Please note the meeting will be held 7:00pm, **MONDAY,** November 19, 2018 in the County Board Room at the Carver County Government Center, 602 East 4th Street, Chaska, MN.

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Monday, November 19, 2018

Agenda Item
Item 7. F. - Project Reviews

Prepared By
Linda Loomis, Administrator

Summary

i. **Carver County 2040 Comprehensive Plan review**
Staff reviewed the Carver 2040 Comprehensive Plan. Comments that were sent to the County are attached. A resolution approving the plan is also attached for Board approval.

ii. **Scott County 2040 Comprehensive Plan review**
Staff reviewed the Scott County 2040 Comprehensive Plan. Comments that were sent to the County are attached as well as a resolution for Board approval.

iii. **City of Chanhassen - TH 101 Improvements**
Staff attended a meeting to discuss proposed re-alignment of TH 101 between Pioneer Trail and CSAH 61 in the city of Chanhassen. Proposed start date for construction is April of 2020. Information about this projects can be found on the project website. Staff will be meeting with the city and other agencies to discuss drainage improvements. One possibility may be to address the Bluff Creek project RPBCWD had proposed, but we were unable to complete the project, due to right of way issues. It may be possible to get right of way through this project to complete the Bluff Creek project.

iv. **City of Savage - 12113 Lynn Avenue**
The LMRWD received notice of a public hearing for a Conditional Use Permit for this project. The hearing is scheduled to be held December 6, 2018 and staff is reviewing the proposal.

v. **City of Richfield/Bloomington - TH 77 & 77th Street Underpass**
Staff has received project plans and a drainage report for this project. Staff is reviewing the document received. This project has implications for another project (494 - Airport to TH 169).

vi. **MPCA - MN River TSS TMDL**
The LMRWD received more draft memos for this study. Staff is reviewing the memos and will provide comment.

vii. **MN Valley State Trail - EAW (Environmental Assessment Worksheet)**
The comment period for the EAW expired on Thursday, November 15th. The LMRWD provided comments to the DNR prior to release of the EAW for public comment. LMRWD staff asked the DNR how LMRWD comments were incorporated into the EAW. Staff did not receive a response from the DNR until less than

24 hours of the comment period remained. Staff did not have time to review the EAW at that point and requested that previous comments from the LMRWD be recorded as the official comments from the LMRWD.

viii. Hennepin County - CSAH 61/Flying Cloud Drive

Staff has conducted one inspection of this project since the Board authorized periodic inspections. The report is attached. The next inspection is scheduled for Monday, November 19th. LMRWD has shared the inspection report with the Technical Evaluation Panel for the project.

ix. MNDOT - I494 MN Valley Drainage preliminary design - utility replace (formerly listed as I-494/TH %/TH 13 mill and overly project)

This project consists of a mill and overlay of the roadway and replacement of failing storm sewer. It does not create any new impervious surface. So the LMRWD Volume control standards do not apply. Staff has received a communication that MNDOT has chosen the LMRWD's preferred alternative for drainage. MNDOT has requested the LMRWD submit a letter regarding the project.

x. MNDOT - I35-W Bridge Replacement

No new information since last update.

xi. MNDOT - I-494 from Airport to TH 169

LMRWD was notified that preliminary design on this project is beginning. Staff attended a kick-off meeting on October 22nd. A report of the meeting is attached. The LMRWD received a phone call from Randy Anhorn, Nine Mile Creek Watershed District Administrator, about this project. Areas of Nine Mile Creek WD experience localized flooding and there is concern that this project has the potential to make flooding worse.

xii. City of Shakopee - Amazon Fulfillment Center drainage

Staff has been trying to connect with Three Rivers Park staff regarding concern about negative impacts from storm drainage from the Amazon Fulfillment Center, but have not been able to set up a meeting.

xiii. MAC/LMRWD/MCWD boundary realignment

xiv. No new information since last update.

xv. Fort Snelling - Dominion Housing

Staff met with engineers for a housing project situated at Fort Snelling. Historic building are being renovated to provide affordable housing for veterans. LMRWD standards were discussed and how the project might meet the standard. There will be an increase in impervious surface that will require storm water management be implemented. Storm water detention ponds cannot be used because of the project's proximity to the Airport. LMRWD staff asked to review the plans once design is further along.

xvi. USACOE/USFWS - Bass Ponds, Marsh & Wetland

USFWS said they are still gathering information and do not have a timeline for this project yet.

