frac{+1.7}{19}$	$\frac{+2.0}{33}$		
$\frac{-6.4}{33}$	$\frac{-3.7}{20}$	$\frac{-0.6}{13}$	61	$\frac{-0.5}{10}$	$\frac{-0.6}{15}$	$\frac{+0.7}{18}$	$\frac{+1.5}{33}$		
$\frac{-7.0}{33}$	$\frac{-3.9}{18}$	$\frac{-1.0}{12}$	60	$\frac{-0.7}{11}$	$\frac{-0.6}{15}$	$\frac{+0.5}{18}$	$\frac{+1.6}{33}$		
$\frac{-5.7}{33}$	$\frac{-2.3}{18}$	$\frac{-1.1}{13}$	69	$\frac{-0.8}{12}$	$\frac{-0.7}{15}$	$\frac{+0.5}{17}$	$\frac{+1.6}{33}$		
$\frac{-5.2}{33}$	$\frac{-2.4}{20}$	$\frac{-1.1}{13}$	64	$\frac{-0.7}{14}$	$\frac{-0.6}{19}$	$\frac{+0.8}{23}$	$\frac{+1.3}{33}$		
$\frac{-4.7}{33}$	$\frac{-3.5}{28}$	$\frac{-1.2}{15}$	65	$\frac{-0.2}{10}$	$\frac{+0.2}{12}$	$\frac{+0.4}{33}$			
$\frac{-2.6}{33}$	$\frac{-0.2}{17}$	$\frac{-0.2}{16}$	$\frac{-0.7}{11}$	70	$\frac{-0.5}{10}$	$\frac{-0.3}{15}$	$\frac{+1.7}{20}$	$\frac{+2.0}{33}$	
$\frac{+1.0}{33}$	$\frac{+2.2}{22}$	$\frac{-1.4}{17}$	$\frac{-0.7}{14}$	$\frac{-0.2}{9}$	93	$\frac{-0.4}{9}$	$\frac{-0.5}{14}$	$\frac{+2.1}{19}$	$\frac{+1.2}{26}$
$\frac{+0.2}{33}$	$\frac{+2.0}{21}$	$\frac{-1.0}{16}$	$\frac{-0.8}{13}$	126	$\frac{-0.5}{10}$	$\frac{-0.2}{15}$	$\frac{+5.1}{25}$	$\frac{+5.3}{33}$	
$\frac{-2.2}{33}$	$\frac{+1.6}{19}$	$\frac{-0.8}{15}$	88	$\frac{-0.6}{10}$	$\frac{-0.2}{16}$	$\frac{+6.4}{27}$	$\frac{+6.8}{33}$	$\frac{+7.3}{40}$	
$\frac{-5.2}{33}$	$\frac{-1.2}{17}$	$\frac{-0.7}{11}$	108	$\frac{-0.4}{10}$	$\frac{-0.1}{16}$	$\frac{+1.3}{28}$	$\frac{+8.0}{33}$	$\frac{+8.1}{40}$	

station

Elev

78+55 +0.1 892.0 .

78+00 891.9 .

77+50 891.9 .

77+00 893.0 .

76+44 +1.8 894.8 .

76+00 ✓ 896.8 .

75+50 ✓ 899.1 .

75+00 ✓ 901.8 .

74+65 +2.0 903.8 .

74+35 ✓ -0.7 905.2 .

74+20 ✓ -0.8 905.9 .

74+00 ✓ 906.7 .

Lt.

X

Rt.

49

$$\begin{array}{ccccccccc} -\frac{5.0}{33} & -\frac{1.6}{21} & -\frac{1.0}{14} & 47 & -\frac{0.6}{13} & -\frac{4.4}{24} & -\frac{4.8}{31} & -\frac{2.2}{34} \end{array}$$

$$\begin{array}{ccccccccc} -\frac{5.2}{33} & -\frac{3.2}{26} & -\frac{2.6}{16} & -\frac{0.9}{13} & 48 & -\frac{0.7}{12} & -\frac{2.6}{16} & -\frac{4.5}{21} & -\frac{5.7}{23} & -\frac{5.6}{32} & -\frac{3.5}{35} \end{array}$$

$$\begin{array}{ccccccccc} -\frac{5.8}{33} & -\frac{2.7}{16} & -\frac{0.5}{12} & 48 & -\frac{0.8}{11} & -\frac{6.4}{21} & -\frac{6.8}{33} \end{array}$$

$$\begin{array}{ccccccccc} -\frac{9.5}{33} & -\frac{6.2}{32} & -\frac{4.4}{28} & -\frac{2.8}{16} & -\frac{0.7}{12} & 38 & -\frac{0.8}{12} & -\frac{4.1}{17} & -\frac{4.6}{20} & -\frac{7.2}{23} & -\frac{7.8}{24} & -\frac{5.3}{33} \end{array}$$

$$\begin{array}{ccccccccc} -\frac{8.3}{33} & -\frac{3.6}{17} & -\frac{0.2}{12} & 70 & -\frac{0.8}{12} & -\frac{4.0}{17} & -\frac{4.7}{21} & -\frac{7.6}{25} & -\frac{7.9}{30} & -\frac{5.6}{34} \end{array}$$

$$\begin{array}{ccccccccc} -\frac{9.5}{33} & -\frac{3.7}{19} & -\frac{1.0}{12} & -\frac{0.2}{8} & 50 & -\frac{1.0}{15} & -\frac{5.7}{23} & -\frac{7.4}{25} & -\frac{7.4}{33} & -\frac{5.7}{36} & -\frac{5.7}{40} \end{array}$$

