ANOKA COUNTY

COUNTY DITCH INSPECTION REPORT

DITCH # 28

DATE: 7/12/94

BY: PK Ruud

COMMUNITIES: East Bethel, Ham Lake

REMARKS:

Driveway Entrance to "Antiques of Meadowmoor". Ditch well defined and

flowing. From here north to CSAH # 22, the ditch follows the east

ditch of TH 65.

Briarwood At this crossing, 1/8 mile east of TH 65, the ditch is well defined

and flowing. Considerable sand and gravel have washed off the

road into the ditch.

TH #65 At this north crossing, the ditch is well defined and flowing slowly.

Several trees lying across the ditch to the east.

TH # 65 At this south crossing, the ditch from the east is well defined. A

beaver dam exists about 100' east of the r/w line. No apparent flow

from the east.

W. Service Rd. At this north crossing, the ditch is well defined. No apparent flow.

W. Service Rd. At this south crossing, the ditch is defined. No apparent flow.

Briarwood At this crossing, about 3/4 mile east of TH 65, the ditch is defined

on the south side, but overgrown with brush. No apparent flow.

ACTIVITIES:

The east ditch along TH 65, between the two crossings in the NW1/4 Of Section 5, has become the active route of the ditch. This, in reality, replaces the loop that crossed the highway to the west side and then crossed back to the east side.

The County Board, in response to a petition for a ditch repair, ordered an Engineer's report for this ditch in about 1988. See the ditch file for details.

ANOKA COUNTY

COUNTY DITCH INSPECTION REPORT

DITCH # 28 (Cont'd.)

DATE: 7/28/94

BY: PK Ruud

COMMUNITIES: East Bethel, Ham Lake

REMARKS:

Following a review of the ditch records covering the ditch repair that was done in 1920, the following additional crossings were viewed:

Swedish Drive

Marshy area on both sides of the road. Ditch not defined.

Deerwood Lane

Ditch well defined but overgrown with grass away from the street.

No apparent flow.

187th Lane

Ditch defined and flowing.

Buchanan Street

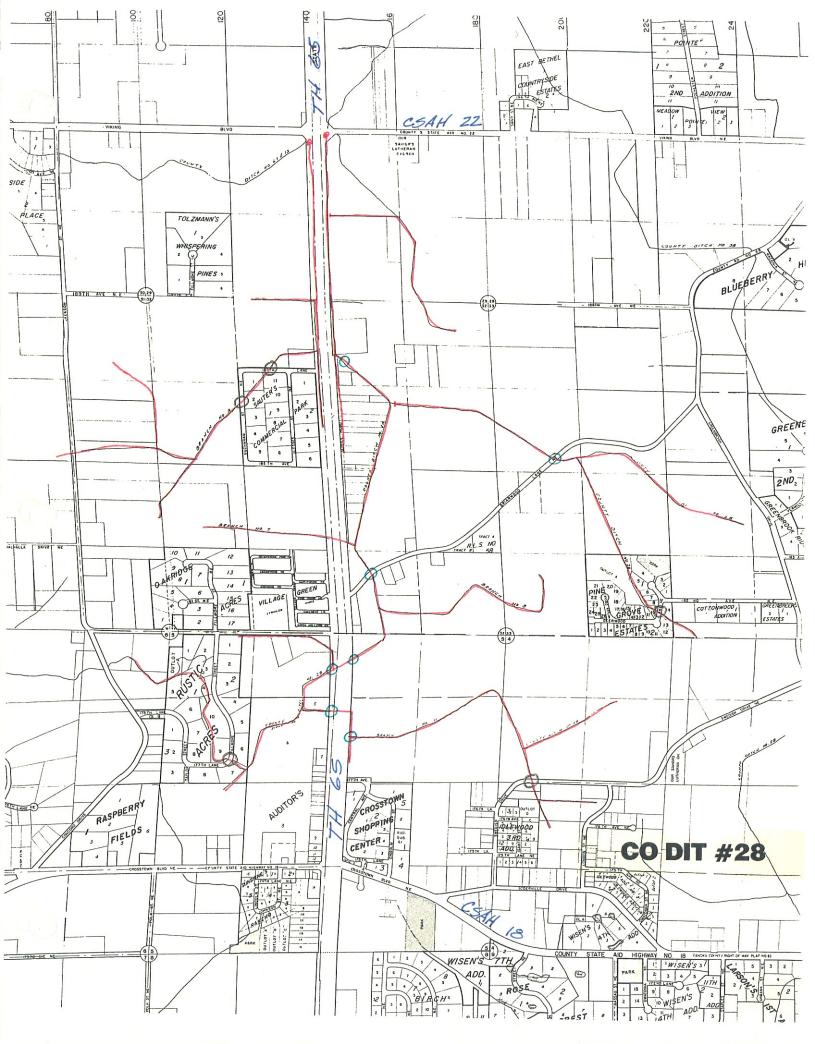
Ditch defined and flowing.

