



JULY						
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AUGUST						
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## RCWD BOARD OF MANAGERS REGULAR MEETING AGENDA

Wednesday, July 9, 2025, 9:00 a.m.

Mounds View City Hall Council Chambers  
2401 County Road 10, Mounds View, Minnesota  
Virtual Monitoring via Zoom Webinar

Join Zoom Webinar:

<https://us06web.zoom.us/j/81134615385?pwd=xEkuqnQaMrqaXW1Ch4TPZOlxkuwbsT.1>

Passcode: 226654

+1 312 626 6799 US (Chicago)

Webinar ID: 811 3461 5385

Passcode: 226654

## Agenda

### CALL TO ORDER

### ROLL CALL

### OPEN MIC/PUBLIC COMMENT

Any RCWD resident may address the Board in his or her individual capacity, for up to three minutes, on any matter not on the agenda. Speakers are requested to come to the podium, state their name and address for the record. Additional comments may be solicited and accepted in writing. Generally, the Board of Managers will not take official action on items discussed at this time, but may refer the matter to staff for a future report or direct that the matter be scheduled on an upcoming agenda.

### SETTING OF THE AGENDA

### APPROVAL OF MINUTES: JUNE 23, 2025, REGULAR MEETING

### CONSENT AGENDA

The following items will be acted upon without discussion in accordance with the staff recommendation and associated documentation unless a Manager or another interested person requests opportunity for discussion:

#### Table of Contents-Permit Applications Requiring Board Action

No.	Applicant	Location	Plan Type	Recommendation
23-059	The Orchard Group, LLC	Dellwood	After-the-fact single-family home build	Post Issued Amended CAPROC 5 items
25-052	Xavis Properties, LLC	Mahtomedi	Final Site Drainage Plan Land Development Wetland Alteration	CAPROC 9 items
25-063	Gregory S. Morenson; Leslie Holt	St. Anthony	Final Site Drainage Plan	CAPROC 6 items

4325 Pheasant Ridge Drive NE #611 | Blaine, MN 55449 | T: 763-398-3070 | F: 763-398-3088 | [www.ricecreek.org](http://www.ricecreek.org)

BOARD OF  
MANAGERS

Jess Robertson  
Anoka County

Steven P. Wagamon  
Anoka County

Michael J. Bradley  
Ramsey County

Marcie Weinandt  
Ramsey County

John J. Waller  
Washington County

*It was moved by Manager \_\_\_\_\_ and seconded by Manager \_\_\_\_\_, to approve the consent agenda as outlined in the above Table of Contents in accordance with RCWD District Engineer's Findings and Recommendations, dated July 1, 2025.*

### **ITEMS REQUIRING BOARD ACTION**

1. Anoka County Ditch 10-22-32 Alternative 4 (Tom Schmidt)
2. Silver Lake Carp Management Contract (Matt Kocian)
3. HEI Task Order 2025-015 Lake Johanna Outlet Structure Feasibility Study (Tom Schmidt)
4. Check Register Dated July 9, 2025, in the Amount of \$185,611.14 Prepared by Redpath and Company

### **ITEMS FOR DISCUSSION AND INFORMATION**

1. District Engineer Updates and Timeline
2. Administrator Updates
3. Manager Updates

## **APPROVAL OF MINUTES: JUNE 23, 2025, REGULAR MEETING**

# DRAFT

For Consideration of Approval at the July 9, 2025 Board Meeting.  
Use these minutes only for reference until that time.

## REGULAR MEETING OF THE RCWD BOARD OF MANAGERS

Monday, June 23, 2025

Mounds View City Hall Council Chambers  
2401 County Road 10, Mounds View, Minnesota  
and

Meeting also conducted by alternative means  
(teleconference or video-teleconference) from remote locations

## Minutes

### CALL TO ORDER

President Michael Bradley called the meeting to order, a quorum being present, at 9:00 a.m.

### ROLL CALL

Present: President Michael Bradley, 1<sup>st</sup> Vice-Pres. John Waller, 2<sup>nd</sup> Vice-Pres. Steve Wagamon, and  
Treasurer Marcie Weinandt

Absent: Secretary Jess Robertson -with prior notice

Staff Present: District Administrator Nick Tomczik, Regulatory Manager Patrick Hughes, Drainage &  
Facilities Manager Tom Schmidt, Project Manager David Petry, Lake and Stream Manager  
Matt Kocian, Operations and Maintenance Inspector Abel Green, Program Technician  
Emmet Hurley (video-conference), Office Manager Theresa Stasica

Consultants: District Engineers Chris Otterness and Adam Nies from Houston Engineering, Inc. (HEI) and  
District Attorney John Kolb from Rinke Noonan

Visitors: Teresa O'Connell, Nyle Zikmund

### OPEN MIC/PUBLIC COMMENT

None.

### SETTING OF THE AGENDA

District Administrator Tomcik explained that staff would like to add 2 agenda items under Items for  
Discussion and Information: #4 - 2026 Stormwater Management Grant Program, and #5 - Open Meeting  
Law Update. He reminded the Board that, with Manager Robertson's absence, they would need to  
appoint a Secretary Pro Tem for today's meeting.

President Bradley asked if Manager Wagamon was willing to step in as Secretary Pro Tem for today's  
meeting.

Manager Wagamon agreed to step in as Secretary Pro Tem.

### **READING OF THE MINUTES AND THEIR APPROVAL**

**Minutes of the June 9, 2025, Workshop and June 11, 2025, Board of Managers Regular Meeting. Motion by Manager Bradley, seconded by Manager Weinandt, to approve the minutes as presented. Motion carried 3-0-1 (Wagamon abstained).**

### **CONSENT AGENDA**

The following items will be acted upon without discussion in accordance with the staff recommendation and associated documentation unless a Manager or another interested person requests the opportunity for discussion:

#### **Table of Contents-Permit Applications Requiring Board Action**

<b>No.</b>	<b>Applicant</b>	<b>Location</b>	<b>Plan Type</b>	<b>Recommendation</b>
25-061	City of White Bear Lake	White Bear Lake	Final Site Drainage Plan	CAPROC 4 items

***It was moved by Manager Weinandt and seconded by Manager Bradley, to approve the consent agenda as outlined in the above Table of Contents in accordance with RCWD District Engineer's Findings and Recommendations, dated June 13, 2025. Motion carried 4-0.***

### **ITEMS REQUIRING BOARD ACTION**

#### **1. Anoka County Ditch 72 – Petition for the Partial Abandonment and Reroute**

Public Drainage & Facilities Manager Schmidt stated that the District had received a petition for a partial abandonment and reroute of segments of the ACD 72 system. He explained that the process in this situation would be for the Board to accept the petition and appoint the District Engineer to review and file a report.

***Motion by Manager Waller, seconded by Manager Weinandt, to adopt Resolution 2025-04 Findings And Order Accepting Petition And Directing Appointment Of Engineer***

#### **ORDER**

- A. The Board of Managers accepts the petition and appoints Houston Engineering to investigate the effect of the proposed action under the standards found in sections 103E.227 and 103E.806 and file a report of findings.**
- B. The Engineer is directed to include in its investigation an assessment of effects from the proposed action to private property which may require Petitioner to acquire flowage or other easements related to the diversion of drainage system waters and realignment of the drainage system, an assessment of the impact of encroachment on right of way of CD 72, an assessment of the impact of the proposed action on the function and integrity of CD 72, and an assessment of the requirements for alternative drainage system easements for the drainage system re-alignment.**
- C. This order is not an approval of the proposed action, nor does it modify the drainage system. Subsequent proceedings on the petition will occur consistent with the requirements of Statutes Sections 103E.227 and 103E.806.**

**ROLL CALL:****Manager Bradley – Aye****Manager Robertson – Absent****Manager Waller – Aye****Manager Weinandt – Aye****Manager Wagamon – Aye****Motion carried 4-0****2. Anoka Washington Judicial Ditch 4 Work Order**

Public Drainage & Facilities Manager Schmidt stated that this item was a work order for Rybak to do some maintenance on JD4 adjacent to Brown's Preserve in Columbus. He stated that the ditch had become so filled with cattails that it needed excavation and explained that the work exceeded delegation and was before the Board because it was such a large maintenance project.

***Motion by Manager Waller, seconded by Manager Bradley, to approve the Public Drainage system repair work order for Rybak Companies for sections of AWJD 4 as outlined and directed by staff in District Drainage Department Repair Report 25-043, estimated at \$59,925.***

Manager Waller noted that he was on this road about a week ago and found it to be a disaster and would not take a tandem truck over the roadway. He stated that part of this work order was to reinforce the berm and remove the upstream weir structure.

Manager Wagamon explained that he had seen the equipment that would be used for this project and found it amazing.

Drainage and Facilities Manager Schmidt noted that the work described by Manager Waller was work that staff would be discussing with the Board at their July Workshop meeting, because that work was separate from what was being presented today. He stated that the work on today's agenda was only in the ditch and was related to previously approved work.

***Motion carried 4-0.*****3. HEI Task Order 2025-008: Old Central Avenue Feasibility Study**

Project Manager Petry stated this item was for a HEI task order to provide a feasibility study to assess potential streambank stabilization and stormwater treatment alternatives along the Lower Rice Creek in Fridley. He explained that this came up as a result of early coordination with Anoka County's transportation division and noted that the County was working on 3 separate projects that were related, including a bridge replacement, road resurfacing, and a regional trail realignment. He noted that the deadline for the task order would be September 30, 2025, and would be assigned to 60-03 within the approved budget amounts.

***Motion by Manager Bradley, seconded by Manager Wagamon, to approve and authorize the Administrator to sign HEI Task Order 2025-008: Old Central Avenue Feasibility Study, not to exceed \$26,000.00. Motion carried 4-0.***

**4. HEI Task Order 2025-011: JD 3 / Clearwater Creek – Channel Restoration Final Plans**

Project Manager Petry stated that this was for a HEI task order for JD3/Clearwater Creek for the channel restoration downstream of Clearwater Creek or the main trunk of AWJD-3. He explained that the District had previously accepted a grant through BWSR's watershed implementation funding for the project, and this was just the task order to complete that work.

District Administrator Tomczik noted that as plans were further developed, it was likely that staff would be back before the Board, presenting information on potential easements, or an additional task order.