$$\begin{array}{ccccccccc} -\frac{7.1}{33} & -\frac{3.0}{27} & -\frac{0.7}{19} & -\frac{1.2}{18} & -\frac{0.8}{14} & -\frac{0.3}{10} & 78 & -\frac{0.9}{14} & -\frac{6.9}{24} & -\frac{5.3}{33} \end{array}$$

$$\begin{array}{ccccccccc} -\frac{3.6}{33} & -\frac{1.8}{22} & -\frac{0.2}{19} & -\frac{0.4}{10} & 48 & -\frac{0.8}{12} & -\frac{2.1}{24} & -\frac{9.0}{33} \end{array}$$

$$\begin{array}{ccccccccc} -\frac{5.1}{33} & -\frac{2.0}{22} & -\frac{0.7}{18} & -\frac{0.2}{14} & 48 & -\frac{0.8}{10} & -\frac{2.0}{14} & -\frac{8.7}{24} & -\frac{10.3}{33} \end{array}$$

$$\begin{array}{ccccccccc} -\frac{2.8}{33} & -\frac{2.1}{22} & -\frac{2.4}{21} & -\frac{0.4}{16} & -\frac{0.4}{11} & 33 & -\frac{0.9}{12} & -\frac{7.7}{23} & -\frac{10.1}{33} \end{array}$$

$$\begin{array}{ccccccccc} -\frac{3.1}{33} & -\frac{1.7}{24} & -\frac{2.3}{21} & -\frac{0.4}{16} & 0.0 & 26 & -\frac{0.8}{9} & -\frac{0.4}{14} & -\frac{2.0}{20} & -\frac{6.4}{33} \end{array}$$

$$\begin{array}{ccccccccc} -\frac{2.7}{33} & -\frac{2.0}{22} & -\frac{0.7}{16} & 120 & -\frac{0.7}{9} & -\frac{0.3}{14} & -\frac{2.9}{21} & -\frac{2.1}{33} \end{array}$$

station

Elev.

79+45.35 at top of L'line 893.7

79+35. +0.8 893.5

79+00 892.7

Lt.

E

RT.

.50

W.H.C.