Attachments

Resolution 18-19 Approving Carver County 2040 Comprehensive Plan
Resolution 18-18 Approving Scott County 2040 Comprehensive Plan
CSAH 61/Flying Cloud Drive inspection report
Letter to MnDOT regarding I-494 MN Valley Drainage Preliminary Design
Report from I-494 from airport to TH 169 meeting

Recommended Action

Motion to approve Resolution 18-19 Approving Carver County 2040 Comprehensive Plan
Motion to approve Resolution 18-18 Approving Scott County 2040 Comprehensive Plan
Motion to authorize letter to MnDOT

_____ introduced the following resolution and moved its adoption:

LOWER MINNESOTA RIVER WATERSHED DISTRICT

RESOLUTION 18-19

RESOLUTION APPROVING THE CARVER COUNTY 2040 COMPREHENSIVE PLAN

WHEREAS, Minnesota Statute Chapter 473.858 requires the Local government units (county, city, town, school district, special district or other political subdivisions or public corporation) to prepare a Comprehensive Plan and submit their proposed plans to adjacent governmental units, affected special districts lying in whole or in part within the metropolitan area, and affected school districts for review and comment; and

WHEREAS, the Lower Minnesota River Watershed District ("LMRWD") is a special purpose unit of government, established in accordance with Minnesota Statutes Chapter 103D; and

WHEREAS, the Carver County (County) lies partially within the LMRWD; and

WHEREAS, On October 24, 2018, the LMRWD adopted a Watershed Management Plan (LMRWD Plan) under Minnesota Statutes Section 103B.231, subdivision 10, which details the existing physical environment, land use and development in the watershed and establishes as plan to manage water resources and regulate water resource use to improve water quality, prevent flooding and otherwise achieve goals of Minnesota Statutes Chapters 103B and 103D; and

WHEREAS, Minnesota Statutes Section 473.859 Subdivision 2, Comprehensive Plan Content requires that a land use plan shall include the water management plan required by section, 103B.235, Local Water Management Plans: and

WHEREAS, Minnesota Statutes Section 103B.235 requires that local government units having land use planning and regulatory responsibility for territory within the watershed shall prepare or cause to be prepared a local water management plan, capital improvement program and official controls as necessary to bring local water management into conformance with the LMRWD Plan. Local Plans must meet the requirements of the LMRWD Plan as well as the general requirement of Minnesota Statutes Section 103B.235 and Minnesota Rules Part 8410; and

WHEREAS, on May 2, 2018, the County prepared and submitted a draft 2040 Comprehensive Plan Update (Carver 2040) for review. Sections relevant to the LMRWD are Chapter 5, Water Resources and Chapter 7, Implementation; and

WHEREAS, Minnesota Statutes Section 103B.235, Subdivision 3 authorizes the LMRWD to review and approve local water management plans and to take other actions necessary to assure that the local plan is in conformance with the LMRWD's plan and standards set forth therein; and

WHEREAS, the LMRWD has reviewed Chapters 5 and 7 of Carver 2040 and hereby determines that the Carver 2040 has been prepared in accordance with the requirements of Minnesota Statutes Sections 473.864, and 103B.235 and Minnesota Rules Parts 840.0160 and 8410.0170, and contains the requirements for local plans.

NOW, THEREFORE, BE IT RESOLVED by the Board of Managers of the LMRWD that the Carver 2040, subject to the following:

A. Include a standard in Chapter 153 of Carver County Ordinance XV, Land Usage that restricts infiltration practices within 50 feet of a septic tank or drain field.
B. Require the lowest level of proposed structures to be a minimum of 2 feet above the 100-year flood elevation in Chapter 153 of Carver County Ordinance XV.
C. In addition to the requirement in Section 153.59 of Carver County Ordinance XV, that placement of fill will not cause a net decrease in storage, require that placement of fill will not decrease the conveyance capacity below the 100-year flood elevation.
D. Include a definition of "steep Slopes" to Carver County Ordinance XV.
E. Update the CCWMO WMP to include information from the Carver County Geological Atlas.
F. The Lower Minnesota River Watershed Restoration and Protection Strategies (WRAPS) and Total Maximum Daily Load (TMDL) studies are underway. The LMRWD recommends the Comprehensive Water Resources Management Plan be updated to reflect the findings and recommendations of the WRAPS and TMDL studies once finalized.
G. In accordance with Minnesota Statutes Section 473.864, Subdivision 1, the County shall adopt its comprehensive plan with required modifications within nine months following a final decision, order, or judgment made pursuant to section 473.866.
H. Pursuant to Minnesota Statutes Section 473.858, Subdivision 2, and consistent with the LMRWD Plan, the County shall submit amendments to Carver 2040 to the LMRWD for review and approval in accordance with State Statutes and Rules.
I. The LMRWD Board of Managers believes that regulation is most properly performed by the local governmental unit (LGU), provided that regulation by the LGU is consistent with the standards, goals and policies of the LMRWD Plan. The County shall adopt official controls, to implement water management policies, standards and criteria, as stated in Carver 2040, at least as strict as those in the LMRWD Plan, on all projects where Scott County acts as the land use authority, within the boundaries of the LMRWD in Scott County.