District Engineer Otterness stated that this extended into Lino Lakes a bit, so it will go all the way up to 35E and down to Peltier Lake. He explained that the intent would be to review existing easements and try to limit the number of easements that may be needed.

***Motion by Manager Weinandt, seconded by Manager Bradley, to approve and authorize the Administrator to sign HEI Task Order 2025-011: JD 3 / Clearwater Creek – Channel Restoration Final Plans, not to exceed \$110,000.00.***

Manager Weinandt stated that she would be driving up to Rosseau to remind administrators and the watershed districts that this was not BWSR money and was Clean Water Fund money. She asked that the Board be very clear on these projects, where the money was coming from. She asked if they use the project money for the planning if they would go into project implementation money in order to do the work.

District Administrator Tomczik explained that it would be a combination and noted that he felt Manager Weinandt had made a valid point, and staff would make sure to identify the Clean Water Fund in promotional items.

Project Manager Petry stated that the design would be paid out of the Clean Water Fund, which is managed by BWSR. He stated that future construction will be done with either grant funds or other District funds.

President Bradley stated that the District had previously received a report from Houston Engineering with various options, and this was the next step, which was turning that work into an actual plan, including determining final costs, which would come back before the Board for approval.

Manager Waller stated that the Clean Water Fund money would be used for paying for the final plans, but the construction funding has not been totally determined yet. He explained that the construction funding could come from an additional grant or ad valorem taxes.

District Administrator Tomczik noted that the earlier in the watershed that sedimentation can be addressed, the better it is in preventing it from going downstream and into the lake.

***Motion carried 4-0.***

**5. Stream Health Evaluation Program Proposal – Friends of the Mississippi River**

Lake and Stream Manager Kocian stated that he was here to seek authorization from the Board to proceed with a contract with the Friends of the Mississippi River to run the Stream Health Evaluation Program (SHEP) in 2025. He explained that the SHEP is a volunteer monitoring program which had been around since 2006 in order to collect biological data in District streams, specifically macroinvertebrate data. He stated that the biological data collected as part of this program can tell them a lot about the overall health of the system. He noted that the costs for this program had been anticipated and were part of the 2025 budget. He introduced Tere O'Connell, who serves on the Citizen Advisory Committee, who was a long-term volunteer with the SHEP program.

Tere O'Connell explained that she had been with SHEP since the beginning and noted that they have to leave things for the next generation the best they can, and she felt that doing this kind of work means a lot to everyone, and encouraged the Board to continue their support of this program. She stated that most of the volunteers are from the Rice Creek area. She distributed copies of information she had related to SHEP and some of the areas where she had collected data.

Manager Weinandt thanked Ms. O'Connell for her willingness to put on her waders and go out to collect this data.

Lake and Stream Manager Kocian explained that the last part of the volunteer program was identifying the invertebrates in a lab, and noted that there was a quality assurance and quality control process that goes along with it that was administered by Bolton and Menk. He stated that Bolton and Menk have found that the volunteer accuracy has been 95%+, with the most recent years being at 99%.

***Motion by Manager Bradley, seconded by Manager Weinandt, to authorize the Administrator to enter into an agreement with Friends of the Mississippi River for the Stream Health Evaluation Program, for an amount not to exceed \$24,000.00. Motion carried 4-0.***

**6. Ramsey County Ditch 4 Repair – Valdez Final Pay Request**

Public Drainage & Facilities Manager Schmidt stated that this item was the final pay request from Valdez Lawn Care and Snow Removal for the repair work done in 2024 on RCD-4 and to close the contract.

District Administrator Tomczik stated that there were two landowners on the system that had been concerned about the extent of the work and had spoken with the Board at previous meetings.

District Engineer Nies stated that he had a brief presentation regarding the project, but needed a moment to connect and be able to share his presentation materials.

President Bradley suggested that they move ahead on the agenda and approve the check register while he was working on the appropriate connections.

**7. Check Register June 23, 2025, in the Amount of \$226,183.84 and June Interim Financial Statements Prepared by Redpath and Company**

*Motion by Manager Weinandt, seconded by Manager Wagamon, to approve check register dated June 23, 2025, in the Amount of \$226,183.84 and June Interim Financial Statements prepared by Redpath and Company. Motion carried 4-0.*

**ITEMS FOR DISCUSSION AND INFORMATION**

**1. Staff Reports**

**2. July Calendar**

President Bradley noted that there would not be a CAC meeting in July.

Manager Weinandt stated that, depending on what the Board hears about remote participation in meetings, she would not be able to attend the July 7, 2025, Workshop meeting, in person.

**3. Administrator Updates**

District Administrator Tomczik stated that the District had purchased a new trailer to assist in its management of the public drainage system and facilities. He noted that HEI adjusted its ACD 53-62 branch 5 and 6 charge memo consistent with city zoning maps, so there was a slight increase in the potential deferred charges. He explained that there would not be a projects and practices grant from the State this year, which the District had used in the past for capital projects. He stated that there have been a number of issues at Hanson Park with the electrical components of the Iron Enhanced Sand Filter (IESF) and explained that they had discovered some leaking of the penetrations in the vault wall, so the Board would see an approved work order to address ways to keep things dry.

237 Manager Weinandt asked if the District had any assurance from the company that provided the  
238 pumps and equipment, or if there was a limited lifespan on those components.

239  
240 Operations and Maintenance Inspector Green stated that there is a warranty, but much of this was  
241 outside of the warranty because it was a problem with the site and not the equipment.

242  
243 Manager Wagamon stated that he has heard people say that there was a lot of maintenance  
244 involved in running the IESF beds correctly.

245  
246 Operations and Maintenance Inspector Green noted that it was not too awful because when the  
247 phosphorus sits in the beds, the plants gobble it up, which means they can just go pull out the plants  
248 and take them to the County dump, which removes the phosphorus from the system forever. He  
249 stated that there are some locations where it can be a bit more labor-intensive to keep the sand pits  
250 clean.

251  
252 Public Drainage & Facilities Manager Schmidt noted that 2 of the 3 IESFs in the District were now  
253 fully functional.

254  
255 President Bradley noted that District Engineer Nies was able to share his presentation with the  
256 Board, so they would return to Items Requiring Board Action, #6.

257  
258 **ITEMS REQUIRING BOARD ACTION – continued...**

259  
260 **#6 - Ramsey County Ditch 4 Repair – Valdez Final Pay Request – continued....**

261 District Engineer Nies gave a brief presentation outlining the close-out of the RCD-4 repair project.  
262 He reviewed the overall process involved in doing a close-out of a project and explained that the  
263 District had not received the IC-134 forms, so the final payment would be contingent on receipt of  
264 those forms. He reviewed the location of the repair, shared a brief history of the repair project  
265 phasing, timeline of events, and shared photos of the construction process, the current vegetation  
266 establishment in the area, and the bank stabilization between Little Lake Johanna and Lake Johanna.

267  
268 ***Motion by Manager Bradley, seconded by Manager Waller, to approve Valdes Lawn Care and***  
269 ***Snow Removal, LLC's final pay request as submitted and certified by the District Engineer and***  
270 ***directs staff to issue payment of \$19,947.94, contingent upon receipt of the required close-out***  
271 ***submittals, including release of all liens and approval of Form IC-134 forms. Motion carried 4-0.***

272  
273 **ITEMS FOR DISCUSSION AND INFORMATION – continued...**

274  
275 **4. 2026 Stormwater Management Grant Program**

276 Program Manager Petry stated that it was budget season, and they had recently been discussing  
277 regional stormwater pond maintenance and street sweeping. He explained that, historically, the

Stormwater Management Grant program guidelines identified maintenance activities that restore a BMP to its original function or repair it to its original design as ineligible for funding through this program. He stated that the Board struck this language from the 2025 program guidelines and asked if there was consensus of the Board to expound on this to also include regional stormwater pond maintenance in this program. He stated that if there was consensus from the Board, staff could begin working on developing the appropriate program.

District Administrator Tomczik clarified that this would also include the potential for the street sweeping aspect within the existing District grant program.

The Board discussed regional stormwater pond maintenance and street sweeping. President Bradley stated that previous meetings on the issue the Board position was that the District does not want to clean ponds or sweep streets but they want to be good partners.

District Administrator Tomczik stated that he wanted to be clear about staff's position because the Workshop discussion had included the idea that this program would be the vehicle to undertake the work, and thanked the Board for their input to clarify what the potential grant language would be.

## 5. Open Meeting Law Update

District Attorney Kolb stated that the legislature this year revisited the Open Meeting Law and made some substantial changes to provisions dealing with remote attendance at meetings with interactive technology. He explained that they took away the limitation on the number of times in a year where a member can participate remotely, the requirement for the location to be open and accessible to the public, and the specific notice requirements for the remote location. Now, when the Board adopts their regular meeting schedule it can include a general statement that or more Managers may attend from remote locations. He noted that this was not a privilege of Managers to be able to attend remotely, but of the organization, to allow the remote attendance. He stated that the Board should look at their current policy to ensure it was consistent with the current law and that the Board adopt something that they were comfortable with in terms of their control, management, or limitations, on the opportunity to attend remotely. He suggested that the Board revoke the prior policy, because then the Statute would apply and would allow the District time to make modifications. He explained that if they chose to do this, for example, Manager Weinandt could attend remotely when she is traveling at the beginning of July.

***Motion by Manager Waller, seconded by Manager Wagamon, to revoke the current policy related to remote attendance by interactive technology and follow the current State Statutes. Motion carried 4-0.***

District Attorney Kolb noted that the District has been served with a Torrens title registration matter in Anoka County. He explained that the County recognized that the District has an easement on the property from a prior permit and recommended that it be included in the Certificate of Title as

319 finally issued. He stated that the District did have to appear even if it was just to say that they  
320 agreed with the title examiner's recommendation, but would like to reserve their right to defend  
321 their interests, if others objected to its inclusion in the Certificate of Title. He noted that the  
322 applicant agrees with the recommendation, so there should be nothing that they have to do unless  
323 any of the other parties object to the District's interest. He explained that he did not have the  
324 actual documents in question yet, so he was not sure of the nature of this easement.