Wilshusen Nov. 28, 1924

PERIODS

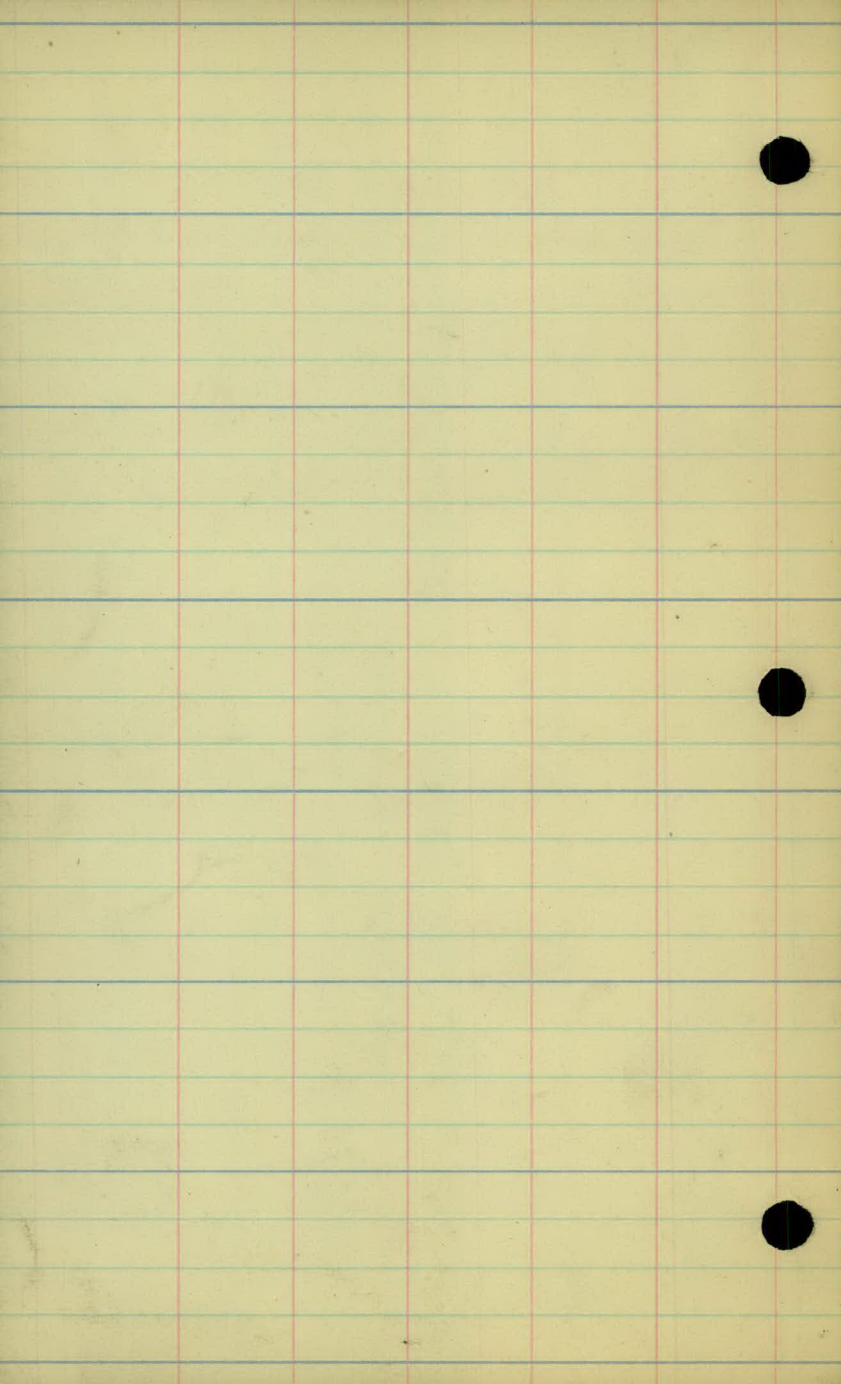
Skoglund

For Additional X-See. See V-L Line Films

-17.0	-12.0	-5.1	-2.3	-0.5	3.0	-0.6	-3.8	-3.2	-0.7
33	31	25	20	15		14	21	31	34

-10.2	-9.7	-6.4	-4.1	-0.7	3.2	-0.4	-4.0	-4.5	-1.2
33	25	25	18	13		13	21	20	35

-10.2	-6.4	-1.0	4.0	-0.8	-3.4	-5.0	-2.2
33	27	13		14	19	29	35



Drainage

Yadnais Lake Blvd.

Road #6

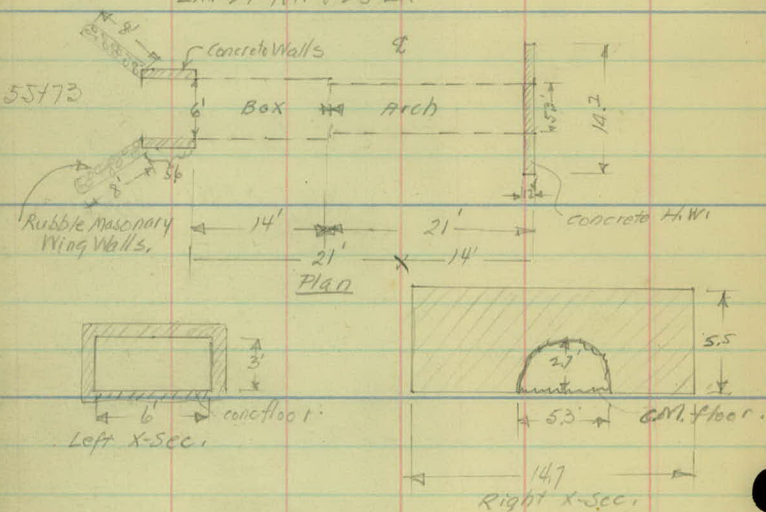
Rice St. to Centerville Road.

Station Present Culv. Recor'd Culv.

77+55

12" x 52' C.M.

Ext. 29' Rt. & 23' Lt.