The Motion was seconded by _____ and adopted by the Board of Managers of the Lower Minnesota River Watershed District this 19th day of November, 2018.

_____
Jesse Hartmann, President

ATTEST:

_____
David Raby, Secretary

_____ introduced the following resolution and moved its adoption:

LOWER MINNESOTA RIVER WATERSHED DISTRICT

RESOLUTION 18-18

RESOLUTION APPROVING THE SCOTT COUNTY 2040 COMPREHENSIVE PLAN

WHEREAS, Minnesota Statute Chapter 473.858 requires the Local government units (county, city, town, school district, special district or other political subdivisions or public corporation) to prepare a Comprehensive Plan and submit their proposed plans to adjacent governmental units, affected special districts lying in whole or in part within the metropolitan area, and affected school districts for review and comment; and

WHEREAS, the Lower Minnesota River Watershed District ("LMRWD") is a special purpose unit of government, established in accordance with Minnesota Statutes Chapter 103D; and

WHEREAS, the Scott County (County) lies partially within the LMRWD; and

WHEREAS, On October 24, 2018, the LMRWD adopted a Watershed Management Plan (LMRWD Plan) under Minnesota Statutes Section 103B.231, subdivision 10, which details the existing physical environment, land use and development in the watershed and establishes as plan to manage water resources and regulate water resource use to improve water quality, prevent flooding and otherwise achieve goals of Minnesota Statutes Chapters 103B and 103D; and

WHEREAS, Minnesota Statutes Section 473.859 Subdivision 2, Comprehensive Plan Content requires that a land use plan shall include the water management plan required by section, 103B.235, Local Water Management Plans: and

WHEREAS, Minnesota Statutes Section 103B.235, Local Water Management Plans, requires that local government units having land use planning and regulatory responsibility for territory within the watershed shall prepare or cause to be prepared a local water management plan, capital improvement program and official controls as necessary to bring local water management into conformance with the LMRWD Plan. Local Plans must meet the requirements of the LMRWD Plan as well as the general requirement of Minnesota Statutes Section 103B.235 and Minnesota Rules Part 8410; and

WHEREAS, on May 1, 2018, the County prepared and submitted a draft 2040 Comprehensive Plan Update (Scott 2040) for review. Sections relevant to the LMRWD are Chapter 8: Water, Natural and Agricultural Resources and Chapter 13: Implementation and Metrics; and

WHEREAS, Minnesota Statutes Section 103B.235, Subdivision 3 authorizes the LMRWD to review and approve local water management plans and to take other actions necessary to assure that the local plan is in conformance with the LMRWD's plan and standards set forth therein; and

WHEREAS, the LMRWD has reviewed Chapters 8 and 13 of Scott 2040 and hereby determines that the Scott 2040 has been prepared in accordance with the requirements of Minnesota Statutes Sections 473 and 103B.235 and Minnesota Rules Parts 840.0160 and 8410.0170, and contains the requirements for local plans.

NOW, THEREFORE, BE IT RESOLVED by the Board of Managers of the LMRWD that Scott 2040 is hereby approved as consistent with the LMRWD Plan, subject to the following:

A. Include a standard in Section 6-B2 of Scott County Zoning Ordinance No. 3, that restricts infiltration practices within 50 feet of a septic tank or drain field.
B. Include a duration of 20 hours with the 2-, 20-, and 100-year storm recurrence interval in Section 6-B2,1,b of Scott County Zoning Ordinance No. 3.
C. The Lower Minnesota River Watershed Restoration and Protection Strategies (WRAPS) and Total Maximum Daily Load (TMDL) studies are underway. The LMRWD recommends the Scott County Water Resources Plan be updated to reflect the findings and recommendations of the WRAPS and TMDL studies once finalized.
D. In accordance with Minnesota Statutes Section 473.864, Subdivision 1, the County shall adopt its comprehensive plan with required modifications within nine months following a final decision, order, or judgment made pursuant to section 473.866.
E. Pursuant to Minnesota Statutes Section 473.858, Subdivision 2, and consistent with the LMRWD Plan, the County shall submit amendments to Scott 2040 to the LMRWD for review and approval in accordance with State Statutes and Rules.
F. The LMRWD Board of Managers believes that regulation is most properly performed by the local governmental unit (LGU), provided that regulation by the LGU is consistent with the standards, goals and policies of the LMRWD Plan. The County shall adopt official controls, to implement water management policies, standards and criteria, as stated in Scott 2040, at least as strict as those in the LMRWD Plan, on all projects where Scott County acts as the land use authority, within the boundaries of the LMRWD in Scott County.

The Motion was seconded by _____ and adopted by the Board of Managers of the Lower Minnesota River Watershed District this 19th day of November, 2018.

