

# COUNTY DITCH #35

Discussion on obstructions in the  
Ditch

May 28, 2013



J. W. Smith et al.  
160A  
~~346.08~~  
640.

G.H. Wyman & N.H. Clapp  
123.04

BRANCH No. 3

N.W.-N.W.

J.W. Smith et al.

G.H. Wyman & N.H. Clapp

Sith et al.

N. Schmidt  
40

N.E.-N.W.

N.W.-N.E.

N.E.-N.E.

John Nelson

No.

S.E.-N.W.

S.W.-N.E.

S.E.-N.E.

No.

N.W.-S.W.

N.W.-E

N.E.-S.E.

J. & J. Tost.

Adolph Hoffman

J. Tost.

J. Rots.

L. Groskoff

T. 33 N. R. 22 W.

T. 32 N. R. 22 W.

J.W. Smith et al.

A. Lundeen

H.F. Weis.

S. Kipp

J. Johnson

Isaac Bernheimer  
147.

BRANCH No. 3

J.T. Elwell  
160

34 100 5A

34 100 5A

5 23 100

Hans Hanson

T. Elwell  
393.75

J.T. Elwell  
160

J. Shaw  
80

Hans & Sophia Hanson  
80

George H. Elwell  
80

A. Hanson  
80

J.W. Smith et al.  
40

Orin Kipp  
160

John E. Pehrson  
80

J. Shaw  
160

S. & O. Kipp  
40

G.H. Pulver  
40

M. Ensig

Station O  
Main Line

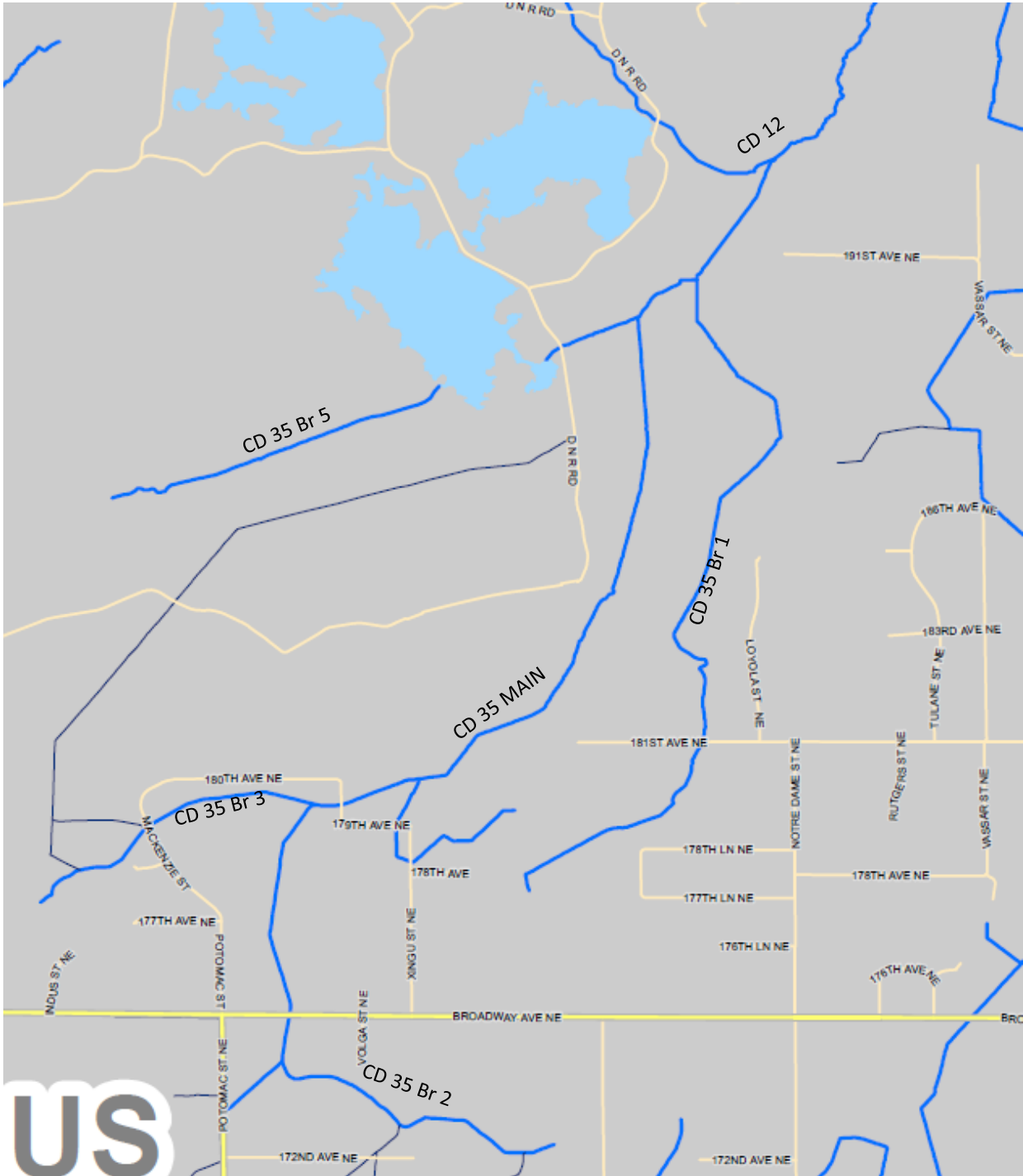
No. 2

Orin Kipp  
80

A. Rysquist  
40

C.D. Green  
40

T. 32 N. R. 22 W.



Culvert Number	Culvert Location (Cross street or Address)	Date Visited	Culvert Material	Culvert Size (inches)	Culvert Length (feet)	Culvert Condition	Culvert Flowing	Amount of Silt (feet) Up / Down	Upstream Invert Elev. (NGVD 29)	Downstream Invert Elev. (NGVD 29)	Benchmark Location crossings only) (on Road	Benchmark Elevation (NGVD 29)	Picture File Names	Notes	Recommendations
1	County Road No. 19 (Potomac Street), Columbus, MN	09/20/2012	CMP	36	50	good	yes	0.2 / 0.2	898.6	898.5	Anoka County BM at the SE corner of C.S.A.H. No. 18 & County Road No. 19 Rod in ground (Blue 26)	905.03	1-Up / 1-Down	Culvert has flared end section on each end.	None
2	7606 West Broadway Ave., Columbus, MN	09/19/2012	CMP	15	16	poor	dry	0.3 / 0	898.8	898.9			2-Up / 2-Down		REPLACE WITH 36" LOWERE 0.5 FEET