77+80

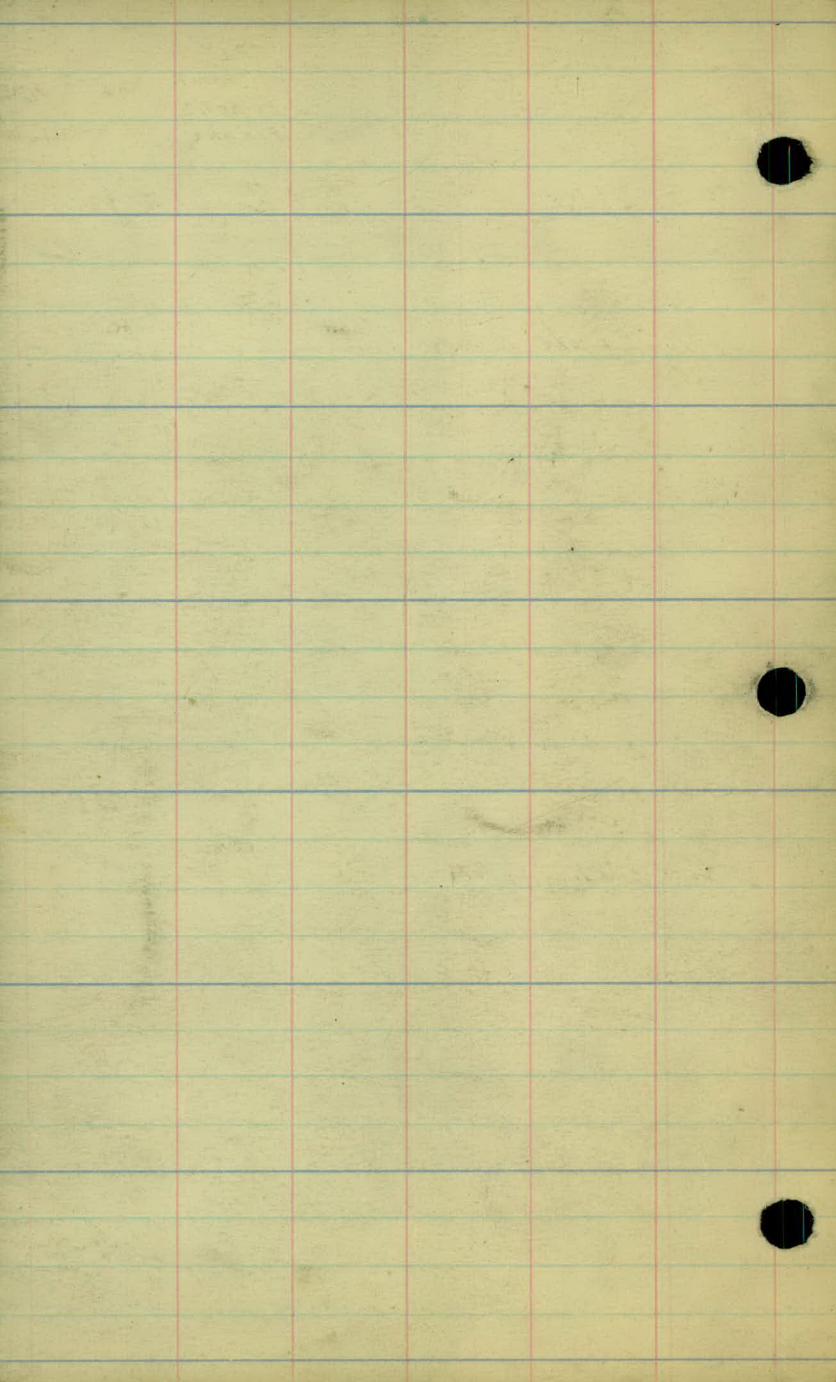


W.H.C.
Wilshusen Nov 25, 1924
Persons
Franke

Drains Rt.
Inv. Elev. 882.9 82.9 81.8 intake
 23' 73 El. 82.5

Drains Rt.
Inv. Elev. 880.7 880.7 787 intake
 14 64 882.6

Drains Rt.
Inv. Elev. 878.9 78.9 78.0
 14 65



Plans in hand - Vadnais Blvd

2/10/25
R.J.W.

Begin G.R. R. & L. 3+40

End G.R. R & L. 7+50

Old G.R. worklows

17+ 24" C.M. 1170. Cond OK. Lengthen
Remove old Conc. Face walls

Begin G.R. 15+50 R.

End. " 20+10 R.

20+45 F. Road R. No culv. requd.

22+50 Road L. No Culv. reqd

30+41 Ent. L. No Culv. reqd.

34+50 R. Lake Vadnais sign

36+02 L. Lake Vad. sign

40+10 Ent. R. P. 12" x 20' C.M.

Begin G.R. 47+50 L

End. " 50+50 L

Daylight cut on L. 52-55

54+50 Ent. R. 12" x 16' C.M. 1170 Cond.?

55+40 W. Board & Fish Comm. Sign's

Near 56+00 48" C.M. Semi-circ.

culv. with Conc. Face wall on

N. end x wings on S. End. - 15

in good cond. - Used as outlet for Lake -
S. end blocked with planks.

Begin G.R. R. 55+40

End " R. 61+75

62+10 Pl. 18" x 30' C.M. Pipe. Left
underneath bank bordering lakeshore
to drain put hole in ditch at
center of curve

74+~~50~~ Begin G.R. R.

75+50 " " L

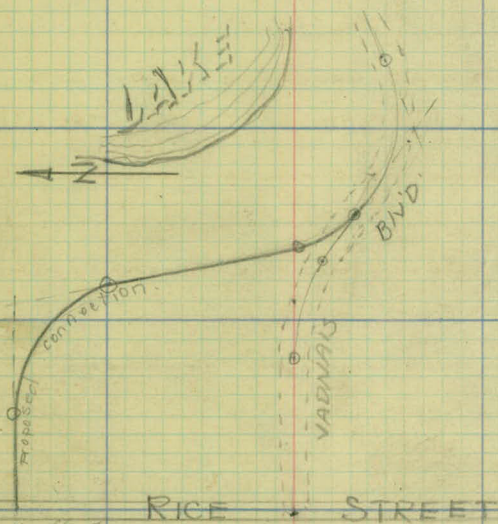
77+55 12" C.M. pipe - drains into Lake
from No. Cond. O.K. Should be 3.4"

79+45 End G.R. R. & L

Ent. on wk. Prof. 2-13-25
H.D.K.

ROAD No. 6
CONNECTION
@ RICE ST.

"B" LINE EXT'D TO VADNAIS BLVD SURVEY



Station Point Lt. Δ Rt. Bear.

5.55°00'E = 5.55°14'E

740.72 P.O.
 120+52.15 ✓ RT. 7°00' 14° C. Lt.
 120+00 32°21' Δ 14°00'
 T. 30.37 ✓ RT. 120+52.15
 L. 100.00 ✓
 R. 410.28 ✓

119+52.15 ✓ P.C. 0°00'

117+06.34 ✓ RT. 24°35'
 117 24°12.2'
 +50 21°12.2'

5.41°00'E

116 18°12.2' 12° C. Rt.
 +50 15°12.2' Δ 49°10'

115 12°12.2' RT. 115+15.15
 +50 9°12.2' T. 218.85 ✓

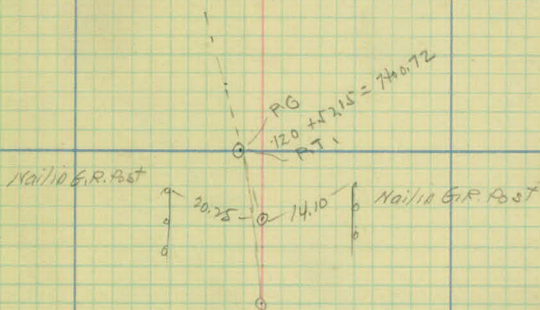
114 6°12.2' L. 409.72 ✓
 +50 32°12.2' R. 478.34 ✓

113 0°12.2'
 113+96.62 ✓ P.C. 0°00'