325  
326 District Administrator Tomczik noted that the District had seen this kind of situation before and  
327 explained that it typically involved a stormwater BMP that the landowner has placed on the  
328 property, and recognized the District's authority and interest in it.

329  
330 Manager Weinandt stated that there were easements on many properties along the ditch system  
331 and asked if they see this kind of thing on the transfer of properties along the ditch systems.

332  
333 District Attorney Kolb stated that this was not a transfer and was the landowner having the  
334 opportunity to take their title and convert it to a Torrens Certificate, which gives the landowner a  
335 different level of security in terms of title to their property and eliminates a lot of unknown claims.

336  
337 **6. Manager Updates**

338  
339 **ADJOURNMENT**

340 ***Motion by Manager Waller, seconded by Manager Wagamon, to adjourn the meeting at 10:20 a.m.***

341 ***Motion carried 4-0.***

## CONSENT AGENDA

The following items will be acted upon without discussion in accordance with the staff recommendation and associated documentation unless a Manager or another interested person requests opportunity for discussion:

### Table of Contents-Permit Applications Requiring Board Action

No.	Applicant	Location	Plan Type	Recommendation
23-059	The Orchard Group, LLC	Dellwood	After-the-fact single-family home build	Post Issued Amended CAPROC 5 items
25-052	Xavis Properties, LLC	Mahtomedi	Final Site Drainage Plan Land Development Wetland Alteration	CAPROC 9 items
25-063	Gregory S. Morenson; Leslie Holt	St. Anthony	Final Site Drainage Plan	CAPROC 6 items

*It was moved by Manager \_\_\_\_\_ and seconded by Manager \_\_\_\_\_, to approve the consent agenda as outlined in the above Table of Contents in accordance with RCWD District Engineer's Findings and Recommendations, dated July 1, 2025.*

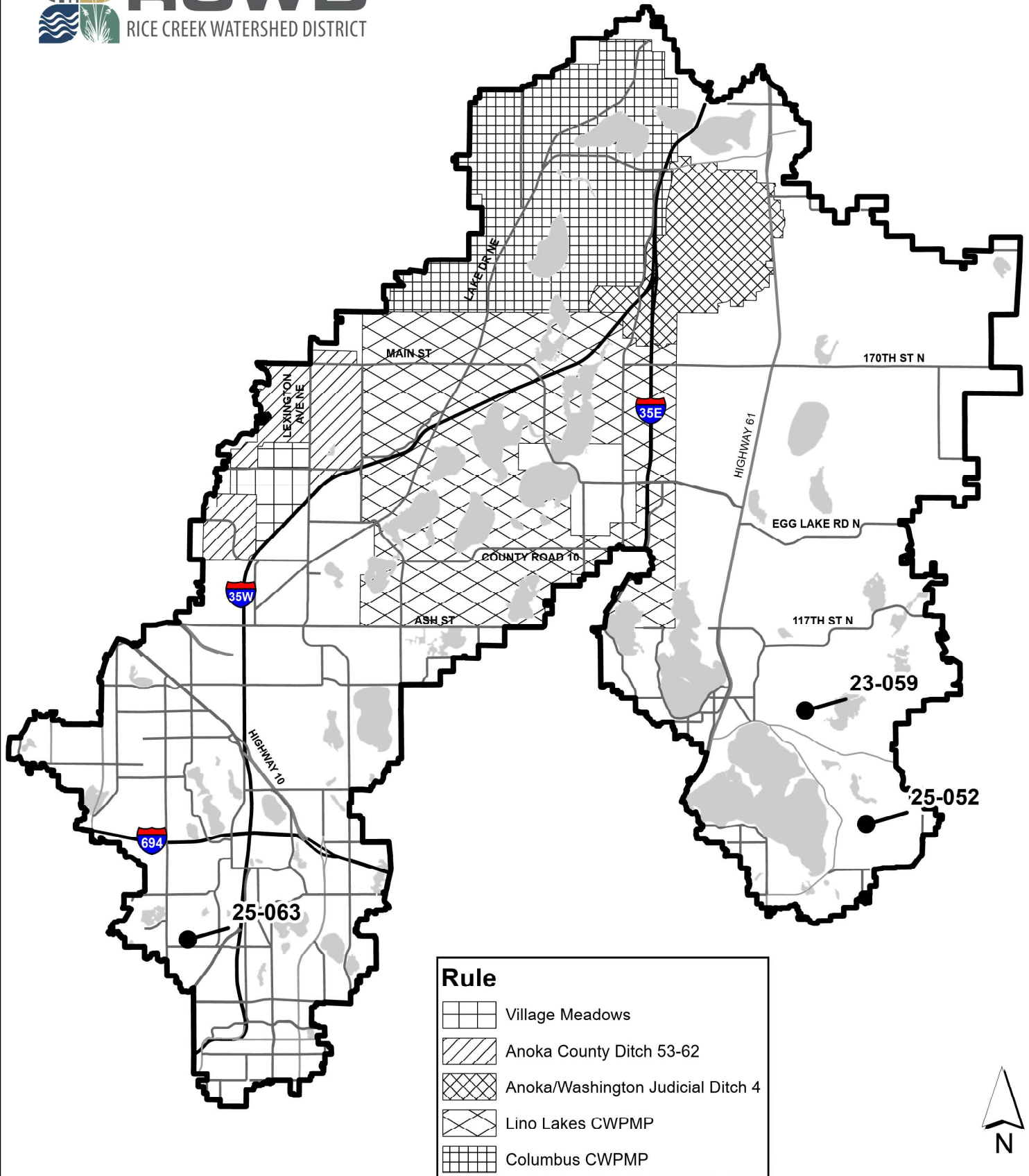
**RICE CREEK WATERSHED DISTRICT  
CONSENT AGENDA**






**July 7, 2025**

It was moved by \_\_\_\_\_ and seconded by \_\_\_\_\_  
\_\_\_\_\_ to Approve, Conditionally Approve Pending Receipt  
Of Changes, or Deny, the Permit Application noted in the following Table of Contents, in  
accordance with the District Engineer's Findings and Recommendations, as contained in  
the Engineer's Findings and Recommendations, as contained in the Engineer's Reports  
dated July 1, 2025.

**TABLE OF CONTENTS**

<b>Permit Application <u>Number</u></b>	<b><u>Applicant</u></b>	<b>Page</b>	<b>Recommendation</b>
Permit Location Map		15	
23-059	The Orchard Group, LLC	16	Post Issued Amended CAPROC
25-052	Xavis Properties, LLC	22	CAPROC
25-063	Gregory S. Morenson; Leslie Holt	28	CAPROC



Rule	
	Village Meadows
	Anoka County Ditch 53-62
	Anoka/Washington Judicial Ditch 4
	Lino Lakes CWPMP
	Columbus CWPMP

**Permit Reviews**  
**07/09/2025 Agenda**

0 1 2 4 Miles



WORKING DOCUMENT: This Engineer's report is a draft or working document of RCWD staff and does not necessarily reflect action by the RCWD Board of Managers.

Permit Application Number:

23-059

Permit Application Name:

40 Apple Orchard Road Single-family Home

Applicant/Landowner:

The Orchard Group LLC  
Attn: Jacob Peulen  
10555 114th Street N  
Stillwater, MN 55082  
Ph: 651-428-8421  
jake.peulen@gmail.com

Permit Contact:

BCD Homes  
Attn: Doug Johnson  
200 Chestnut St E STE 403  
Stillwater, MN 55082  
Ph: 651-274-1894  
doug@bcdhomes.com

Project Name: 40 Apple Orchard Road Single-family Home

Purpose: After-the-fact single-family home build

Site Size: 2.67± acre parcel / ~~0.56~~ 2± acre of disturbed area; existing and proposed impervious areas are 0.11± acres and ~~0.22~~ 0.41± acres, respectively

Location: 40 Apple Orchard Road, Dellwood

T-R-S: NE ¼, Section 7, T31N, R21W

District Rule: C, D

Amendment – This permit application was originally issued on 9-29-2023. It was noted during construction that additional impervious area was added to construct a bocce ball court, pool, pool house and deck. The project exceeds 10,000 square feet of impervious area (excluding the driveway), and thus triggers Rule C. The District Engineer finds this does constitute a substantial change and the permit amendment must be approved by the board. All new text has been *italicized*.

Recommendation: Post Issued Amended CAPROC

It is recommended that this Permit Amendment be given Conditional Approval Pending Receipt of Changes (CAPROC) and outstanding items related to the following items.

Administrative

1. *Submit a copy of the recorded plat or easements establishing drainage or flowage over stormwater management facilities, stormwater conveyances, ponds, wetlands, on-site floodplain up to the 100-year flood elevation, or any other hydrologic feature (if easements are required by the City of Dellwood).*
2. *The applicant must submit a Draft Declaration for Maintenance of Stormwater Management Facilities acceptable to the District for proposed onsite stormwater management and pretreatment features.*
3. *The applicant must provide an attested copy of any and all signed and notarized legal document(s) from the County Recorder. Applicant may wish to contact the County Recorder to determine recordation requirements prior to recordation.*
4. *The applicant must submit a cash surety of \$2,500 (\$3,500 total less the submitted \$1,000) along with an original executed new or revise escrow agreement acceptable to the District. If the applicant*

*desires an original copy for their records, then two original signed escrow agreements should be submitted. The surety is based on \$1,500 for 2 acres of disturbance, and \$2,000 for 3,957 CF of storm water treatment.*

5. *The applicant or contractor must provide a construction schedule for the underground system (or communicate when the schedule will be provided). A note shall be added to the final plans to contact the RCWD inspection prior to the installation. See Stipulation 2.*

Stipulations:     *The permit will be issued with the following stipulations as conditions of the permit. By accepting the permit, applicant agrees to these stipulations:*

1. *Provide an as-built survey of all stormwater BMPs (ponds, rain gardens, trenches, swales, etc.) to the District for verification of compliance with the approved plans before return of the surety.*
2. *RCWD inspector must be notified prior to installation of underground system.*

Exhibits:

1. *Final plan set (Rev 5) containing 6 sheets, dated and received 6-26-2025.*
2. ~~*Site plan dated 9-15-2023 and received 9-20-2023.*~~
3. *Permit application dated 9-15-2023 and received 9-20-2023.*
4. *Revised stormwater management report, dated and received 6-26-2025, containing narrative, drainage maps, HydroCAD report for the 2-year, 10-year, and 100-year rainfall events for proposed and existing conditions and geotechnical report (dated 6-18-2025)*
5. *Revised stormwater management report, dated and received 6-25-2025, containing narrative, drainage maps, HydroCAD report for the 2-year, 10-year, and 100-year rainfall events for proposed and existing conditions and geotechnical report (dated 6-18-2025)*
6. *Revised stormwater management report, dated and received 6-20-2025, containing narrative, drainage maps, HydroCAD report for the 2-year, 10-year, and 100-year rainfall events for proposed and existing conditions and geotechnical report (dated 6-18-2025)*
7. *Stormwater management report, dated and received 5-6-2025, containing narrative, drainage maps, HydroCAD report for the 2-year, 10-year, and 100-year rainfall events for proposed and existing conditions.*
8. *Joint application form, signed 03-22-2025 and received 03-31-2025.*
9. *Wetland impact plan sheet, dated 02-19-2025 and received 03-31-2025.*
10. *Review file 22-193R.*

Findings:

1. Description – *The project includes after-the-fact construction of a home extension, pool, patio, and septic in addition to a pool, pool house and bocce ball court on a 2.67± acre parcel located in Dellwood. The project will increase the impervious area from 0.11± acres and ~~0.22~~ 0.41± acres and disturb ~~0.56~~ 2± acres overall. The property sits on a high point that drains north, east, and south to adjacent lower elevations and wetlands. Bald Eagle Lake is the resource of concern. The applicant has submitted a \$300 application fee for a non-Rule C permit and \$1,000 cash surety for 0.56± acres of disturbance. The applicant submitted an additional \$2,700 for a total application fee of \$3,000 for a Rule C permit creating less than 5 acres of new and/or reconstructed impervious surface.*

2. Stormwater – ~~The project proposes less than 10,000 square feet of new and or reconstructed impervious surface; therefore, Rule C does not apply.~~ The applicant is proposing the BMPs as described below for the project:

Proposed BMP Description	Location	Pretreatment	Volume provided	Equivalent area treated	EOF
Underground filtration system	North of Bocce ball court	Sheet flow over grass	3,326± cubic feet	12,687± square feet	957.0
Rain Garden(bio-filtration)	South of pool house near property line	Sheet flow over grass	295± cubic feet	2,095± square feet	951
French Drain (infiltration)	South of house near property line	Sheet flow over grass	337± cubic feet	3,766± square feet	951

Soils on site are primarily HSG D consisting of clays (CL and SC), with one boring indicating HSG B silty sand (SM). The applicant has infiltrated to the extent feasible. The new/reconstructed area is 18,390± square feet. Per Rule C.6(c)(1), the Water Quality requirement is 3,957± cubic feet based on the various BMPs. The equivalent treatment area totals 18,458 square feet. It was derived by dividing the provided volume by the appropriate TP removal factor and shows that treatment was provided in aggregate. The BMPs are appropriately sized for the impervious area draining to them.

Adequate pre-treatment has been provided. Drawdown is expected within 48-hours using an appropriate rate of 0.45 inches per hour for the French Drain and 0.8-inches per hour for the rain garden. The borings extended more than 3-feet below the basin and did not show any indication of a seasonal high water table, which provides a minimum of three feet of separation. The project is located within a DWSM area, but not within the 1-year emergency response zone. 12-inches of sand has been provided above the drain tile for the Rain Garden. The applicant has treated 87% of the required impervious area. Additional TSS removal is not practicable. The applicant has met all the Water Quality requirements of Rule C.6 and the respective design criteria of Rule C.9 (a) and (c).

Point of Discharge	2-year (cfs)		10-year (cfs)		100-year (cfs)	
	Existing	Proposed	Existing	Proposed	Existing	Proposed
To North	0.8	0.7	1.7	1.4	3.5	2.8
To east	1.4	0.9	3.0	2.2	6.5	7.1
To south	1.6	0.7	3.3	1.9	6.7	4.6
To west	0.4	0.4	0.7	0.7	1.3	1.3
Totals*	3.6	2.4	7.5	5.7	15.7	15.6

\*Differences due to time of concentration

The project is not located within the Flood Management Zone. The increase to the east in the 100-year is within tolerance of the model. The applicant has complied with the rate control requirements of Rule C.7.

The applicant has complied with the freeboard requirements of Rule C.9(h).

3. Wetlands – Wetlands were delineated under review file 22-193R with boundary decision issued on 10/10/2023, which remains valid.

The original permit approval did not include any wetland impacts. During construction, additional features were added to the site design including landscaping that will result in filling all of Wetland B

*(27 ft<sup>2</sup> of permanent wetland impact). The wetland is not permanently or semipermanently flooded, is in a less than 50 percent area/county, and is outside of the shoreland protection zone and thus qualifies for the de minimis exemption. A notice of decision was issued on 04-08-2025.*

4. Floodplain – The site is not in a regulatory floodplain.
5. Erosion Control – Proposed erosion control methods include silt fence. All disturbed areas will need to be permanently stabilized with sod, seed, or etc. Erosion and sediment control measures will be maintained by BCD Homes. The project disturbs ~~less~~ more than 1 acre; an NPDES permit ~~not a~~ and SWPPP are required. The project complies with RCWD Rule D requirements. The project is located more than 1 mile from an NPDES-listed water impaired for nutrients.
6. Regional Conveyances – Rule G is not applicable.
7. Public Drainage Systems – Rule I is not applicable.
8. Documenting Easements and Maintenance Obligations – ~~No easements nor maintenance obligation are required for the project.~~ *Applicant must provide a draft maintenance declaration for approval, and a receipt showing recordation of the approved maintenance declaration and the drainage and flowage easements (if required).*
9. Previous Permit Information – Review file 22-193R.

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the state of Minnesota.



07/01/2025

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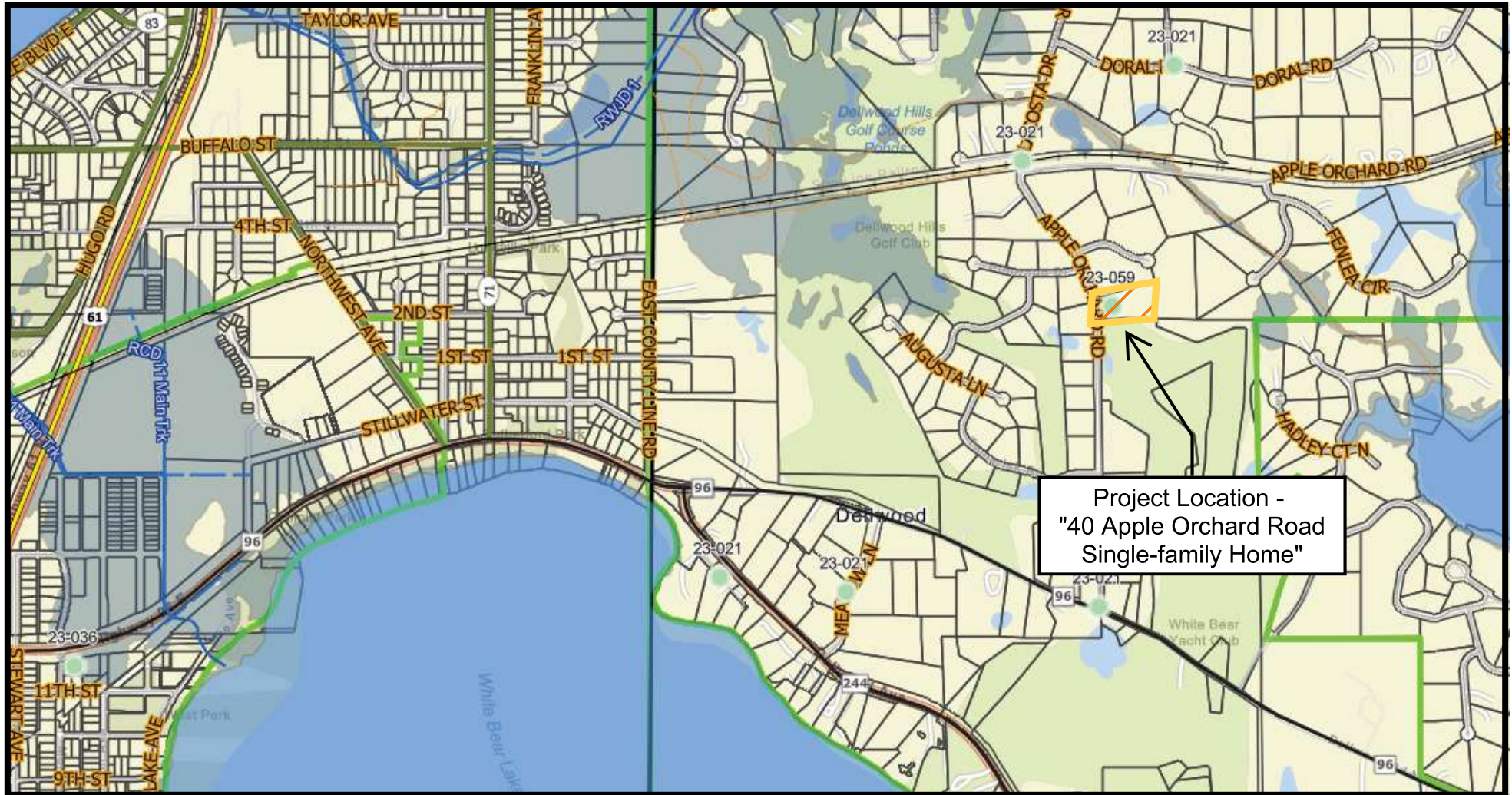
Katherine MacDonald, MN Reg. No 44590



07/01/2025

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Greg Bowles, MN Reg. No 41929