3	7606 West Broadway Ave., Columbus, MN	09/19/2012	RCP	37	9				898.0	898.4			3-Up / 3-Down	Culvert sections are separated and are sitting in ditch. (See Pictures)	REMOVE OR REPLACE WITH 36"
4	C.S.A.H. No. 18 (Broadway Avenue), Columbus, MN	09/17/2012	CMP	48	80	good	yes	0.1 / 0.1	895.8	895.6	Lag Bolt in Power Pole #06033 on South side of C.S.A.H. No. 18 - 40 ft. west of Culvert No. 4.	902.32	4-Up / 4-Down	Culvert has flared end section on each end.	None
Bridge-1	17611 Potomac St. NE., Columbus, MN	09/17/2012											Bridge-1	Steel Bridge Coordinates, Approximate Center: 192495 / 548673	None
Bridge-2	17737 Potomac St. NE., Columbus, MN	09/17/2012											Bridge-2	Steel Bridge Coordinates, Approximate Center: 193563 / 548669	None
5	Ussuri Street, Columbus, MN	09/13/2012	CMP	48	42	fair	dry	0.1 / 0.3	897.2	897.2	RR Spike in Power Pole #117466 on East side of Ussuri St. 50 ft. south of Culvert No. 5.	901.21	5-Up-A, 5-Up-B, 5-Up-C / 5- Down-A, 5-Down-B	Culvert is rusted and downstream end of culvert is damaged.	POSSIBLY LOWER 1 to 1.7 FEET
6 Branch No. 1	181st Avenue, Columbus, MN	09/11/2012	CMP	24	44	poor	dry	0.1 / 0.9	901.7	902.0	RR Spike in Guy Pole #118890 on North side of 181st Ave. - 5 ft. east of Culvert No. 6.	903.70	6-Up-A, 6-Up-B / 6-Down- A, 6-Down-B	Bottom of pipe is rusted out. The invert elevation is based on 24" down from top of pipe.	REPLACE
Bridge-3 - Branch No. 1	PIN 35-33-22-31-0005, Columbus, MN	09/11/2012											Bridge-3	Wooden Bridge Coordinates, Approximate Center: 197503 / 554394	None
Bridge-4 - Branch No. 1	18442 Loyola St. NE., Columbus, MN	09/11/2012											Bridge-4	Wooden Bridge Coordinates, Approximate Center: 197870 / 554545	REMOVE OR REPLACE BRIDGE or 30" CULVERT