_____
Jesse Hartmann, President

ATTEST:

_____
David Raby, Secretary

Young Environmental Consulting Group, LLC

SITE LOCATION:	CSAH 61-Flying Cloud Drive
PURPOSE:	Construction Stormwater Site Visit on behalf of the Lower Minnesota River Watershed District (LMRWD)
DATE & TIME:	6 November 2018, 0830–1030
INSPECTOR:	Sarah Duke Middleton, Water Resources Scientist Young Environmental Consulting Group, LLC
WEATHER:	37°F, overcast, winds 5–12 mph, moderate to heavy rain throughout inspection
SITE CONDITIONS:	Saturated soils; water actively draining from site; ponding and slippery conditions
PHASE:	Active construction including removal of existing material and construction of walls; prep for bridge construction (predominantly eastern half of project)

DISCUSSION

Prior to inspecting the site, I met with Ames contractor Nathan Bren at the project construction trailer. He provided a general overview of the site and told me where I could easily drive rather than walk to inspect it. We discussed the current BMPs in place on the site, and he stated that recent heavy rains had caused severe problems (not specified in detail). Nathan indicated that the project is awaiting direction from the U.S. Fish and Wildlife Service regarding how it wants to address problems on-site. (I assume he is referring to the deposition of sediments into off-site water bodies.)

I stated on several occasions that my only role is to document site conditions on a biweekly basis on behalf of the LMRWD. Before conducting the field inspection, my contact information was provided to Nathan, as well as a general overview of my experience inspecting construction sites. We have agreed that I will notify him a day or more prior to each site visit with a general time that I plan to arrive onsite.

INSPECTION NOTES

Weather played a large role in this inspection. Moderate to heavy rainfall allowed me to see clearly how water flows through the site; however, the extensive ponding and saturated soils prevented me from accessing some areas. I conducted most of the inspection on foot due to inaccessibility with my vehicle.

The site visit revealed a widespread failure of BMPs. The topography of the area and site grading has water flowing from the north to the southern border of this project. Stormwater and sediments from the project have drained south into Rice Lake.

See the attached photo log for documentation of the current site conditions.

RECOMMENDATIONS

Lower Minnesota River Watershed District:

- Contact the U.S. Fish and Wildlife Service to determine what direction/recommendations it is considering and the timeline for delivering those recommendations to Hennepin County's construction project team.
- Attend the next project meeting to present the district's concerns about erosion and sediment management of the project and the potential negative effects of adjacent water and natural resources.

Project Team/Site Supervisor:

- Work with USFWS to address sedimentation drainage into Rice Lake immediately.
- Many BMPs have failed on site; review site conditions (slope, drainage, etc.) and ensure that appropriate BMPs are installed for site conditions and anticipated seasonal precipitation.
- Culverts that direct water off-site
    - Those routing existing water features:
        - Install and maintain BMPs on the northern and southern sides of the project. Currently, many culverts on the northern side of the project are unprotected and allow construction runoff to flow directly into the stream/culvert. See the following photos for reference: 19–22.
    - Those draining stormwater:
        - Culverts on the northern side of the road receive drainage from nearby construction activity. Without BMPs in place, heavy sedimentation flows directly into the culvert and outputs into Rice Lake. Install BMPs around all culverts that direct water off-site. See the following photos for reference: 4, 22–25.
- Actively maintain all site BMPs daily per design and installation specifications. Ensure that all both erosion and sediment control BMPs designed and installed, per specifications.

NEXT PROJECT SITE VISIT

The next site visit will take place on Monday the 19th or Tuesday the 20th of November 2018, unless otherwise directed by the LMRWD.

Young Environmental Consulting Group, LLC

PHOTO LOG

I took the following photographs throughout the site visit on Tuesday, 6 November 2018. The photographs begin at the east end of the project (near the project construction trailer) and move west. The southern side of the road was inspected first (east to west), then the northern side (moving west to east). All photos show a red arrow indicating north and a text box indicating the general location of Rice Lake.

Photo No.: 1

Location: South side of Flying Cloud Drive, west of construction trailer. Facing south towards Rice Lake.

BMPs Present: Two rows of silt fence, biologs.

Description: BMPs overwhelmed with sediment from road.

Photo No.: 2

Location: South side of Flying Cloud Drive, 5–10 yards west of Photo 1. Facing east.

BMPs Present: South side of road—Two rows of silt fence, geotextile blanket, rock check downslope of blanket. North side of road—fabric ESC blanket, hydromulch.

Description: BMPs installed along north and southern project perimeters.

Photo No.: 3

Location: South side of Flying Cloud Drive

BMPs Present: Two rows of silt fence, sandbags creating a sediment trap, some vegetation.

Description: This photo is the southern side of a temporary culvert, draining water from the old roadway through the black tubing and into a sandbag sediment basin.

I could not access the silt fence area and therefore could not determine if the sediment sand basin was functioning as intended.

Photo No.: 4

Location: South side of Flying Cloud Drive.