## Legend



Project Location



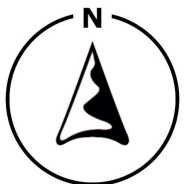
Public Ditch - Open Channel

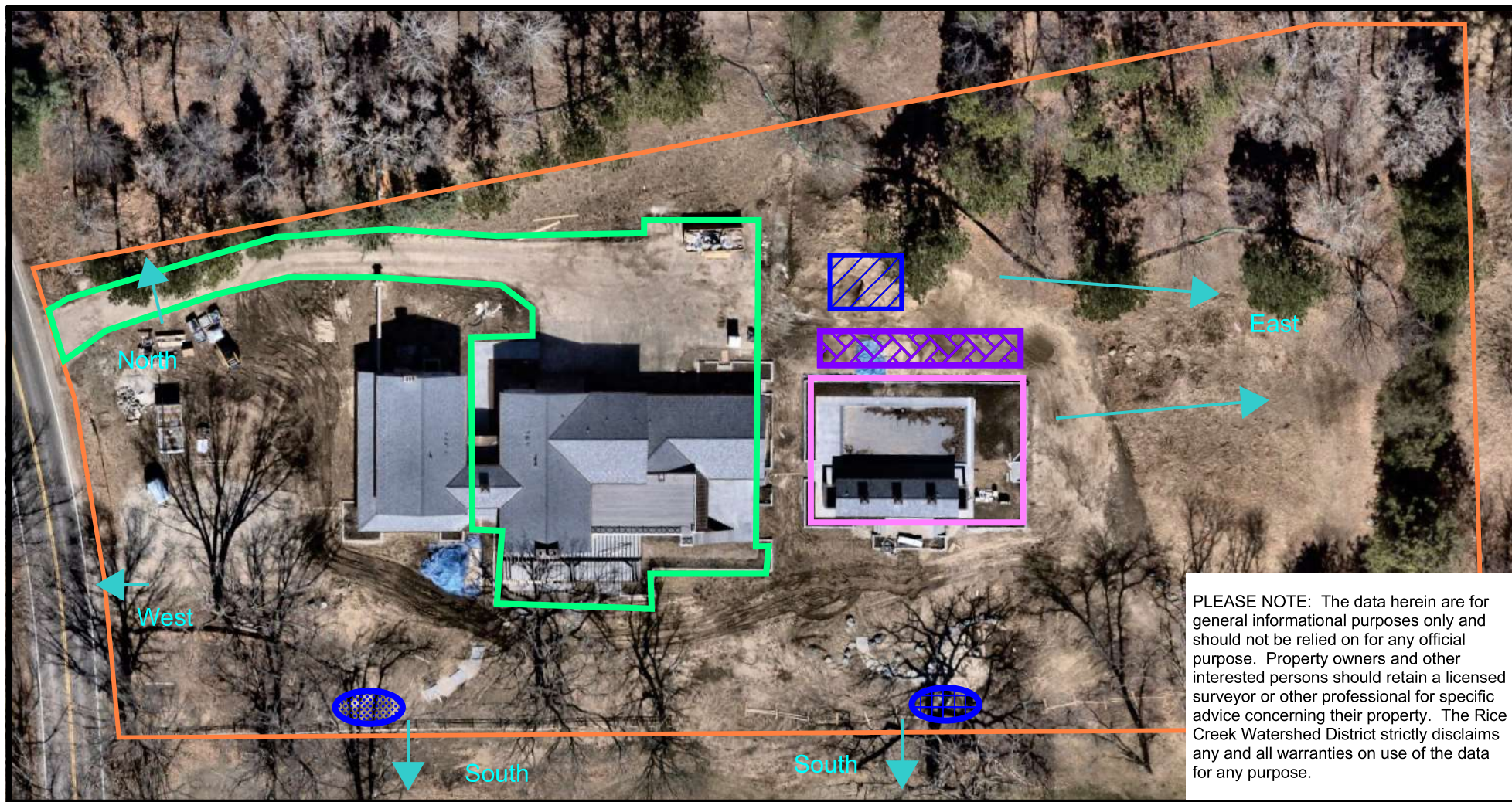


Public Waterway











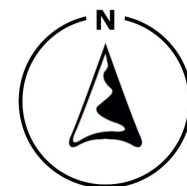
Private Ditch





## Legend

- |  |   |  |  |
|--|---|--|--|
|  Project location |  House addition and drive      |  Pool and pool house |  Drainage Arrow |
|  Bocce ball court |  Underground filtration system |  Rain garden         |  French drain   |





WORKING DOCUMENT: This Engineer's report is a draft or working document of RCWD staff and does not necessarily reflect action by the RCWD Board of Managers.

Permit Application Number:

25-052

Permit Application Name:

1050 East Ave Subdivision

Applicant/Landowner:

Xavis Properties, LLC  
Attn: Pat Fischer  
3647 NE McKinley St NE  
Minneapolis, MN 55418  
Ph: 612-781-3184  
skylinebltrs@outlook.com

Permit Contact:

Larson Engineering, Inc.  
Attn: T.J. Rose  
3524 Labore Road  
White Bear Lake, MN 55110  
Ph: 651-481-9120  
Fx: 651-481-9201  
trose@larsonengr.com

Project Name: 1050 East Ave Subdivision

Purpose: FSD – Final Site Drainage, LD – Land Development, WA – Wetland Alteration; Residential subdivision.

Site Size: 4.79± acre parcel / 3.0 ± acres of disturbed area; existing and proposed impervious areas are 0.41 ± acres and 1.32 ± acres, respectively

Location: 1050 East Ave, Mahtomedi

T-R-S: SE ¼, Section 20, T30N, R21W

District Rule: C, D, F

Recommendation: CAPROC

It is recommended that this Permit Application be given Conditional Approval Pending Receipt of Changes (CAPROC) and outstanding items related to the following items:

Conditions to be Met Before Permit Issuance:

Rule C - Stormwater

1. An outfall structure discharging to a wetland, public water or public water wetland must incorporate a stilling-basin, surge-basin, energy dissipater, placement of ungrouted natural rock riprap or other feature to minimize disturbance and erosion of natural shoreline and bed resulting from stormwater discharges, per Rule C.9(g).
2. TSS must be removed to the extent practicable. Applicant must install a sump at the low spot at East Street or indicate why the installation is not practicable.

Rule D – Erosion and Sediment Control

3. Submit the following information per Rule D.4:
  - (b) Tabulation of the construction implementation schedule.
  - (c) Name, address and phone number of party responsible for maintenance of all erosion and sediment control measures.
  - (d) Quantification of the total disturbed area.

(h) Provide documentation that an NPDES Permit has been applied for and submitted to the Minnesota Pollution Control Agency (MPCA).

(i) A Storm Water Pollution Prevention Plan for projects that require an NPDES Permit.

Rule F – Wetland Alteration

4. Applicant must provide shape file of wetland boundaries; a condition of approval of the type and boundary delineation.

Administrative

5. Email one final, signed full-sized pdf of the construction plan set. Include a list of changes that have been made since approval by the RCWD Board. Final plans must include the following:
  - Ensure the datum is labeled.
6. Submit a copy of the recorded plat or easements establishing drainage or flowage over stormwater management facilities, stormwater conveyances, ponds, wetlands, on-site floodplain up to the 100-year flood elevation, or any other hydrologic feature (if easements are required by the City of Mahtomedi).
7. The applicant must submit a Draft Declaration for Maintenance of Stormwater Management Facilities acceptable to the District for proposed onsite stormwater management and pretreatment features.
8. The applicant must provide an attested copy of any and all signed and notarized legal document(s) from the County Recorder. Applicant may wish to contact the County Recorder to determine recordation requirements prior to recordation.
9. The applicant must submit a cash surety of \$4,300 along with an original executed escrow agreement acceptable to the District. If the applicant desires an original copy for their records, then two original signed escrow agreements should be submitted. The surety is based on \$2,000 for 3.0 acres of disturbance, \$2,300 for 4,608 CF of storm water treatment.

Stipulations: The permit will be issued with the following stipulations as conditions of the permit. By accepting the permit, applicant agrees to these stipulations:

1. Provide an as-built survey of all stormwater BMPs (ponds, rain gardens, trenches, swales, etc.) to the District for verification of compliance with the approved plans before return of the surety.
2. Provide an as-built survey of wetland boundaries, quantifying the wetland impact area for verification of compliance with the approved plans

Exhibits:

1. Revised plan set containing 5 sheets dated 6-20-2025 and received 6-20-2025
2. Permit application, dated 5-19-2025 and received 5-28-2025.
3. Revised Stormwater Calculations, dated 6-20-2025 and received 6-20-2025, containing narrative, drainage maps, HydroCAD report for the 2-year, 10-year, and 100-year rainfall events for proposed and existing conditions.
4. Stormwater Calculations dated 5-16-2025 and received 5-16-2025, containing narrative, drainage maps, HydroCAD report for the 2-year, 10-year, and 100-year rainfall events for proposed and existing conditions.
5. De minimis exemption memo, dated and received 5-7-2025.

6. Joint application form, signed 4-29-2025 and received 5-7-2025.
7. Draft geotechnical boring logs dated 4-11-2025 and received 5-16-2025.
8. Review file 24-092R & 25-061R.

Findings:

1. Description – The project proposes to construct a subdivision with 6 total lots and an extension of East Street on a 4.79± acre parcel located in Mahtomedi. The project will increase the impervious area from 0.41± acres to 1.32± acres and disturb 3.0± acres overall. A portion of the project drains to a proposed onsite infiltration basin to the northwest before discharging west to an existing wetland. A portion of the new and reconstructed road discharges directly to the wetland to the west. A small portion of the undisturbed site is discharged to the east. All ultimately drain to Long Lake, the Resource of Concern. The applicant has submitted a \$3,000 application fee for a Rule C permit creating less than 5 acres of new and/or reconstructed impervious surface.
2. Stormwater – The applicant is proposing the BMPs as described below for the project:

Proposed BMP Description	Location	Pretreatment	Volume provided	EOF
Surface infiltration basin	Northwestern property line	Sump in CBMH	4,898± cubic feet below the outlet	992.75

Soils on site are primarily HSG B consisting of silty sands (SM). Thus, infiltration is considered feasible and infiltration is acceptable to meet the water quality requirement. Per Rule C.6(c)(1), the Water Quality requirement is 1.1-inches over the new/reconstructed area (1.15± acres) for a total requirement of 4,608± cubic feet.