7 Branch No. 1	PIN 35-33-22-21-0002, Columbus, MN	09/10/2012	RCP	24	19	good	no	0.7 / 0.1	889.2	889.4			7-Up / 7-Down		None
8 Branch No. 1	PIN 35-33-22-21-0002, Columbus, MN	09/10/2012	CMP	30	40	good	dry	none	890.5	890.4			8-Up / 8-Down	Culvert has flared end section on each end.	None
9 Branch No. 1	PIN 35-33-22-21-0002, Columbus, MN	09/10/2012	CMP	15	15	good	dry	none	888.9	888.8			9-Up / 9-Down-A, Down-B		REPLACE WITH 30"
10 Branch No. 1	8538 191st Ave. NE., Columbus, MN	09/11/2012	CMP	24	16	very poor	no	0.2 / 1.0	887.3 ± - GPS	886.4 ± GPS			10-Up-A, 10-Up-B / 10-Down- A, 10-Down-B	Culvert is rotted away. (See Pictures)	REMOVE OR REPLACE WITH 30"
11 Branch No. 2	Furman Street NE, Columbus, MN	09/20/2012	CMP	18	35	good	dry	none	903.3	902.9	RR Spike in Power Pole #122935 at the SW corner of C.S.A.H. No. 18 & Furman St.	909.16	11-Up / 11-Down	Culvert appears to be on easterly extension of Branch No. 2	None
12 - Branch No. 2	17123 Furman St. NE, Columbus, MN	09/20/2012	CMP	24	26	good	no	0.5 / 0.5	900.0	900.2			12-Up / 12-Down		None
13 - Branch No. 2	17123 Furman St. NE, Columbus, MN	09/20/2012	CMP	24	36	good	yes	0.1 / 0.5	899.5	899.5			13-Up / 13-Down		None
14 - Branch No. 2	7622 West Broadway Ave., Columbus, MN	09/20/2012	CMP	36	40	good	dry	none	898.2	898.4			14-Up / 14-Down	Culvert has flared end section on each end.	None
Culvert Number	Culvert Location (Cross street or Address)	Date Visited	Culvert Material	Culvert Size (inches)	Culvert Length (feet)	Culvert Condition	Culvert Flowing	Amount of Silt (feet) Up / Down	Upstream Invert Elev. (NGVD 29)	Downstream Invert Elev. (NGVD 29)	Benchmark Location crossings only) (on Road	Benchmark Elevation (NGVD 29)	Picture File Names	Notes	Recommendations