BMPs Present: Unclear if sand berm is indented to be a BMP.

Description: This photo is the northern side of a temporary culvert, draining water from the old roadway (see Photo 3). No BMP present at mouth of culvert.

Photo No.: 5

Location: South side of Flying Cloud Drive, facing west.

BMPs Present: Two rows of silt fence, hydromulch.

Description: Site BMPs. The hydromulch appears to have been applied in the last 7–10 days with no germination present at the time of inspection.

Photo No.: 6

Location: South side of Flying Cloud Drive, adjacent to the auto business, 10–20 yards east of Photo 5. Facing south.

BMPs Present: Hydromulch, two rows of silt fence, some vegetation.

Description: Silt fencing ends just before stream bank. It is unclear what BMPs might be present around the stream culvert (not accessible).

Photo No.: 7

Location: South side of Flying Cloud Drive.

BMPs Present: Vegetative buffer.

Description: In this section, the old road has not been removed and existing vegetation has been left intact up to the roadway.

Photo No.: 8

Location: South side of Flying Cloud Drive. *Photos 8–15 in same general area of project.

BMPs Present: Biologs, ESC blanket.

Description: BMPs have failed. Extensive erosion beneath the fabric has resulted in a pool of sediment at base of slope. Soil-to-BMP contact has been lost, yielding all BMPs ineffective. Wooden stakes used to anchor fabric are completely dislodged and sideways.

Photo No.: 9

Location: South side of Flying Cloud Drive. *Photos 8–15 in same general area of project.

BMPs Present: Biologs, two rows of silt fence, ESC blanket.

Description: Erosion of slope after BMPs failed to anchor soil. The gap between the blanket and soil is 0.5–1ft+ in multiple areas. Both the biologs and ESC blanket are falling down the slope.

Photo No.: 10

Location: South side of Flying Cloud Drive. *Photos 8–15 in same general area of project.

BMPs Present: ESC blanket, two rows of silt fence, occasional biolog.

Description: Failure of upslope BMPs have resulted in a large accumulation of sediment in silt fence at base of slope. Silt fence was not accessible due to site conditions; it is unclear whether sediments have already gone into Rice Lake.

Photo No.: 11

Location: South side of Flying Cloud Drive. *Photos 8–15 in same general area of project.

BMPs Present: ESC blanket, biologs. Jersey barriers seem to be present for safety. not as a stormwater BMP.

Description: Upslope side of large sand pile. Poor BMP installation evident. See Photos 12 and 13 for downslope visual.

Photo No.: 12

Location: South side of Flying Cloud Drive. *Photos 8–15 in same general area of project.

BMPs Present: ESC blanket, biologs, two rows of silt fence.

Description: Downslope side to Photo 11. Also see Photo 13. Failure of upslope BMPs with misc. debris on slope. Unconfirmed, but probable, sediment in culvert.

Photo No.: 13

Location: South side of Flying Cloud Drive. *Photos 8–15 in same general area of project.

BMPs Present: ESC blanket, biologs, two rows of silt fence.

Description: Downslope side to Photo 11. Also see Photo 12. Unconfirmed, but probable, sediment in culvert.

Photo No.: 14

Location: South side of Flying Cloud Drive. *Photos 8–15 in same general area of project.

BMPs Present: ESC fabric, two rows of silt fence.

Description: Major BMP fail with large sediment deposition overwhelming silt fence.

Photo No.: 15

Location: South side of Flying Cloud Drive. *Photos 8–15 in same general area of project.

BMPs Present: Jersey barriers, ESC blanket, biologs, two rows of silt fence.

Description: Major BMP fail with large sediment deposition at base of slope.

Photo No.: 16

Location: South side of Flying Cloud Drive.

BMPs Present: Two rows of silt fencing, vegetative buffer.

Description: BMPs along Rice Lake.

Photo No.: 17

Location: South side of Flying Cloud Drive.

BMPs Present: ESC blanket, two rows of silt fence.

Description: Failure of upslope BMPs contributed to large amounts of sediment deposition at base of slope. Possible sediment in Rice Lake. Not yet confirmed (access issues), but flattened vegetation and full silt fences suggest this is highly probable.

Photo No.: 18

Location: South side of Flying Cloud Drive.

BMPs Present: Two rows of silt fencing; one is supported with jersey barriers.

Description: BMP maintenance required to prevent off-site deposition.

Photo No.: 19

Location: South side of Flying Cloud Drive, near bridge construction.

BMPs Present: Silt fencing with jersey barriers in some locations.

Description: It is unclear if this is a diversion of an existing channel. Installed BMPs are filled with sediment. See Photo 20 for upslope side of culvert.

Photo No.: 20

Location: North side of Flying Cloud Drive, near bridge construction.

BMPs Present: Silt fence (with and without jersey barriers), biologs, ESC blanket.

