Bk 23 - Dr. 16

242½

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

Drainage Survey

GERVAIS CREEK

Vicinity- Little Canada Rd. & Centerville Rd.

~~From~~ ..... To .....

Road Acc't. No. .....

Date Filed 10-26-39 File .....

Levels

Gervais Creek

Sand & Dirt in pipes.

by L. Nonemacher 4/1 & 4/3-39

15+79	14"
17+26	20"
28+64	10"
28+96	16"
30+85	4"
33+92	6"
37+88	5"
38+41	7"
42+28	7"
40+20	9"
47+85	4"
50+21	2"

Sta.	+	H	−	Elev.	
B.M.	8.35	882.15			873.8
10			9.6	72.6	1.7
9			9.4	72.8	1.5
8			9.8	72.4	2.0
+55			8.0	74.2	
+55			8.9	73.3	
7			9.7	72.5	1.8
6			10.2	72.0	2.3
5			10.2	72.0	2.3
+50			7.4	74.8	2.0
4			9.8	72.4	2.0
3			9.3	72.9	1.3
2			9.6	72.6	1.7
1					

	Lt.	℄	Rt.	
			3/29/38 K. A. L. B. H. L. C. Al. Lyndahl.	
Flow Line Culv. sta. 11+00				
Top of supposed Dam				
Bottom of Ditch at Dam				
Int. of Ditches				
			6.8 / 50	75.4
Top Brush			6.8 / 50	75.4
			6.0	76.2
			6.0 / 50	76.2

Gervais Creek

Levels

Anchor
Clark
Hendrix
Bronson
Carley

Gervais Creek
Levels

3/23/39

Sta	+	I	-	Elev.	Water
		887.69			
Lake			10.6	73.09	
0 +00	Bag of Trees.		10.4	73.3	2.6
1			10.4	73.3	
2			10.8	72.9	
3			10.9	72.8	2.3
4			11.0	72.7	2.4
5			11.3	72.4	2.7
T.P.	4.02	882.60 ✓	(5/11) 4.11	878.58 ✓	
6			10.6	72.0	3.1
+ 30			10.7	71.9	3.3
7			10.6	72.0	3.2
8			10.2	72.4	2.6
9			10.3	72.3	
10			10.4	72.2	

Water 2.8' in ditch

Branch to North

Sta	+	H.I.	−	Elev.	
			E 8.8 W 9.0		
11				73.8	
			8.8 8.8	73.8	
12			9.2	73.4	1.2
13			9.5	73.1	1.6
T.P.	4.93	885.20	2.33	880.27	
14			12.3	72.9	1.8
+98			W 6.10 E 6.14	79.1	
15			12.8	72.4	2.2
+75			~~12.27~~	~~71.93~~ 71.93	
16			—		
17			—		
+30			~~13.20~~	~~72.0~~ 71.50	
18			11.8	73.4	
T.P.	2.87	884.58	3.49	881.71	
19			12.3	72.3	1.3
20			12.6	72.0	1.6
21			13.0	71.6	2.0
22			13.5	71.1	2.4
23			12.2	72.4	1.1

Double 30" C.M. pipe. Inv. Outlet

Top of wall

Inv. of ~~36"~~ 42" Conc. pipe. Pipe 11.4

Outlet ~~36"~~ 42" Conc. pipe. Pipe 11.0
No. Water

Sta.	+	H.I.	−	Elev.	
+50			11.9	72.68	0.2
24		884.58	12.8	71.8	1.4
25			12.7	71.9	1.4
T.P.	2.39	883.67	3.30	881.28	
26			12.1	71.6	1.7
27			12.4	71.3	2.0
28			12.3	71.4	1.9
+60			12.69	70.98	2.3
29			12.63	71.04	
30			12.2	71.5	
+75			12.17	71.50	
T.P.	9.74	884.47	8.94	874.73	
31					
32					
+35			13.23	71.24	
34			13.35	71.12	
35			12.9	71.6	1.1

Inlet from culv. under Rd.
Ty - 36" (Conc.)