1.89°30'E

W.H.C.
Reisner
Salvin
Mahoney

Feb 14, 1915
Thurs Windy

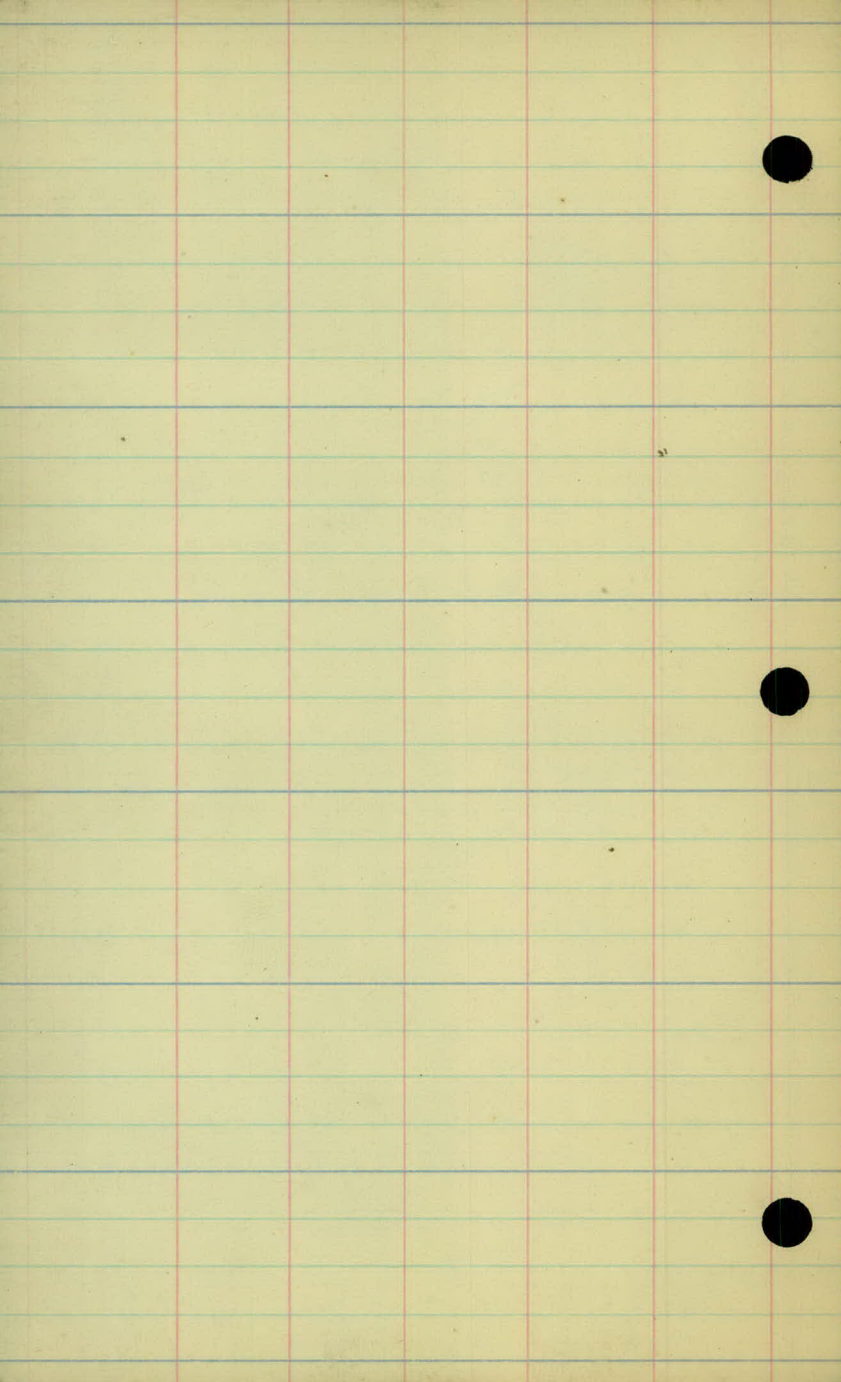


Nail in 16" Oak

25.20 - 4.45 - B

Nail in 18" Oak

contd from "B" Line



ART TOPOG

117

116

115

114

113

126

E. Edge Pavement.

112

W.H.C.
Persons
Galvin
Mahoney

Feb. 16, 1945

Open Field

+70-36" oak 21'

+32-24" oak 24'

+11-16" oak 30'

+98-12" oak 31'

+67-24" oak 7'

+65-8" oak 27'

+45-6" oak 1'

+37-24" oak 21'

+10-20" oak 10'

+07-20" oak 4'

+81-20" oak 11'

+85-16" 3tp. 25'

+67-24" oak 2'

+81-20" oak 11'

+65-8" oak 7'

+61-24" oak 32'

+35-21" red. sp. 23'

|||||
|||||

+52.15E 7400.72 = R.T. & P.O.