15 - Branch No. 3	7135 178th Ave. NE. - Up, 7237 178th Ave. NE. - Down, Columbus, MN	09/17/2012	CMP	15	Unable to determine	Unable to determine	no	Buried	Buried - Unable to determine	896.6±			15-Up-LinePT/ Down-A, 15Down-B	REPLACE WITH 30"	
16 - Branch No. 3	<b>Mackenzie Street, Columbus, MN</b>	09/17/2012	RCP	36	38	good	no	0 / 0.4	897.4	896.8	Top NE corner of electric transformer pad - 20 ft. south of driveway to 17864 Mackenzie St.	901.82	16-Up / 16-Down	Culvert has flared end section on each end.	None
17 - Branch No. 3	7340 180th Ave. NE., Columbus, MN	09/13/2012	CMP	18	44	poor	dry	1.5 / 1.5	896.1	896.5			17-Up / 17-Down-A, 17-Down-B	Culvert ends are rotted away.	REPLACE WITH 42"
18 - Branch No. 3	7442 180th Ave. NE., Columbus, MN	09/13/2012	RCP	48	17	good	dry	1.0 / 1.2	897.1	897.1			18-Up / 18-Down		None
19 - Branch No. 4	<b>Xingu Street NE, Columbus, MN</b>	09/12/2012	CMP	24	37	good	dry	0.8 / 1.2	899.7	899.7	RR Spike in Power Pole #62286 at the SW corner of 179th Ave & Xingu St. NE	906.43	19-Up / 19-Down		None
20 - Branch No. 4	<b>179th Avenue NE, Columbus, MN</b>	09/12/2012	CMP	18	41	good	dry	none	899.1	898.6	RR Spike in Power Pole #62286 at the SW corner of 179th Ave & Xingu St. NE	906.43	20-Up / 20-Down	Culvert has flared end section on each end.	None
Bridge 5 - Branch No. 4	7755 179th Ave. NE., Columbus, MN	09/12/2012											Bridge-5	Wooden Bridge Coordinates, Approximate Center: 194572 / 550397	None
Bridge6 - Branch No. 4	7755 179th Ave. NE., Columbus, MN	09/12/2012											Bridge-6	Wooden Bridge Coordinates, Approximate Center: 194647 / 550440	None
21 - Branch No. 5	DNR Road (SE1/4 of SE1/4, Sec. 27, T.33, R.22), Columbus, MN	09/11/2012	CMP	48	46	good	yes	0 / 0.1	888.4± - GPS	888.2± - GPS			21-Up-A, 21-Up-B, Up-C / 21-Down	The upstream ends has a water control structure.	None