Inv. 36" conc. pipe
" " " "

Rip-Rap
Inv. 36" Vit

Flow-line — Man hole Top 9.27

end of pipe (36" Conc.)

Sta.	+	H	−	Elev.	Water
36			2.7	81.8 ~~71.8~~	0.8
T.P.	1.68	884.62	4.53	879.94	
37			13.1	71.5	1.1
	+80		13.70	70.9	1.5
38	+46		13.62	71.00	1.4
39			13.3	71.3	1.2
40			12.4	72.2	
	+15		14.18	70.44	
42	+33		14.35	70.27	
43			13.8	70.8	1.0
T.P.	9.28	883.05	10.86	873.77	
44			12.2	70.9	1.1
	(+30?)				
	+30		11.82	71.23	
T.P.	13.18	895.26	0.97	882.08	
T.P.	2.51	882.73	15.04	880.22	

Inv. 36" Vit

Inv. 36" Vit

Inv. 36" Vit

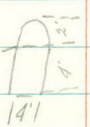
Inv. 36" Vit

Inv. 6'X4' Arch Culv.

Top Head Wall at End Rd.

" " E " "

Con Derville Rd.



Sta.	+	HI	−	Elev.	Water
		882.73			
44	+84		12.15	70.58	
45			12.2	70.5	
46			12.6	70.1	Running 1.0
47			12.7	70.0	
	+75		13.1	69.6	
T.P.		2.56	3.45	879.28	
48	+30				
50	+04				
	+25		12.33	69.51	
51			12.0	69.8	Running 06
52			12.5	69.3	1.0
54			12.4	69.4	

Inv 6'x4' Arch Culv.

Inv. 42" Conc. Culv

Manhole

4.65 To Manhole

End 42" Conc. Culv.

Sta.	+	x	-	Elev.	Water
		881.84			
55			12.4	69.4	
T.P.	3.16	875.97 ✓	9.03	872.81 ✓	
56			6.8	69.2	1.0
57			7.3	68.7	1.5
58			7.9	68.1	2.0
59			7.5	68.5	2.0
60			7.9	68.1	2.0
61			8.1	67.9	2.2
	+90		4.90	71.07	
62			7.6	68.4	1.7 ✓
63			8.0	68.0	2.0
64			7.0	69.0	

Floor W/clr Box

+60

Sta	+	HI	−	Elev	
		875.97			
65			7.6	68.4	1.5
T.P	3.33	875.05	4.25	871.72	
66			4.0	69.1	1.0
67			6.0	69.1	0.5
	450		6.7	68.4	
68			7.1	68.0	
69			8.2	66.9	
70			8.5	66.6	
71			9.0	66.1	
72			9.1	66.0	
T.P.	4.06	873.36	5.75	869.30	
73			8.0	65.4	
74			8.6	64.8	

+35 - 6" Tile Outlet - 25'

+40 - 12" Culv. - 30'

+60 Bridge Xs Ditch

Drainage O.K. from here East

Fill Material from School Yard washed in ditch but has been cleaned out

Stg.	+	π	−	Elev.	
		873.36			
75			8.8	64.6	
76			9.6	63.8	
77			10.0	63.4	
78			10.3	63.1	
T.P.	4.36	869.00	8.72	864.64	
79			6.2	62.8	
80			6.5	62.5	
81			6.5	62.5	10 sec
82			7.2	61.8	
83			7.2	61.8	
84			8.0	61.0	
+15			8.7	60.3	
T.P.	12.33	877.45	3.88	865.12	
T.P.			4.95		872.50

475 Water Leaves Ditch on II

W. End Culv. Under Edgerton St.

See Elev. sta. 37 Edgerton St. & Leeds.

Crampton.