120

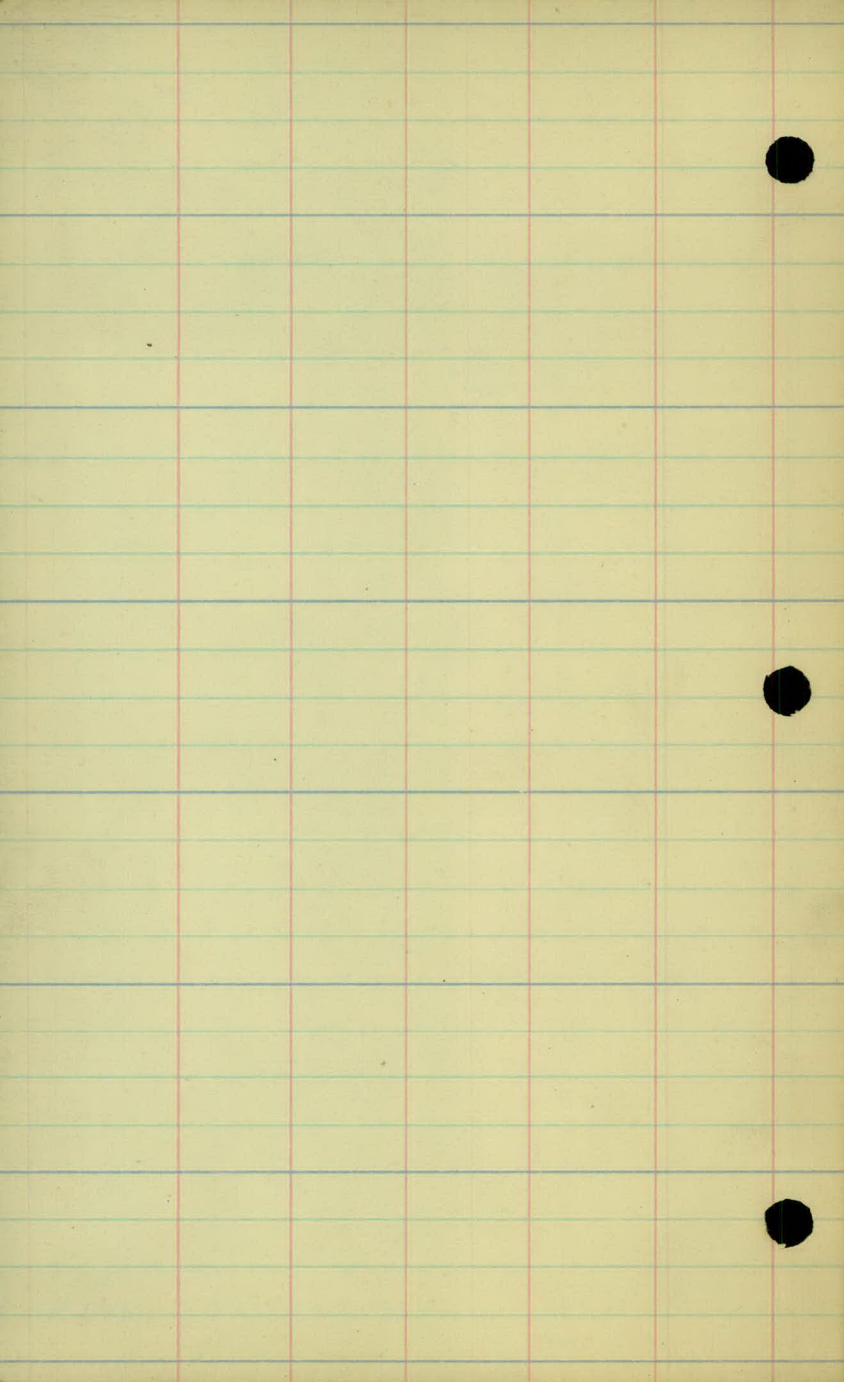
119

118

See Vadner's Blot
survey

+20-(3)-4th Willows 10'

open field.



LEVELS

ROAD No. 6

connection @ Rice St.

station	+	H.I	-	Rod	Elev.
B.M.	2.19	930.11			927.92
112+26				2.24	27.87
+31				2.5	27.6
+38				3.7	26.4
113+00				5.7	24.4
+50				6.7	23.4
114+00				8.3	21.8
+50				10.7	19.4
T.P.	116	921.69	9.58		920.53
115				6.0	15.7
+50				11.3	10.4
T.P.	0.03	911.44	10.28		911.41
116+00				7.7	03.7
T.P.	0.84	900.77	11.51		899.93
+50				3.2	97.6
117				3.3	92.5
+50				11.7	89.1
T.P.	5.53	894.33	11.97		888.80
118				9.0	85.3
+50				11.1	83.2
119				11.5	82.8
+75				10.8	83.5
+60				5.4	88.9
120				6.6	87.7
Eq	+52.15	800.72		7.8	86.5