Adequate pre-treatment has been provided. Drawdown is expected within 48-hours using an appropriate rate of 0.45 inches per hour. The seasonal high-water table is estimated at elevation 983.5, which provides a minimum of three feet of separation. The project is located within a DWSM area, but not within the 1-year emergency response zone. The applicant has treated 93% of the required impervious area, which includes 81% flowing to the infiltration basin and 12% which meets the criteria of C.6(f). Applicant must address TSS removal per item 2. Otherwise, the applicant has met all the Water Quality requirements of Rule C.6 and the design criteria of Rule C.9(c).

Point of Discharge	2-year (cfs)		10-year (cfs)		100-year (cfs)	
	Existing	Proposed	Existing	Proposed	Existing	Proposed
East	0.7	0.4	1.4	0.8	3.3	1.9
West	1.0	1.1	3.3	2.6	19.2	17.7
Totals	1.7	1.5	4.7	3.4	22.5	19.6

The project is not located within the Flood Management Zone. The increase to the west for the 2-year event is within tolerance of the model. The applicant has complied with the rate control requirements of Rule C.7.

The applicant has complied with the bounce and inundation requirements of Rule C.8 and the freeboard requirements of Rule C.9(h).

3. Wetlands – Wetlands were delineated under review file 24-092R. A boundary decision was issued on 06-14-2024 which remains valid at the time of this application. The project proposes 1,857 ft<sup>2</sup> of impact to Wetland B to facilitate construction of the roadway. The impacts are to a seasonally

flooded basin in a less than 50 percent area/county and are outside of the shoreland protection zone and thus qualify for the de minimis exemption. A notice of decision was issued on 07-09-2025.

4. Floodplain – The site is not in a regulatory floodplain.
5. Erosion Control – Proposed erosion control methods include silt fence, rock construction entrance, inlet protection and rip rap. The project will disturb more than 1 acre; an NPDES permit is required. The information listed under the Rule D – Erosion and Sediment Control section above must be submitted. Otherwise, the project complies with RCWD Rule D requirements. The project does not flow to a nutrient impaired water (within 1 mile).
6. Regional Conveyances – Rule G is not applicable.
7. Public Drainage Systems – Rule I is not applicable.
8. Documenting Easements and Maintenance Obligations – Applicant must provide a draft maintenance declaration for approval, and a receipt showing recordation of the approved maintenance declaration and the drainage and flowage easements (if required).
9. Previous Permit Information – The wetland boundary for the project was reviewed and approved under file 24-092R.

I assisted in the preparation of this report under the supervision of the District Engineer.

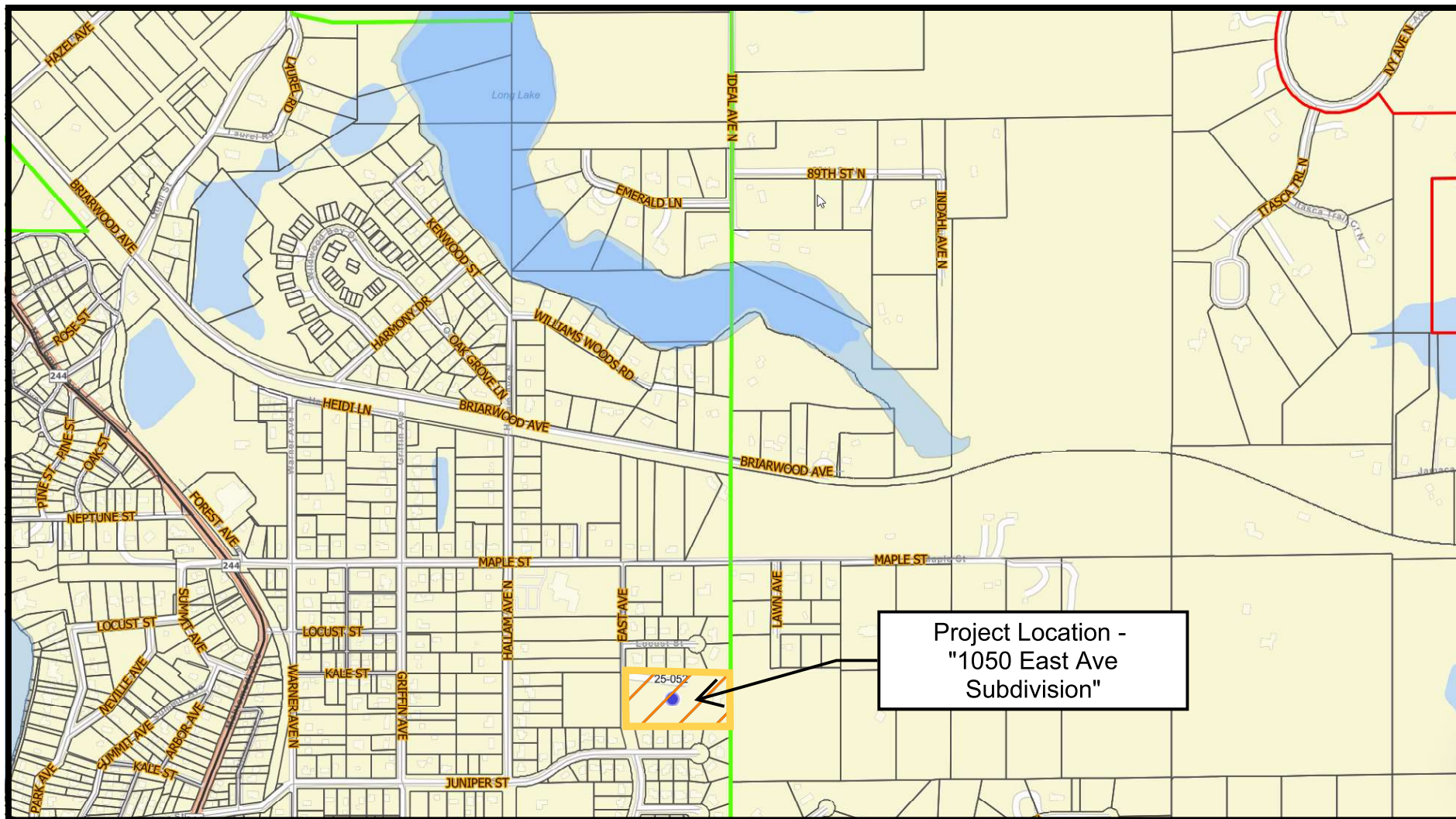
Belle Reeve 07/01/2025

Belle Reeve, EIT

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the state of Minnesota.

K. MacDonald 07/01/2025

Katherine MacDonald, MN Reg. No 44590

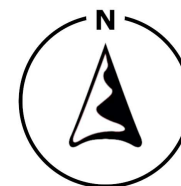


## Legend

 District Boundary

 Project Location

 City Boundary






## Legend

 Project Location

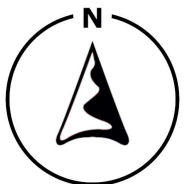
 Proposed Houses

 New/Reconstructed Impervious

 City Boundary

 Infiltration Basin

 Drainage Arrow



Permit Application Number:

25-063

Permit Application Name:

Able View Assisted Living

Applicant/Landowner:

Attn: Gregory S. Morenson; Leslie Holt  
8891 Airport Road, D-12  
Blaine, MN 55449  
Ph: 612-202-1314  
gsmortenson@msn.com

Permit Contact:

Miller Architects and Builders  
Attn: Chris Hogan  
3335 West Saint Germain St  
St. Cloud, MN 56302  
Ph: 320-251-4109  
chrish@millerab.com

Project Name: Able View Assisted Living

Purpose: New 34 unit assisted living, two story, slab on grade building. FSD – Final Site Drainage

Site Size: 0.86± acre parcel / 0.90 ± acres of disturbed area; existing and proposed impervious areas are 0.043 ± acres and 0.460 ± acres, respectively

Location: 0 Foss Road St. Anthony, MN 55421

T-R-S: SE ¼, Section 31, T30N, R23W

District Rule: C, D

Recommendation: CAPROC

It is recommended that this Permit Application be given Conditional Approval Pending Receipt of Changes (CAPROC) and outstanding items related to the following items:

Conditions to be Met Before Permit Issuance:

Rule C - Stormwater

Rule D – Erosion and Sediment Control

1. Submit the following information per Rule D.4:

- (c) Name, address and phone number of party responsible for maintenance of all erosion and sediment control measures.

Administrative

2. Email one final, signed full-sized pdf of the construction plan set. Include a list of changes that have been made since approval by the RCWD Board. Final plans must include the following:
  - Ensure the datum is labeled.
3. Submit a copy of the recorded plat or easements establishing drainage or flowage over stormwater management facilities, stormwater conveyances, ponds, wetlands, on-site floodplain up to the 100-year flood elevation, or any other hydrologic feature (if easements are required by the City of St. Anthony).

4. The applicant must submit a Draft Declaration for Maintenance of Stormwater Management Facilities acceptable to the District for proposed onsite stormwater management and pretreatment features.
5. The applicant must provide an attested copy of any and all signed and notarized legal document(s) from the County Recorder. Applicant may wish to contact the County Recorder to determine recordation requirements prior to recordation.
6. The applicant must submit a surety of \$2,800 along with an original executed escrow agreement acceptable to the District. If the applicant desires an original copy for their records, then two original signed escrow agreements should be submitted. The surety is based on \$1,000 for 0.9 acres of disturbance, \$1,800 for 3,673.56 CF of storm water treatment.

Stipulations: The permit will be issued with the following stipulations as conditions of the permit. By accepting the permit, applicant agrees to these stipulations:

1. Provide an as-built survey of all stormwater BMPs (ponds, rain gardens, trenches, swales, etc.) to the District for verification of compliance with the approved plans before return of the surety.