Description: Upstream (northern) side of culvert. See Photo 19 for downstream photo. ESC blanket is failing, with 0.5–1ft+ gaps between fabric and soil.

Photo No.: 21

Location: North side of Flying Cloud Drive, near bridge construction. Roughly 5 yards west of Photo 20.

BMPs Present: Silt fence (with and without jersey barriers), biologs, ESC blanket.

Description: This is the ESC blanket failure channeling into Photo 20 area.

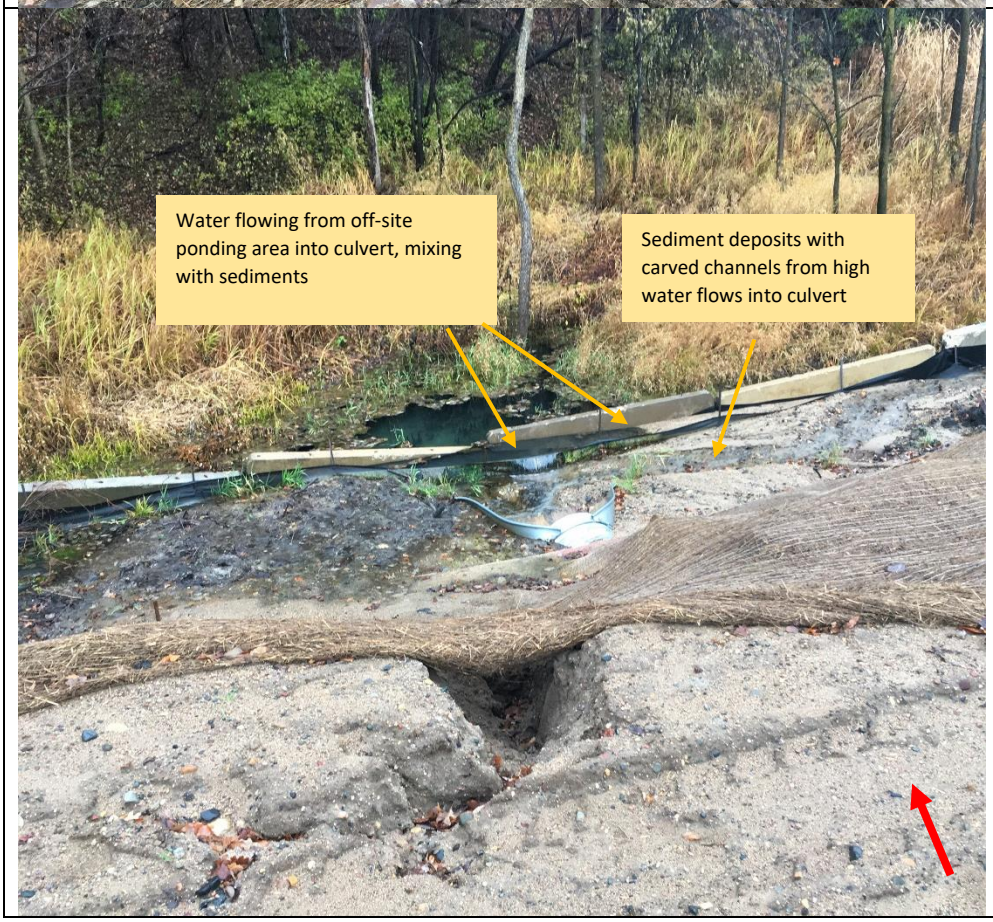

Photo No.: 22

Location: North side of Flying Cloud Drive.

BMPs Present: Silt fence with jersey barrier reinforcement and second row with metal rods, ESC blanket.

Description: BMP failures have permitted sediment to enter culvert. This culvert (north side of project), outlets on southern side of road into Rice Lake.

	Photo No.: 23 Location: North side of Flying Cloud Drive. BMPs Present: Silt fence with jersey barrier reinforcement and second row with metal rods, ESC blanket. Description: Another angle of Photo 22 area.
	Photo No.: 24 Location: North side of Flying Cloud Drive. BMPs Present: None evident. Description: Retaining wall in progress. Note exposed soils above retaining wall and probable drainage pattern. See Photo 25.

Photo No.: 25

Location: North side of Flying Cloud Drive.

BMPs Present: None.

Description: Sediments flow off retaining wall and into a pooling area (see pale yellow arrows). There is a drainage feature (culvert? pipe?) in this spot, but it is covered by water and sediment. There is no clear outlet.

	Photo No.: 26 Location: North side of Flying Cloud Drive, not too far from project construction trailer. BMPs Present: Hydromulch and ESC blanket. Description: BMPs installed. No indication of germination.
	Photo No.: 27 Location: North side of Flying Cloud Drive, western end of project near Lion's Tap restaurant. BMPs Present: Hydromulch and some vegetation. Description: BMPs installed on upslope/northern edge of project.