cont'd next page

112+26

W.H.C.
Hersons Feb. 16, 1925
Cabin
Mahorney

R.R. spike in cottonwood 150' Rt. 112+50

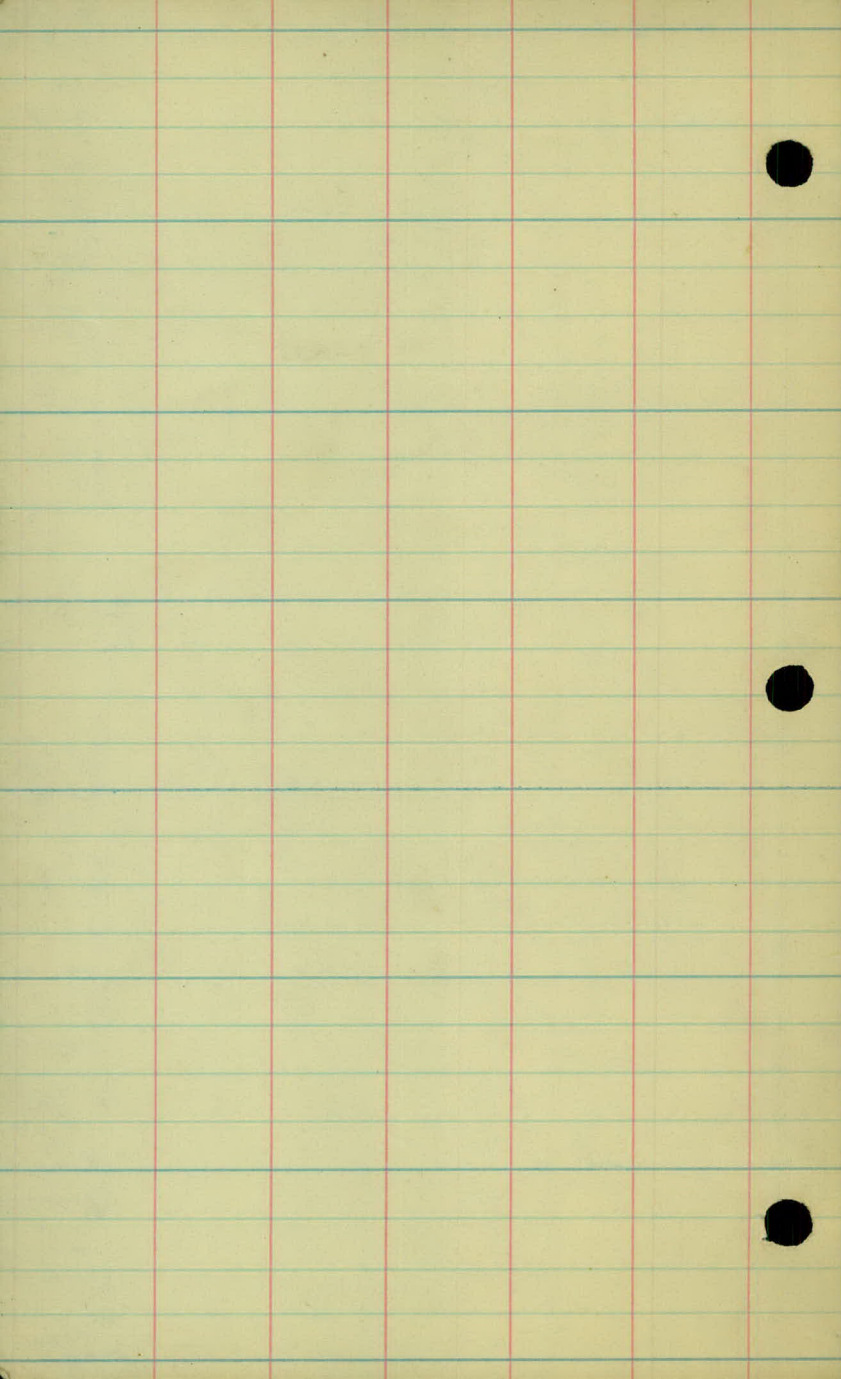
East Edge Rice St. Pavement

Station	+	H.I	-	Rod	Elev.
		894.33			
T.P.	11.22	905.09	0.46		893.87
T.P.	10.67	915.66	0.10		904.99
T.P.	8.99	924.63	0.02		915.64
B.M.			0.44		924.19 = 24.21

Nail in 12" oak at Sta. 1+35

Radnais Blvd Datum = 924.52
24.21

.31



CROSS SECTIONS

ROAD No. 6

Connection @ Rice St.

station

Elev.

116+50 ✓

897.6

116+00 ✓

908.7

+50 ✓

910.4

115+00 ✓

915.7

+50 ✓

919.4

114+00 ✓

921.8

+50 ✓

923.4

113+00 ✓

924.4

112+38 ✓

926.4

112+31 ✓ -0.3

927.6

112+26 ✓

927.9

112+14 ✓

928.0

H.

L

RT

W.H.C.
Persons
Galvin
MaboneyFeb. 21,
1928

$$\frac{-5.3}{33} \checkmark$$

$$\frac{-7.6}{17} \checkmark$$

54

$$\frac{+34}{26} \checkmark$$

$$\frac{+4.4}{33} \checkmark$$

$$\frac{-4.5}{33} \checkmark$$

$$\frac{-2.7}{20} \checkmark$$

104

$$\frac{+30}{73} \checkmark$$

$$\frac{+40}{33} \checkmark$$

$$\frac{-3.2}{33} \checkmark$$

$$\frac{-1.7}{19} \checkmark$$

39

$$\frac{+2.1}{25} \checkmark$$

$$\frac{+3.1}{33} \checkmark$$

$$\frac{-2.4}{33} \checkmark$$

$$\frac{-1.4}{22} \checkmark$$

66

$$\frac{+1.2}{19} \checkmark$$

$$\frac{+2.1}{33} \checkmark$$

$$\frac{-0.9}{33} \checkmark$$

$$\frac{-0.2}{25} \checkmark$$

24

$$\frac{+0.6}{21} \checkmark$$

$$\frac{+1.2}{33} \checkmark$$

$$\frac{-0.6}{33} \checkmark$$

104

$$\frac{+0.8}{33} \checkmark$$

$$\frac{-0.2}{33} \checkmark$$

71

$$\frac{+0.5}{33} \checkmark$$

$$\frac{0.0}{33} \checkmark$$

14

$$\frac{+0.5}{33} \checkmark$$

$$\frac{-0.4}{33} \checkmark$$

61

$$\frac{-0.2}{33} \checkmark$$

$$\frac{+0.5}{33} \checkmark$$

51

$$\frac{+0.3}{33} \checkmark$$

$$\frac{+0.1}{33} \checkmark$$

010

$$\frac{0.0}{33} \checkmark$$

W. E. Age. Payment.

$$\frac{+0.1}{33} \checkmark$$

00

$$\frac{0.0}{33} \checkmark$$

Station

Elev.

7100.72 Valhalla Blvd Survey
 120+52.15 ✓ 886.5

120+00 ✓ 887.7

+62 ✓ +12 888.9

+33 ✓ +11 883.9

119+00 ✓ 882.8

+65 ✓ -2.1 883.2

118+00 ✓ 885.3

117+50 ✓ +3.8 889.9

117+00 ✓ 892.5

Lt.