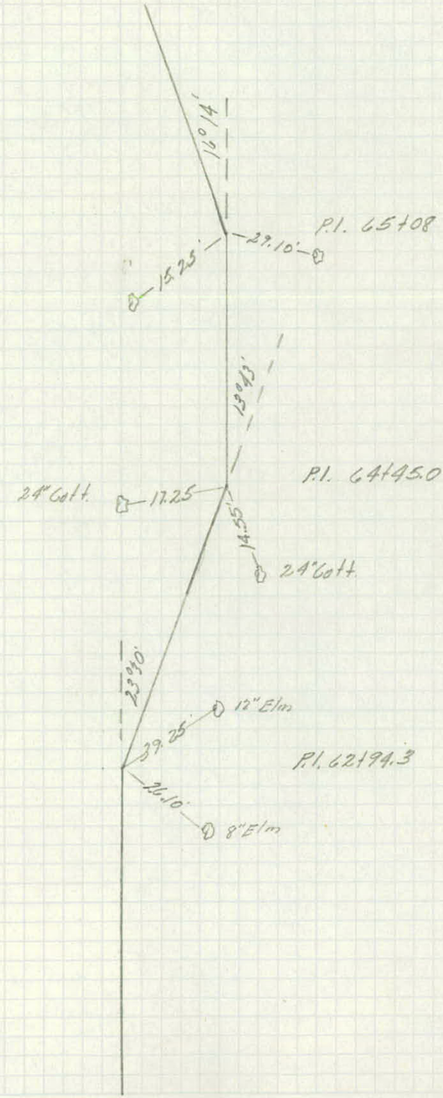
Gervais Creek

SURVEY

41+50 to 67+00

INDEX

Align & Topog.


16°14'
P.I. 65+08
29.10'
15.25'
13°43'
P.I. 64+45.0
24" Cott.
17.25
14.55'
24" Cott.
23°30'
12" Elm
39.25'
P.I. 62+94.3
26.10'
8" Elm

#07-Fe. Con. -12'

67

66 Ditch -3' Fe-8'

#75-Wtch-8'

#72-Rang Tie
#22-Ditch 00
#29-Engd-18"Coll-25
#50-Ditch 3

65 Fe-7' Ditch 00

#82-20"Fe-7'
#83-Range Tie-
#86-18"Elm-1'
#70-Engd-Coll-28'
#54-24"Twn Coll.-18'
#69-18"Coll-11'
#92-30"Coll-13'
#95-6"Elm-4'
#27-24"Coll-17'
#50 Ditch-1'
#99-6"Elm-5'
#22-18"Coll-4'
#91-24"Coll-9'
#29-18"Twn Coll-12'
#18-24"Coll-13'
#05-24"Coll-12'
#87-24"Coll-19'

64 Fe-14
#97-24"Coll-11'

#89-Engd 18"Coll 27'
#78-Range Tie

#53-30"Coll-Fe-21'

#25-Ditch 00

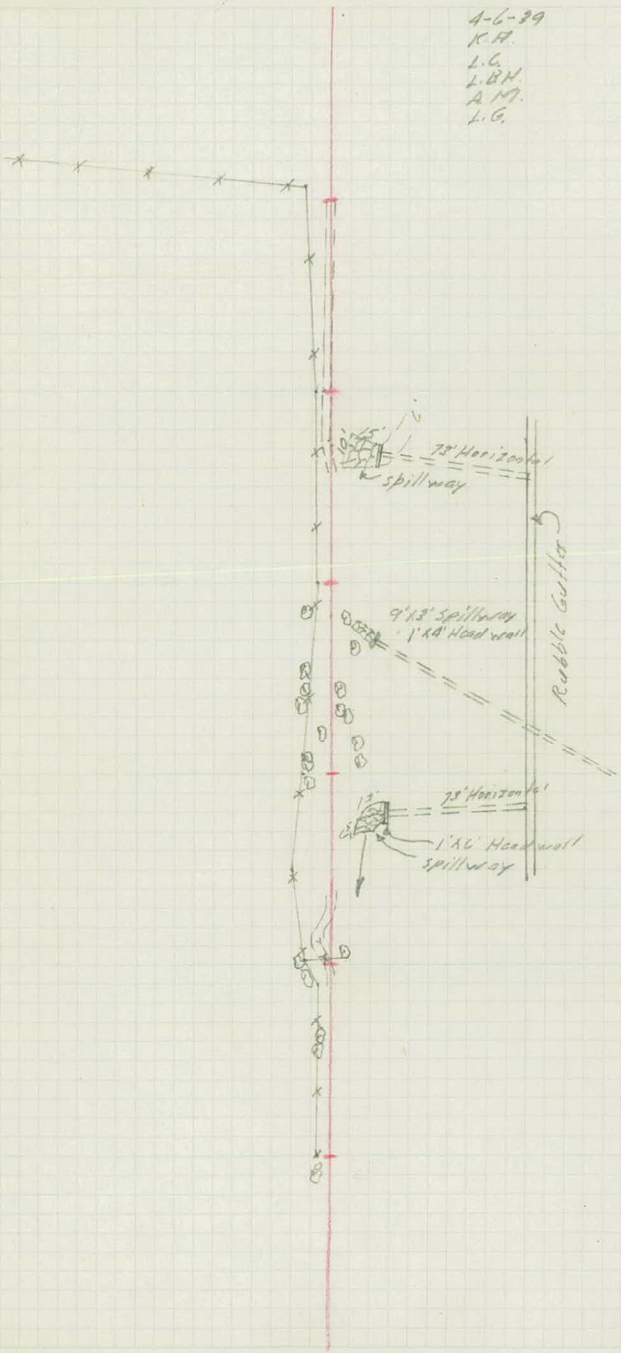
#12-Ditch-7'
#03-Fe. Con-12'
#08-30"Coll-23'Fe-
63 #02-30"Coll-16
#90-Fe-07
#95-30"Coll-14'