Fillmore Street

Ditch defined and clear of brush. No apparent flow.

ACTIVITIES:

As a part of the designation of the ditch system at the time of the 1920 repair, the ditches on both the east and west sides of TH 65 became parts of the Ditch 28 system.



7/12/94 PKR #28 W Serv Rd T. H. 65 (50.) Ditch defined no apparent flow. W. Serv. Rd. THGS (No.) Ditch defined, no flow apparent. 1 THGS (N.B.) (So.) Ditch to east defined. Beaver dam 100' east of R/w.

No apparent flow from east. TH 65 (N.B.) (No.) Ditch well defined, trees lying across difch, 5/ow flow to east. Briarwood (W) Ditch well defined & flowing.

Culvert & this crossing proposed

for repl. in 1994 on East Bethel

Str. Troj. (Tabled.) Str. Proj. (Tabled.) V Entr. Antiques of Meadomoor Ditch flowing & defined. Briarwood (E) Ditch defined on south side of road, but grown over with brush. No apparent flow.

DEast THGS road ditch connects ditches.

7/28/94 PKR #28 (Confd) Marshy area ditch not defined. Swedish Dr. Ditch defined, no apparent flow. Overgrown with canary grass away from street. Deerwood Lane 1874 Lane Ditch defined & flowing. Buchayan St. Ditch defined of flowing. Fillmore St. (@177 fb) Ditch defined &clear. No apparent flow.

PUBLIC DRAINAGE DITCH INVENTORY FORM (Laws of 1990, Chapter 601, Section 27)

1. Drainage authority name: Anoka County (East Bethel/Ham Lake)
2. Drainage ditch name and number: #28
3. Ditch location and drainage area boundary: (shown on attached quadrangle map)
4. Drainage area in acres: 1730.48; Benefitted area in acres: 660
5. Approximate length in miles: Open Ditch 7.33 Buried Tile 0
6. Year constructed: 1898; Original cost: \$ 1000.87
7. Are original plans on file? Yes x No; Location:Anoka_County Courtho
8. Date of original plans: 1898
9. Are "as built" plans on file? Yes No _x ; Location:
10. Year(s) improved: None
11. Are improvement plans on file? Yes No _N/A; Location:
12. Year(s) repaired: 1920
13. Are repair plans on file? Yes No _x ; Location:
14. If the ditch was transferred from a county or joint county ditch authority to a watershed district or WMO, is the transfer order on file? Yes Nox NA
15. Is the list of lands benefitted and damaged on file? Yes No
16. Have the benefits and damages been redetermined? Yes No; If yes, year(s) of redetermination:1920
17. Has right-of-way been acquired for a 1-rod permanent grassed strip? Yes No; If yes, has it been maintained? Yes No _x
18. Is there a maintenance fund for the ditch? Yes No _x _; If yes, current balance in maintenance fund: \$
19. What was the last year maintenance work was performed by drainage authority:

20. Have other local units or private parties performed maintenance work on the ditch? Yes _ x _ No; List parties: _ By local property owners.
21. Have the alignment, grade, bottom width, or bridge or culvert crossings been materially changed from the original or improved construction, without going through formal ditch proceedings? Yes Nox
22. Is the ditch inspected annually; every 2-5 years; every 5-10 years; only when a problem arises _χ_; or never? Year of last inspection:1987
23. Approximate percentage of the ditch's contributing drainage area that is currently urbanized:24%; rural:76_%
24. Have any substantial areas of wetlands originally totally drained by the ditch reestablished themselves due to lack of ditch maintenance? Yes No _x
 25. What is the general condition of the ditch? a. well-maintained b. fairly well-maintained c. poorly maintained d. very poorly maintained e. functionally abandoned
26. Describe the existing condition of the ditch, including erosion/sedimentation problems: Some weeds and brush. Ditch drains well but not to the elevation it originally did. Very little standing water. 1987 survey shows 3+ feet of silt. Repair petition from 85 failed because of costs.
27. Does the ditch continue to serve a useful purpose to one or more properties? Yes
28. What plans are there for future management of the ditch? A. Monitor the ditch for problems that occur, such as deadfalls, unapproved culverts/crossings, or filling, that block or impede the normal flow. B. Review, with municipalities & the WMO's, the impact of new development on the drainage system. C. Monitor & repair/replace drainage structures at county highway crossed by the ditch. 29. Additional comments or recommendations for statutory changes: A. Need legislation that allows for maintenance of the county ditch system
B. Need changes in county ditch legislation that provides for a method (s) of assessing property within a drainage area to pay for approved
repairs or improvements.