Z

Rt.

$$\begin{array}{r} \checkmark \\ -5.8 \\ 33 \end{array}$$

$$\begin{array}{r} \checkmark \\ -4.5 \\ 20 \end{array}$$

$$\begin{array}{r} \checkmark \\ -0.8 \\ 12 \end{array}$$

54

$$\begin{array}{r} \checkmark \\ -0.4 \\ 11 \end{array}$$

$$\begin{array}{r} \checkmark \\ -5.1 \\ 23 \end{array}$$

$$\begin{array}{r} \checkmark \\ -5.3 \\ 26 \end{array}$$

$$\begin{array}{r} \checkmark \\ -3.2 \\ 28 \end{array}$$

$$\begin{array}{r} \checkmark \\ -3.2 \\ 33 \end{array}$$

$$\begin{array}{r} \checkmark \\ -6.9 \\ 33 \end{array}$$

$$\begin{array}{r} \checkmark \\ -6.1 \\ 21 \end{array}$$

$$\begin{array}{r} \checkmark \\ -2.8 \\ 13 \end{array}$$

$$\begin{array}{r} \checkmark \\ 0.0 \\ 8 \end{array}$$

12

$$\begin{array}{r} \checkmark \\ -0.1 \\ 13 \end{array}$$

$$\begin{array}{r} \checkmark \\ -4.0 \\ 22 \end{array}$$

$$\begin{array}{r} \checkmark \\ -5.5 \\ 33 \end{array}$$

$$\begin{array}{r} \checkmark \\ -8.1 \\ 33 \end{array}$$

$$\begin{array}{r} \checkmark \\ -7.4 \\ 20 \end{array}$$

$$\begin{array}{r} \checkmark \\ -5.3 \\ 9 \end{array}$$

30

$$\begin{array}{r} \checkmark \\ +0.4 \\ 15 \end{array}$$

$$\begin{array}{r} \checkmark \\ +0.6 \\ 25 \end{array}$$

$$\begin{array}{r} \checkmark \\ -0.5 \\ 28 \end{array}$$

$$\begin{array}{r} \checkmark \\ -6.6 \\ 38 \end{array}$$

$$\begin{array}{r} \checkmark \\ -2.8 \\ 33 \end{array}$$

$$\begin{array}{r} \checkmark \\ -1.0 \\ 4 \end{array}$$

126

$$\begin{array}{r} \checkmark \\ +3.5 \\ 8 \end{array}$$

$$\begin{array}{r} \checkmark \\ +3.0 \\ 14 \end{array}$$

$$\begin{array}{r} \checkmark \\ +6.9 \\ 28 \end{array}$$

$$\begin{array}{r} \checkmark \\ +2.0 \\ 33 \end{array}$$

$$\begin{array}{r} \checkmark \\ -1.0 \\ 33 \end{array}$$

$$\begin{array}{r} \checkmark \\ -3.5 \\ 20 \end{array}$$

17

$$\begin{array}{r} \checkmark \\ +3.5 \\ 11 \end{array}$$

$$\begin{array}{r} \checkmark \\ +5.5 \\ 24 \end{array}$$

$$\begin{array}{r} \checkmark \\ +10.3 \\ 33 \end{array}$$

$$\begin{array}{r} \checkmark \\ -0.1 \\ 33 \end{array}$$

$$\begin{array}{r} \checkmark \\ -0.9 \\ 21 \end{array}$$

172

$$\begin{array}{r} \checkmark \\ +1.0 \\ 18 \end{array}$$

$$\begin{array}{r} \checkmark \\ +2.0 \\ 29 \end{array}$$

$$\begin{array}{r} \checkmark \\ +2.7 \\ 33 \end{array}$$

$$\begin{array}{r} \checkmark \\ -2.1 \\ 33 \end{array}$$

$$\begin{array}{r} \checkmark \\ -1.2 \\ 15 \end{array}$$

91

$$\begin{array}{r} \checkmark \\ +1.2 \\ 20 \end{array}$$

$$\begin{array}{r} \checkmark \\ +2.3 \\ 33 \end{array}$$

$$\begin{array}{r} \checkmark \\ -3.7 \\ 33 \end{array}$$

$$\begin{array}{r} \checkmark \\ -2.4 \\ 19 \end{array}$$

55

$$\begin{array}{r} \checkmark \\ +1.7 \\ 24 \end{array}$$

$$\begin{array}{r} \checkmark \\ +2.2 \\ 33 \end{array}$$

$$\begin{array}{r} \checkmark \\ -3.7 \\ 33 \end{array}$$

$$\begin{array}{r} \checkmark \\ -2.6 \\ 20 \end{array}$$

06

$$\begin{array}{r} \checkmark \\ +2.6 \\ 17 \end{array}$$

$$\begin{array}{r} \checkmark \\ +3.7 \\ 33 \end{array}$$

$$\begin{array}{r} 113+50 \\ 56 \\ \hline 169+50 \end{array}$$

$$\begin{array}{r} 58+49.7 \\ 1.6 \\ \hline 50+44.7 \end{array}$$

$$\begin{array}{r} 113+50 \\ 38 \\ \hline 151+50 \end{array}$$

$$\begin{array}{r} 35.8 \\ 2.1 \\ \hline \end{array}$$

$$\begin{array}{r} 113 \\ 21 \\ \hline 134 \end{array}$$

$$\begin{array}{r} 129+50 \\ 113+50 \\ 215 \\ \hline 135+0 \end{array}$$