#62-18"Willow-5'
#56-6"Elm-5'

62 Fe-6'
#91-18"Coll-5'

#88-32"Coll-5'

4-6-39
K.H.
L.G.
L.B.H.
A.M.
L.G.



Gervais Ditch
X Sections
Back of Little Canada School

Sta.	+	⊼	–	Elev.	
B.M	2.24	187.92			185.66
T.P.	3.33	180.07	11.18	176.74	
61 +50				73.6	
62				73.7	
+29				73.8	
+61				74.3	
63				75.1	
T.P.	7.45	184.56	2.96	177.11	
+50				74.3	
64				74.2	
+50				74.1	
65				74.1	

Lt ℄ Rt

Water Dept Mont #323

Floor Weir Box See Gervais Creek Notes for Elev.

76.5	76.3	76.3	74.3	73.6	73.9	75.3	76.7	76.0	85.0	89.5	91.1		
3.6/50	3.8/11	3.8/4	6.8/3	6.5	6.2/5	4.8/6	3.4/11	4.1/18	+4.9/41	+9.4/53	+11.0/70		
75.0	74.9	76.2	75.5	74.2	73.7	74.2	75.4	77.3	77.6	81.7	92.9	201.8	202.9
5.1/50	5.2/16	3.9/12	4.6/6	5.9/3	6.4	5.9/3	4.7/5	2.8/12	2.5/18	+1.6/30	+12.8/47	+21.7/70	+22.8/100
74.9	74.1	74.2	75.0	74.1	73.8	74.4	75.3	84.9	90.0	93.1	201.4	202.4	203.1
5.2/50	6.0/27	5.9/17	5.1/5	6.0/4	6.3	5.7/3	4.8/6	+4.8/22	+9.9/38	+13.0/44	+21.3/61	+22.3/70	+23.0/100
75.9	74.4	74.4	75.8	75.9	74.4	74.3	74.8	75.9	90.3	96.4	203.1	203.5	
4.2/50	5.7/36	5.7/20	4.3/12	4.2/6	5.7/3	5.8	5.3/4	4.2/6	+10.2/34	+16.3/50	+23.0/65	+23.4/100	
77.7	75.8	76.8	75.6	75.5	74.5	74.3	74.3	75.1	75.9	78.3	93.1	202.1	202.7
2.4/30	4.3/31	3.3/18	4.5/15	4.6/7	5.6/5	5.8/3	5.8/1	5.0	4.2/1	1.8/26	+13.0/57	+22.0/78	+22.6/100
80.6	76.0	76.7	74.0	74.3	74.3	75.2	79.5	79.5	78.3	78.6	89.6	97.6	204.0
4.0/50	8.6/35	7.9/9	10.6/4	10.3	10.3/3	9.4/5	5.1/10	5.1/2	6.3/13	6.0/25	+5.0/50	+13.0/70	+19.4/87
									203.6 +19.0/115	203.5 +18.9/57	204.9 +20.3/94		
83.2	78.9	76.3	77.7	77.6	74.1	74.2	74.4	79.7	80.8	80.8	80.1	80.3	83.4
1.9/50	5.7/40	8.3/18	6.9/14	7.0/7	10.5/3	10.4	10.2/4	4.9/7	3.8/11	3.8/13	4.5/15	4.3/26	1.2/38
93.3	97.6												
+8.7/63	+13.0/76												
L.O.	203.6 +19.0/107	203.0 +18.4/103	203.9 +19.3/101	203.9 +19.3/98	202.6 +18.0/92								