From:

Jon Olson

To:

Sabatka, Dan

Date: Subject: 8/18/04 4:03PM Re: Classic Construction Proj No 2004-157K

Dan

Since the difference in water elevation is slight and there is a 48" pipe downstream, go ahead with the 48".

Jon Olson Division Manager - Public Services Anoka County Government Center 2100 Third Avenue - 7th Floor Anoka, MN 55303-2265 763-323-5789

>>> "Dan Sabatka" <<u>Dsabatka@rlk-kuusisto.com</u>> 08/18/04 01:07PM >>> Jon

Based on your review of the Classic Construction Commercial Site, in which you requested a 60" storm sewer pipe in lieu of the proposed 48" pipe, I ran my HydroCad model with both size pipes. Per a previous conversation with you, the reason for the 60" pipe was to protect the commercial lots to the south. According to the HydroCad model the 100yr HWL for Pond 2 is 897.10 with a 48" pipe, and 896.74 with the 60" pipe. Since there is only .36' difference between the two, is the 60" pipe necessary?

If you would like copies of the HydroCad model for review, please let me know.

Thanks

Dan Sabatka, EIT
Project Engineer
RLK-Kuusisto
phone (763)434-7646
fax (763)434-8007
dsabatka@rlk-kuusisto.com

CC:

Olson, Jon; Robjent, Lyndon; Witter, Andrew

From:

Jon Olson

To: Date: Sabatka, Dan 7/16/04 3:21PM

Subject:

Classic Construction Proj No 2004-157K

Dan

After reviewing the proposed development at Classic Construction Park, and the impact to our ditch system, Anoka County has the following comments:

- The length of some of the Subcatchment areas in both the existing condition and the proposed condition, seem short for the size of the acreage. It is somewhat consistent between both the existing and proposed calculations. It seems very conservative.
- The 60" RCP servicing our ditch under Ulysses St. has a west invert elev. of 888.1 and an east invert elev. of 888.1 as well. It appears to be an equalizer pipe. No flow through it. It is approximately 60' long. It is being fed by a 36" RCP storm sewer system which outlets a little south of the west end of the culvert at elev. 881.2. The proposed replacement pipe is a 48" RCP sewer system, that begins in the southeast corner of proposed Subcatchment 101 and carries the water north, up to the east side of Ulysses St., into CBMH-3 and outlets to the east at FES 4. The invert elev. at the beginning of the 48" Storm sewer system (Stub IE) = 891.2 elevation which matches the existing elevation. The invert elev. of CBMH-3 is 890.49 and the outlet elev. of the FES 4 apron is 890.37 @ 0.20%. That is a substantial change in elevation at the Ulysses St. crossing of our ditch however that elevation the effective elevation of the 60 ijnch outlet from the entire area along TH 65. It appears, from the ponding calculations, that the discharge is slowed and stored adequately and that the discharge from the area is less following the development than it is in the existing condition. Given the possible conservative calculations based on the length used in the subcatchment calculations, it appears to be adequate.
- A bigger concern is that the existing culvert, 60" RCP, is being replaced with a 48" RCP. Although the site, as a whole, is modeled with a lower discharge rate post development, we are concerned for the areas upstream of this culvert (now west of stub IE). There appears to be a potential for increased water elevations in the areas upstream of stub IE. Consequently a 60 inch pipe should be used from stub IE through CBMH-4 Through CBMH-3 to FES-4. We realize that there is a 36 inch pipe there now however there is no historical data submitted to show that the 36 inch pipe has the capasity of the original ditch.

Following these recommendations you are authorized to work in County Ditch 28 in section 5 of Ham Lake.

Jon Olson Division Manager - Public Services Anoka County Government Center 2100 Third Avenue - 7th Floor Anoka, MN 55303-2265 763-323-5789

CC:

Olson, Jon; Robjent, Lyndon; Witter, Andrew