Photo No.: 28

Location: South side of Flying Cloud Drive, western end of project near Lion's Tap restaurant.

BMPs Present: Two rows of silt fencing.

Description: BMPs nearly overtopped by pooling sediments.

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Carver
Vacant

Dakota
Vacant

Hennepin
David Raby
Secretary/Treasurer

Adam Frey
Vice President

Scott
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112 East 5th Street
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Chaska, MN 55318

E-mail: lowermnriverwd.org

November 19, 2018

Minnesota Department of Transportation

RE: 11558 - SP 1985-148 I-494 Prelim Drainage - Storm Sewer Replacement between Minnesota River and TH 13

Salutation:

It is the understanding of the Lower Minnesota River Watershed District (LMRWD) that the Minnesota Department of Transportation (MnDOT) plans to move forward on the above referenced project with Option C.

Option C would construct a minimal depth median trunk line connecting all inlets except for the storm sewer adjacent to the bridges. The trunk line would combine 8 existing crossings into a single crossing at the I-494 low point. From the low point the trunk line would run parallel to I-494 in the side slope before turning northward to discharge into the existing Beaver Pond near the I-494 low point.

The seven existing crossings being replaced by the trunk line will be plugged, filled and abandoned in place. In general the existing storm sewer inlets will be replaces in-kind while the pipe network below the will change, allowing for a net decrease in the amount of pavement needing to be removed and replaced as part of the storm sewer system replacement. Of the eight existing WB I-494 crossings between the bridges only two of them flow to the existing Beaver Pond and the remaining six flow to Gun Club Lake. Whereas Option C proposes all of this water will flow through Beaver Pond prior to entering Gun Club Lake and eventually the Minnesota River. Option C will not only treat water that was previously not being treated, by it will eliminate 7 potential sources of erosion.

The LMRWD agrees with following the assessment of the proposal

Volume Control

- This project consists of a simple mill and overlay of the roadway and replacement of failing storm sewer, and does not include creation of new impervious. Therefore the District's volume control requirements would not apply.

Rate Control

- The River Bridge scuppers flow directly to the Minnesota River and Gun Club Lake. When the River Bridge scuppers become clogged much of the runoff flows past the existing inlets on the east end of the bridge and down the side slopes. This causes erosion to both the side slopes and the trail. In the case of the clogged scuppers, the proposed storm sewer will increase the number of inlets and the capacity of the pipe to capture the runoff and minimize flowby and erosion. This added capacity will increase the outlet discharge from that of the existing outlet. Riprap will be used at the outlet to Gun Club Lake to prevent future erosion.

- The discharge rates from the storm sewer located between the River Bridge and the TH 13 Bridge are not expected to increase, but would be combined and routed all to Beaver Pond before discharging to Gun Club Lake. Six of the eight existing outlets currently flow directly to Gun Club Lake so the attenuation in Beaver Pond would decrease the discharges to Gun Club lake from the existing condition. Riprap will also be used at the outlet to Beaver Pond to prevent future erosion.

- The discharge rates from the storm sewer on the west end of the TH 13 River Bridge would increase to capture the flowby occurring in the existing condition (similar to the River Bridge, but to a far lesser degree). This flowby runs past the single line of inlets, and discharges down the side slopes causing erosion issues. This will flow to Beaver Pond through an existing storm sewer that serves MnDOT's right of way east of TH 13 to east of I35E.

- Beaver Pond receives flows from a large amount of MnDOT right of way and some offsite as mentioned above. The additional area being rerouted to the pond rather than directly to Gun Club Lake will flow through to the pond very quickly since it is generated from paved surfaces. This flow will start working through the pond much sooner than the rest of the contributing area to the east.

- With no overall increase in impervious and the improvements to route additional roadway drainage area through Beaver Pond, the overall discharge to Gun Club Lake and then to the Minnesota River should not increase from existing conditions. Therefore the District's rate control requirements would not apply.

The LMRWD commends MnDOT's effort to increase the amount of storm water treated through replacement of the projects storm sewer system and reduce the potential for erosion and sediment reaching water resources within the Minnesota River Basin. Please notify the LMRWD if proposed plans change.

If you have any question please do not hesitate to contact me.

Sincerely,

Linda Loomis
Administrator
Lower Minnesota River Watershed District
naiadconsulting@gmail.com
763-545-4659

I-494: Airport to Highway 169

Water Resources Stakeholder Meeting Minutes

Location: City of Richfield, Heredia Room

Date: 22 October 2018

Time: 2:00-4:00 p.m.

Agenda

1. Introductions
    a. A project kick-off meeting was held at the City of Richfield Municipal Center and attended by representatives from the Lower Minnesota River Watershed District, Nine Mile Creek Watershed District, City of Richfield, City of Bloomington, City of Edina, SEH, HZ United, Army Corps of Engineers and MnDOT. See attached sign-in sheet [pending Meeting Minutes Final Version].