CULVERT 5 MAIN DITCH



**City of Columbus**

Replace Culvert 5 with 48 inch consider placing 1.7 feet lower





# CULVERTS 2 & 3 MAIN DITCH





**David and Deborah Thompson**

7606 West Broadway

PIN # 03-32-22-33-0011

Remove or replace culvert 2, replace 0.5 feet lower with 36 inch

Remove or replace culvert 3, replace at current grade with 36 inch







CULVERT 10 BRANCH 1



James L Goergen and L A Walters  
8538 191st Avenue NE  
PIN # 26-33-22-34-0001  
Remove or replace culvert 10 with 30"

10-Up-A Ditch 35



10-Up-B Ditch 35



10-Down-B Ditch 35



10-Down-A Ditch 35







CULVERT 9 BRANCH 1



**John Gross**  
PIN # 35-33-22-21-0002  
Remove or replace culvert 9 with 30"







BRIDGE 4 BRANCH 1



Carl Parker

18442 Loyola St.NE

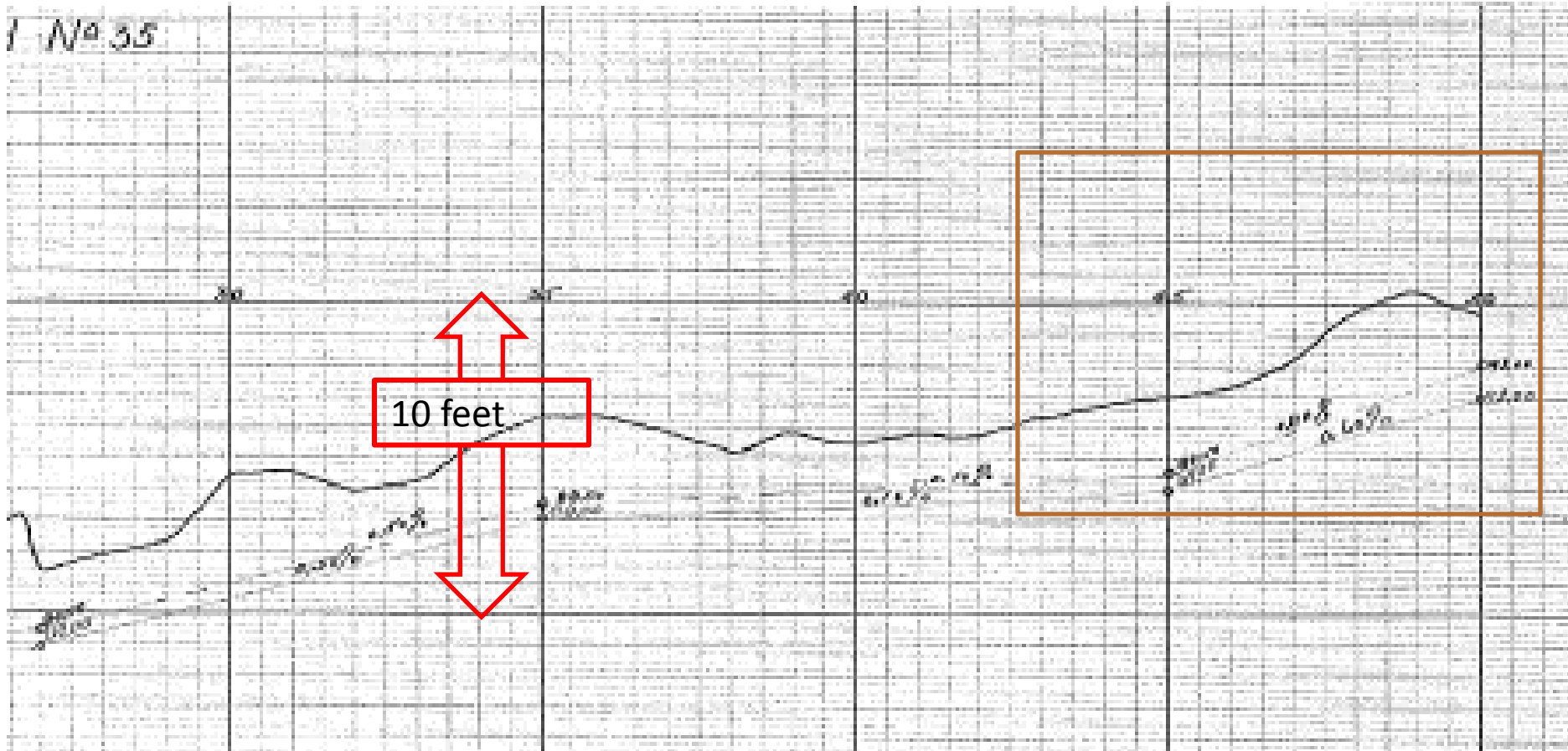
Columbus

PIN # 353322310007

Remove or replace bridge 4 with bridge or 30" culvert







Bridge 4 while in bad shape is located in an area of the ditch with a lot of fall, about 3.5 feet in 500 feet. Effect on drainage very localized, no impact on main ditch. Culvert 9 is in the same situation however is g





CULVERT 6 BRANCH 1



**City of Columbus**  
Replace Culvert 6 replace with 24 inch

6-Up-A Ditch 35



SEP 11 2012

6-Up-B Ditch 35



SEP 11 2012

6-Down-A Ditch 35



SEP 11 2012

6-Down-B Ditch 35



SEP 11 2012



CULVERT 15 BRANCH 3





Culvert is outlet to pond  
Remove 15 inch culvert 15 and replace with 30"

15-Up-Line Pt Ditch 35



15-Down-B Ditch 35



Culvert is under driveway to 7135, inlet end on property of:  
Daniel R and Kim A Zimmerle  
7237 178th Avenue NE  
Columbus  
PIN# 02-32-22-14-0007