Exhibits:

1. Plan set containing 7 sheets dated 3-31-2025 and received 6-4-2025
2. MS4 Permit application receipt, received 6-4-2025
3. Stormwater Calculations, dated 3-31-2025 and received 6-4-2025, containing narrative, drainage maps, HydroCAD report for the 2-year, 10-year, and 100-year rainfall events for proposed and existing conditions
4. Geotechnical Report dated 2-10-2025 and received 6-4-2025

Findings:

1. Description – The project proposes to construct assisted living units on a 0.86± acre parcel located in St. Anthony. The project will increase the impervious area from 0.043± acres to 0.460± acres and disturb 0.90± acres overall. The majority of the stormwater runoff will continue to drain to the northeast, draining to a nearby pond (Mirror Pond), while a small part will drain to the west to the roadside ditch. All drainage ultimately flows north to Pike Lake, the resource of concern. The applicant has submitted a \$3,000 application fee for a Rule C permit creating less than 5 acres of new and/or reconstructed impervious surface.
2. Stormwater – The applicant is proposing the BMPs as described below for the project:

Proposed BMP Description	Location	Pretreatment	Volume provided	EOF
Surface (Bio) Filtration Basin (FB1)	East side of parcel	Sumps in CB2 and STMH2	3,830± cubic feet below the outlet	940.1

Soils on site are primarily HSG D consisting of clays (CL). Thus, infiltration is not considered feasible and filtration is acceptable to meet the water quality requirement. Per Rule C.6(c)(1), the Water Quality requirement is 1.69-inches over the new/reconstructed area (0.52± acres) for a total requirement of 3173± cubic feet.

Adequate pre-treatment has been provided. Drawdown is expected within 48-hours using an appropriate rate of 0.80 inches per hour. 18-inches of sand has been provided above the drain tile. The clay soils will provide adequate separation from groundwater. The applicant has treated 100% of

the required impervious area. Additional TSS removal is not required. The applicant has met all the Water Quality requirements of Rule C.6 and the design criteria of Rule C.9(c).


Point of Discharge	2-year (cfs)		10-year (cfs)		100-year (cfs)	
	Existing	Proposed	Existing	Proposed	Existing	Proposed
To pond (NE corner of parcel)	1.2	0.4	2.6	0.8	6.4	4.5
To Road (West edge of parcel)	0.0	0.1	0.1	0.1	0.2	0.2
Totals	1.2	0.5	2.7	0.9	6.6	4.7
80% of existing	1.0		2.1		5.3	

The project is located within the Flood Management Zone. The applicant has complied with the rate control requirements of Rule C.7.

The applicant has complied with the freeboard requirements of Rule C.9(h).

3. Wetlands – There are no wetlands located within the project area.
4. Floodplain – The site is not in a regulatory floodplain.
5. Erosion Control – Proposed erosion control methods include silt fence, erosion control blanket, rock construction entrances, inlet protection and rip rap. The project will disturb less than 1 acre; an NPDES permit nor a SWPPP is required. The SWPPP is located on plan sheet 5. The information listed under the Rule D – Erosion and Sediment Control section above must be submitted. Otherwise, the project complies with RCWD Rule D requirements. The project does not flow to a nutrient impaired water (within 1 mile).
6. Regional Conveyances – Rule G is not applicable.
7. Public Drainage Systems – Rule I is not applicable.
8. Documenting Easements and Maintenance Obligations – Applicant must provide a draft maintenance declaration for approval, and a receipt showing recordation of the approved maintenance declaration and the drainage and flowage easements.
9. Previous Permit Information – No previous permit information was found for this site.

I assisted in the preparation of this report under the supervision of the District Engineer.

  
Christina Traner

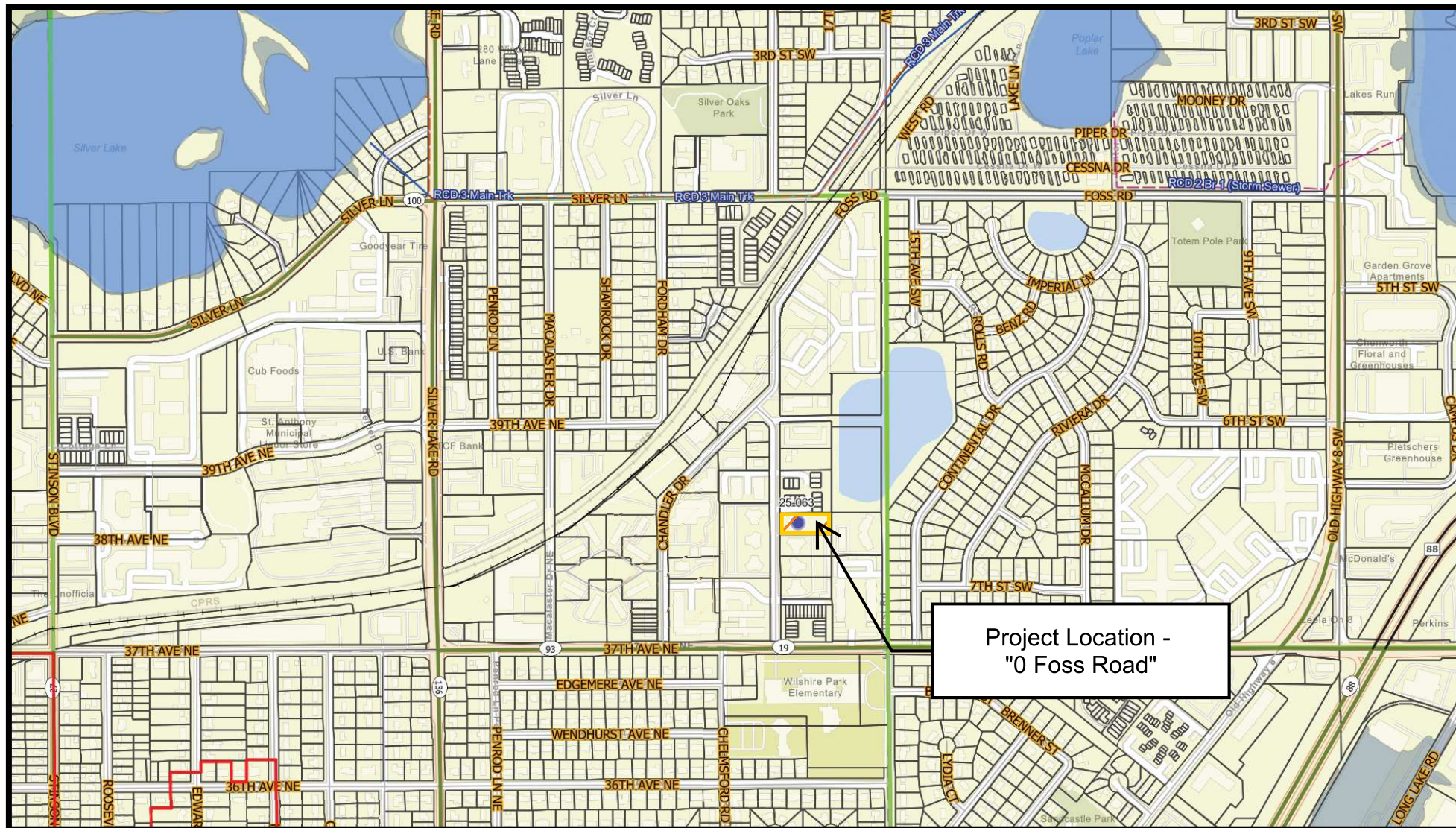
07/01/2025

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the state of Minnesota.

  
Katherine MacDonald

07/01/2025

Katherine MacDonald, MN Reg. No 44590



Project Location -  
"0 Foss Road"