2. Project Overview
    a. Introduction of project partners and responsibilities
    b. Limits of corridor
        i. I-494 from the Minnesota River by the Minneapolis/St. Paul International Airport to Highway 169 in the City of Bloomington.
    c. Infrastructure in the corridor has been identified as requiring preservation works. The infrastructure needs include the following:
        i. Major concrete pavement rehabilitation
        ii. Bituminous mill and overlay
        iii. Addition of MnPASS lanes and/or auxiliary lanes
        iv. Interchange reconfigurations
        v. Bridge replacements or rehabilitation
    d. Specific infrastructure needs:
        i. Expansion of roadway near East Bush Lake Road
        ii. Major pavement rehabilitation
        iii. Retaining wall additions to accommodate roadway expansion
        iv. New construction near France Avenue which will include profile corrections. This location may involve pavement removal to subbase.
        v. Portland Ave. interchange widening to accommodate movements removed from Nicollet area
        vi. Bridge feasibility study. Next steps will include reaching out to stakeholders to help define what bridge typical section should look like.

vii. TH 77 bridge replacement due to widening/reconstruction of I-494
viii. Rehabilitation of I-494 to Minnesota River

e. 2014 Vision Study (SEH)
   i. The State commissioned a vision study for the I-494/I-35W interchanged located in Bloomington, MN to enhance safety and improve congestion that affects traffic operations at the interchange and segments of I-494/I-35W.
   ii. Existing stormwater infrastructure along corridor is aging while lacking capacity and key stormwater management features.
   iii. Vision Study concepts include replacement of bridges and replacement of sections of I-494 over I-35W to accommodate for expansion.
   iv. Bus rapid transport project will have construction impacts (2019-2021).

f. Funding
   i. The funding of the project is $245 million and will include MnPASS lane construction, construction Phase I of interchange, and concrete pavement rehabilitation.

3. Water Resources Design Objectives
   a. Drainage Design Concept (plan & profile)
   b. Permitting
      i. Goal to secure permits before design build contract

4. Permitting Requirements
   a. Lower Minnesota River Watershed District
      i. Rules are currently being written which will address permitting of linear projects. Typically rules rely on cities. Linear projects difficult for cities to regulate. New regulations have not been adopted.
      ii. Large quantity of water enters Minnesota River in this area.
      iii. Historically fallen under District to regulate. Compliance with NPDES permit typically means compliant with Lower Minnesota River Watershed District.
   b. Richfield-Bloomington WMO
      i. RBWMO does not have formal permitting process.
      ii. Linear projects which create more than one acre of impervious will require stormwater management involving volume, rate control and water quality. Applies to net new or additional impervious.
      iii. Wellhead protection area high vulnerability. Wells are located near northern end with subsurface water generally flowing away from wells.
      iv. Stormwater ponds in the area are at capacity. Difficult to convert developed lands to ponds. Priority is finding space for conversion. Location of storage treatment facilities will be a concern.
      v. Capacity past TH 77 will be a challenge. Storage closer to Minnesota River is ideal.

vi. Areas of concern:
    1. Penn Ave pump station down to Penn Lake models indicate system is currently running at capacity.
    2. Limited capacity for additional storage at water bodies along corridor.
    3. Tie in points with capacity issues.

c. Nine Mile Creek Watershed District
    i. District has rules involving linear projects. Any project that creates more than one acre of impervious will require stormwater management involving volume, rate control and water quality.
    ii. Major concern is water capacity issues near East Bush Lake Road.
    iii. Expansion of roadway could encroach in floodplain of Nine Mile Creek.

d. USACE
    i. Wetland delineation is complete.
    ii. USACE will need more information regarding potential impact to aquatic resources when information is available.

5. Questions
6. Open Discussion
    a. City of Edina
        i. Hydraulics west of Highway 100 are critical.
        ii. Northeast quadrant of I-494 and Highway 100 water routes to East Bush Lake Road low point when area is at capacity.
    b. General Concerns
        i. East Bush Lake Road low point
        ii. Potential locations along corridor for treatment
        iii. Collaboration with private land owners a possibility. Next steps include identification of areas for potential public/private coordination.
        iv. Underground storage considered to alleviate capacity issues. 2014 Vision Study explored options. Financial constraints regarding underground storage.
        v. Safety and mobility are high priority. Must improve primary needs and factor in fiscal and Right of Way constraints.
        vi. Portland Avenue experiencing local drainage issues.
        vii. Knox Avenue expansion of ponds discussed.
        viii. City of Bloomington will be active participant in decision making of pond locations outside of MnDOT Right of Way.
        ix. Model coordination is crucial. Protocol should be established due to involvement of multiple parties.
7. Adjournment

Action Items

1. Drainage Area Maps
2. Stakeholder meeting following completion of Drainage Area Maps.

Notes