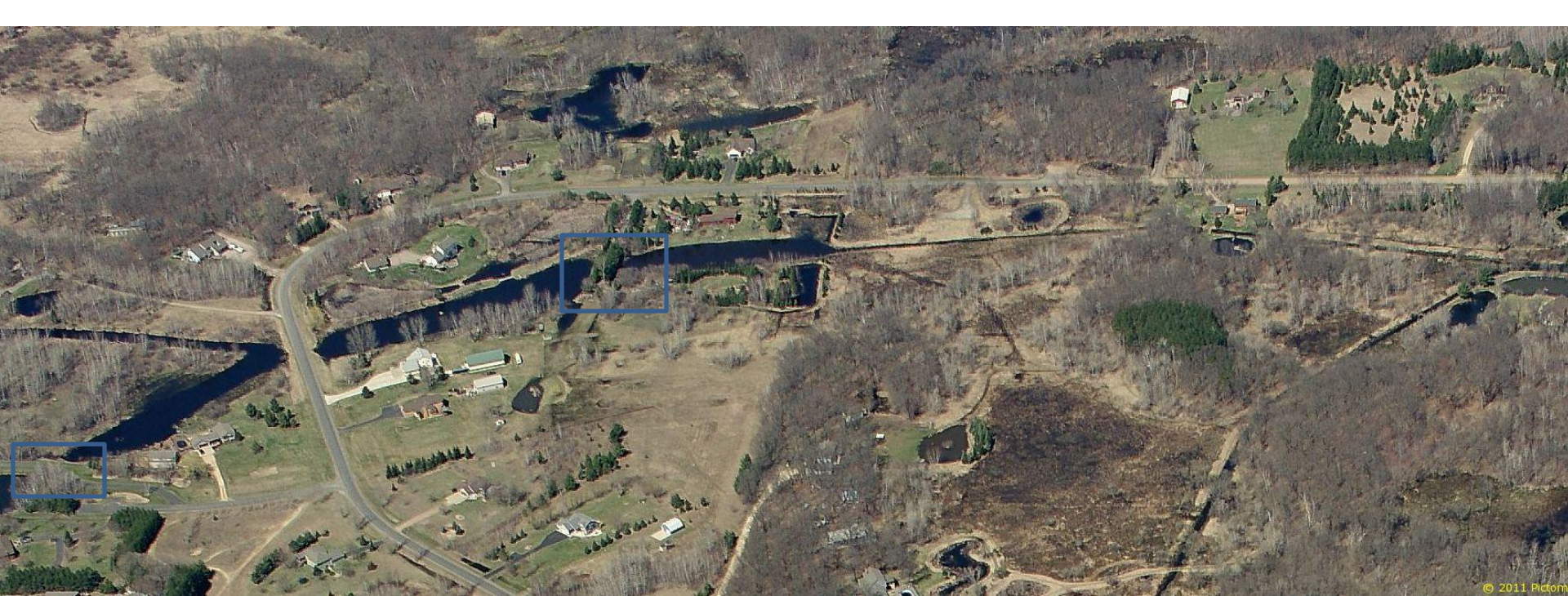




**Jeffrey M and Penny Penn**  
7340 180th Avenue NE  
Columbus  
PIN# 04-32-22-11-0004  
Culvert is outlet to pond  
Remove 18 inch Culvert and replace with 42"







CULVERTS 15 AND 17, ARE ON BRANCH 3 OF COUNTY DITCH 35. THE RESIDENTS HAVE DEVELOPED A SERIES OF PONDS ON THE DITCH AND EVEN AIREATE ONE OF THE PONDS. I BELIEVE THESE PONDS HAVE NO EFFECT ON THE MAIN DITCH. I WOULD SUGGEST A LETTER ADVISING THEM THAT THEIR PONDS ARE ON A COUNTY DITCH AND THAT, IN THE UNLIKELY EVENT THAT A PROPERTY OWNER TO THE WEST OF THEM WANTS THE DRAINAGE THEY ARE ENTITLED TO, THESE OWNERS WOULD BE ORDERED TO RESTORE THE DRAINAGE. AN OPTION HERE WOULD BE TO SUGGEST THAT THE OWNERS INVOLVED PETITION TO HAVE BRANCH 3 ABANDONED UNDER MN STATUTE 103E.806 WEST OF THE NORTHWARD EXTENSION OF THE EAST R/W OF POTOMAC STREET.



# RECOMMENDATIONS ON COUNTY DITCH 35 AND ITS' BRANCHES

- CULVERTS 2, 3, 5, ON THE MAIN DITCH BE REPLACED AS RECOMMENDED.
- CULVERTS 6 AND 9 BE REPLACED ON BRANCH 1 OF COUNTY DITCH 35.
- BRIDGE 4 AND THE REMAINS OF CULVERT 10 BE REMOVED ON BRANCH 1 OF COUNTY DITCH 35
- THAT THE PROPERTY OWNERS OF CULVERTS 15 AND 17 BE SENT A LETTER INDICATING THAT THEIR CULVERTS ARE AN OBSTRUCTION OF BRANCH 3 OF COUNTY DITCH 35 AND IN THE UNLIKELY EVENT THAT PROPERTY OWNERS TO THE WEST REQUEST THE DRAINAGE THEY ARE ENTITLED TO REQUEST THAT DRAINAGE, THEN THEY THE PROPERTY OWNERS WOULD BE RESPONSIBLE TO RESTORE THE DRAINAGE. AN OPTION HERE WOULD BE TO SUGGEST THAT THE OWNERS INVOLVED PETITION TO HAVE BRANCH 3 ABANDONED UNDER MN STATUTE 103E.806 WEST OF THE NORTHWARD EXTENSION OF THE EAST R/W OF POTOMAC STREET.



## FOLLOWUP

I WANT EVERYONE TO KNOW THAT THESE CHANGES WILL IN FACT DO LITTLE TO IMPROVE THE FUNCTION OF THE ENTIRE DITCH SYSTEM ALTHOUGH THEY MAY HAVE SOME IMPACT ON LOCAL PERFORMANCE.

Below are some photos of the actual ditch near these culverts.



EAST FROM POTOMAC

NORTHEAST FROM MACKENZIE







NORTH FROM BROADWAY



EAST FROM URAL STREET



SOUTH FROM 181ST



NORTH FROM 181ST