80.5	76.9	76.2	75.7	74.2	74.1	75.7	79.5	79.5	77.8	77.8	79.7	84.6	89.9
4.1/50	7.7/31	8.4/19	8.9/7	10.4/4	10.5	8.9/3	5.1/10	5.1/14	6.8/17	6.8/20	4.9/23	0.0/36	+5.3/46
~~97.6~~	~~+13.0~~												
L.O.	204.2 +19.6/93	203.5 +18.9/89	204.4 +19.8/87	204.6 +20.0/86	203.6 +19.0/78								
79.6	77.4	76.9	75.4	76.8	74.1	74.1	74.0	78.4	80.7	84.6	95.3	97.6	203.6
5.0/50	7.2/33	7.7/14	9.2/10	7.8/7	10.5/3	10.5	10.6/3	6.2/10	3.9/29	0.0/38	+10.7/59	+13.0/65	+19.0/80
L.O.	+18.4/94	+18.1/90	+19.0/88	+19.4/87									
	203.0	202.7	203.6	204.0									

Sta	+	H.I.	-	Elev.
		189.56		
65	+50			74.2
66				74.0
	+74			72.9
T.P.		108.59	2.38	175.18
B.M.			2.95	185.64

6/21/39

Blue Tops

Ditch #16

Lake Improvement

On Water Works R.O.W.

Sta	+	⊼	−	Elev
	5			879.10
6+00				872.00
7+00				871.92
8+00				871.84
9+00				871.76
T.P.	1.71	879.47	6.42	877.76
10+00				871.68
11+00				871.60
12				871.5
T.P.	3.47	884.18	3.64	880.71
13				871.42
14				871.34
15				71.26
16				71.18
	5.25	884.33		879.10

−0.08% Grade

G. Rock

Top of Wall West Side St 14+80

7.47 B.T. C 4.0 / 7.47

7.55 B.T. C 4.0 / 7.55

7.63 B.T. C 4.0 / 7.63

7.71 B.T. C 4.0 / 7.71

12.50 B.T. C 4.0 / 8.50

12.58 B.T. C 4.0 / 8.60 Inv.

12.63 B.T. Invert 8.63 C 4.0

12.68 B.T. C 4.0 / 8.68

12.93 B.T. C 4.0 / 8.93

13.01 B.T. C 4.0 / 9.01

13.09 B.T. C 4.0 / 9.09

13.17 B.T. C 4.0 / 9.17

Sta	+	HI	−	Elev
		884.35		
17				71.10
18				71.02
19				70.94
20				70.86
T.P	4.50	884.51	4.34	880.01
21				70.78
22				70.70
23				70.62
24				70.54
25				70.46
26				70.38
27				70.30

Q. Rod

13.25'

13.33 — B.T / C 4.0 / 9.33

13.41 — B.T / C 4.0 / 9.41

13.49 — B.T / C 4.0 / 9.49

13.73 — B.T / C 4.0 / 9.73

13.81 — B.T / C 4.0 / 9.81

13.89 — B.T / C 4.0 / 9.89

13.97 — B.T / C 4.0 / 9.97

14.05' — B.T / C 4.0 / 14.05'