## Legend

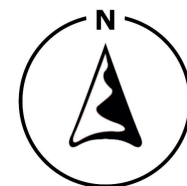
 District Boundary

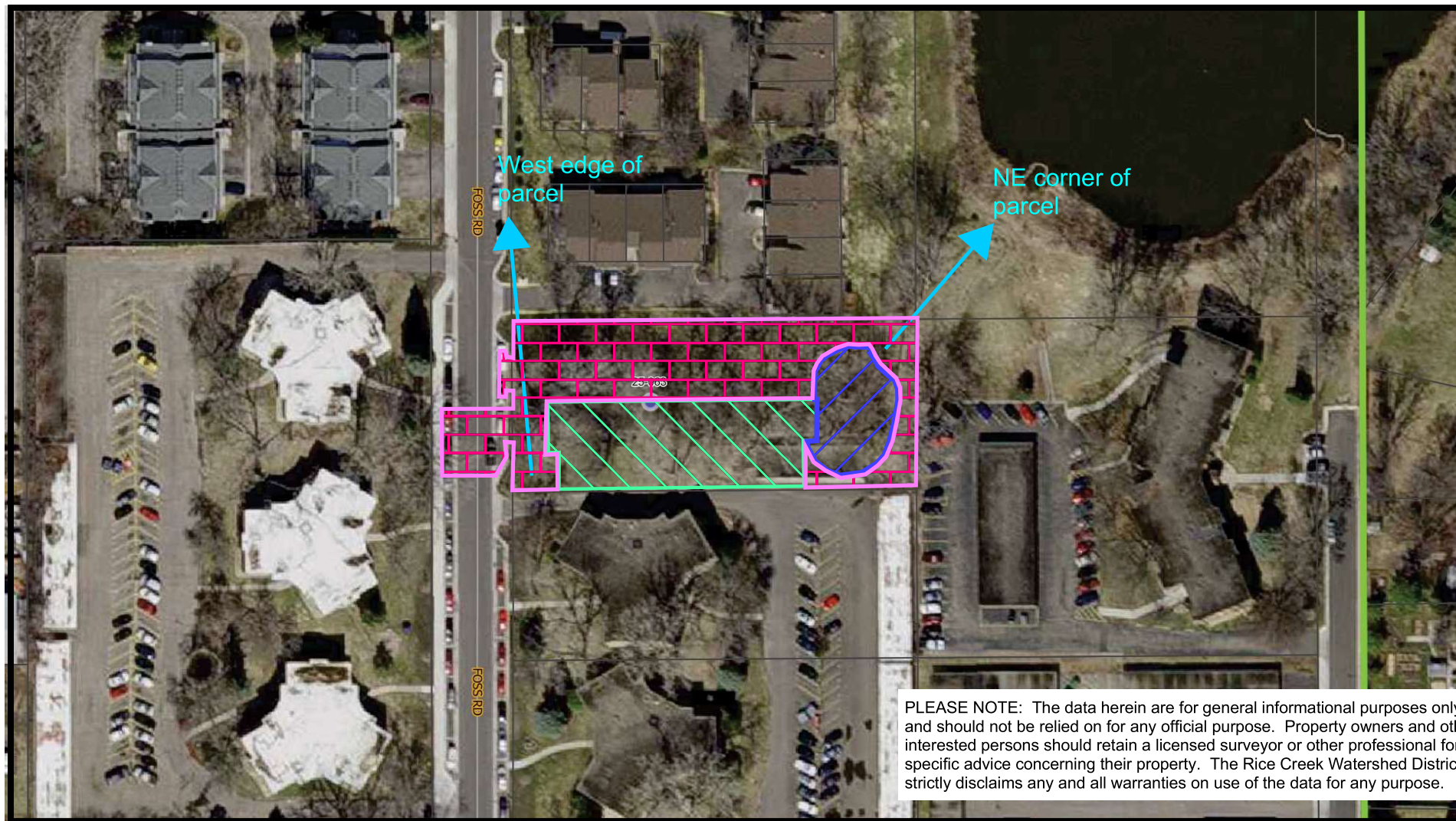
 Project Location

 City Boundary

 Public Ditch - Stormsewer

 Public Ditch - Tile





## Legend

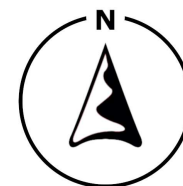
 Biofiltration Basin

 City Boundary

 New/Reconstructed Impervious

 Drainage Arrow

 Proposed Building



## **ITEMS REQUIRING BOARD ACTION**

1. Anoka County Ditch 10-22-32 Alternative 4 (Tom Schmidt)

# MEMORANDUM

## Rice Creek Watershed District



**Date:** June 25, 2025  
**To:** RCWD Board of Managers  
**From:** Tom Schmidt, Drainage & Facilities Manager  
**Subject:** Anoka County Ditch 10-22-32 Alternative #4

---

### **Introduction**

This agenda item is for the Board to act on Alternative #4 for Anoka County Ditch 10-22-32 (ACD 10-22-32), located north of Pine Street.

### **Background**

The Board directed the investigation of Alternative #4 at its June 14, 2023, meeting. At the Board workshop on June 9, 2025, staff and engineers discussed Alternative #4 (ACSIC Option) for ACD 10-22-32, located north of Pine Street, with the Board. Staff are seeking a decision from the Board on Alternative #4. The matter has ongoing landowner, municipal, and county interest; a definitive decision will provide staff with clarity on the Board's position regarding the approach to future management of this section of the public drainage system.

One of the components of Alternative #4, the lowering of the culvert at West Pine Street, has received approval from the Board under the Wetland Conservation Act and is anticipated to be completed as part of maintenance by the end of 2025.

This agenda item was originally intended for the June 11, 2025, Board meeting and was postponed at the request of Manager Wagamon due to his illness.

### **Staff Recommendation**

Staff are seeking the Board's action on Alternative #4 (ACSIC Option).

### **Attachments**

- HEI September 3, 2024, Memo ACD 10-22-32 Repair Alternative 4 Update on Regulatory Engagement
- ACD 10-22-32 Reference Materials
  - HEI January 23, 2023, ACD 10-22-32 Evaluation of Maintenance Alternatives
  - RCWD April 26, 2023, Board Approved Minutes Excerpt (Public Meeting: ACD 10-22-32 Evaluation of Maintenance Alternatives)
  - HEI May 23, 2023, ACD 10-22-32 Summary of Comments Received and Next Steps
  - RCWD June 14, 2023, Board Approved Minutes Excerpt (Board acts to develop Alternative #4)

# Technical Memorandum

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**To:** Nick Tomczik, Administrator  
Rice Creek Watershed District

**Cc:** Tom Schmidt

**From:** Chris Otterness, PE

**Subject:** ACD 10-22-32 Repair Alternative 4  
Update on Regulatory Engagement

**Date:** September 3, 2024

**Project #:** R005555-0332

## INTRODUCTION

The purpose of this memorandum is to summarize findings on the feasibility of proposed repairs to Anoka County Ditch (ACD) 10-22-32, specifically “Alternative 4” identified in the January 23, 2023 memorandum *Anoka County Ditch 10-22-32 Evaluation of Maintenance Alternatives*. On June 14, 2023, the RCWD Board of Managers directed staff to develop maintenance Alternative #4 by:

1. Identifying and quantifying regulatory requirements
2. Assessing the feasibility of the proposed alternative in light of the regulatory requirements; and
3. Engaging with municipal partners, DNR, and other regulatory land use and road authorities as necessary to evaluate the feasibility of maintenance Alternative #4.

## BOARD CONSIDERATION OF REPAIRS<sup>1</sup>

The Board’s consideration of repair options for ACD 10-22-32 involves several requirements of the drainage code and other law. Repair and maintenance obligations under the drainage code require the Board to consider whether “the repairs recommended are necessary for the best interests of the affected property owners”. (103E.705 and .715). Affected property owners include all owners of property benefitted by the drainage system and responsible for costs of the drainage system.

The Board must also consider “conservation of soil, water, wetlands, forests, wild animals, and related natural resources, and to other public interests affected, together with other material matters as provided by law in determining whether the project will be of public utility, benefit, or welfare”. (103E.015, subd. 2).

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<sup>1</sup> The introductory comments in this section were provided by the District’s drainage attorney.

"Public welfare" or "public benefit" includes an act or thing that tends to improve or benefit the general public, either as a whole or as to any particular community or part, including works contemplated by [the drainage code], that drain or protect roads from overflow, protect property from overflow, or reclaim and render property suitable for cultivation that is normally wet and needing drainage or subject to overflow. (103E.005, subd. 27).

The phrase, "other material matters as provided by law" implicates environmental policies and procedures of the state. One requirement, in particular, is the least impact alternative requirement found in the Minnesota Environmental Policy Act (MEPA), statutes chapter 116D. No state action significantly affecting the quality of the environment shall be allowed, nor shall any permit for natural resources management and development be granted, where such action or permit has caused or is likely to cause pollution, impairment, or destruction of the air, water, land or other natural resources located within the state, so long as there is a feasible and prudent alternative consistent with the reasonable requirements of the public health, safety, and welfare and the state's paramount concern for the protection of its air, water, land and other natural resources from pollution, impairment, or destruction. (116D.04, subd. 6).

Another material consideration is the State's water policy -- it is in the public interest to preserve the wetlands of the state to conserve surface waters, maintain and improve water quality, preserve wildlife habitat, reduce runoff, provide for floodwater retention, reduce stream sedimentation, contribute to improved subsurface moisture, enhance the natural beauty of the landscape, and promote comprehensive and total water management planning. (103A.202).

Finally, in considering the scope and extent of repair, the courts recognize additional considerations and obligations. Drainage Authorities have an obligation to maintain ditches in a manner consistent with the policies established by the legislature in various environmental laws.

A clear articulation of this obligation was provided by the Court of Appeals in case brought by McLeod County, in its capacity as drainage authority, against the Minnesota Department of Natural Resources.

The Minnesota Supreme Court has stated: Once a ditch system is established, the order creating it constitutes a judgment in rem. \* \* \* Thereafter, every owner of land who has recovered damages or been assessed for benefits has a property right in the maintenance of the ditch in the same condition as it was when originally established. *Fischer v. Town of Albin*, 258 Minn. 154, 156, 104 N.W.2d 32, 34 (Minn.1960) (quoting *Petition of Jacobson v. Kandiyohi County*, 234 Minn. 296, 299, 48 N.W.2d 441, 444 (1951)).

Thus, the landowners have a right to have the ditch maintained, and it is the [drainage authority] that must undertake the maintenance. However, as a political subdivision of the

state, the [drainage authority] has a greater duty than does a private individual to see that legislative policy is carried out. As a creature of the state deriving its sovereignty from the state, the [drainage authority] should play a leadership role in carrying out legislative policy. *County of Freeborn v. Bryson*, 309 Minn. 178, 188, 243 N.W.2d 316, 321 (Minn.1976). Therefore, when the [drainage authority] undertakes the maintenance of a ditch, pursuant to statute, “it must do so in a way that is consistent with the objectives of the statute and other announced state policies.” *Kasch v. Clearwater County*, 289 N.W.2d 148, 151 (Minn.1980).

The supreme court has stated that Aldo Leopold's “ ‘land ethic simply enlarges the boundaries of the community to include \* \* \* the land.’ ” *In re Application of Christenson*, 417 N.W.2d 607, 615 (Minn.1987) (quoting *Bryson*, 309 Minn. at 189, 243 N.W.2d at 322). The court has reaffirmed that the state's environmental legislation had given this land ethic the force of law, and imposed on the courts a duty to support the legislative goal of protecting our state's environmental resources. Vanishing wetlands require, even more today than in 1976 when *Bryson* was decided, the protection and preservation that environmental legislation was intended to provide. *Id.* Thus, the county has an obligation to maintain the ditch in a manner consistent with the policies established by the legislature in the Act.

*McLeod Cnty. Bd. of Com'rs as Drainage Authority for McLeod Cnty. Ditch No. 8 v. State, Dept. of Natural Resources*, 549 N.W.2d 630, 633–34 (Minn.App.,1996)

In the process of applying all of the above considerations and obligations, courts have concluded that the drainage authority, has discretion to determine the manner in which the ditch will be maintained – including the scope and extent of repair. *Slama v. Pine Cnty.*, No. A07-1091, 2008 WL 1972914 (Minn. Ct. App. May 6, 2008).

In reviewing this memorandum, the Board is strongly encouraged to consider the utility of any proposed action in the context of the above considerations and obligations.

#### ALTERNATIVE 4 COMPONENTS

Maintenance Alternative #4 includes three components:

- a) Lowering of the culvert under Pine Street at the ACD 10-22-32 Main Trunk;
- b) Lowering of the culverts at a driveway west of Jodrell Street (referred to as “137<sup>th</sup> Ave.”); and
- c) Lowering of the culverts at Jodrell Street.

Lowering of the 137th Ave. culverts and Jodrell Street culverts requires regulatory engagement with the Minnesota Department of Natural Resources (DNR) since the culverts serve as the runout for public waters basins and thus changes at the culverts have the potential to impact these basins. Lowering of the Pine Street culvert does not have the potential to impact public waters but does have the potential to impact wetlands regulated under the state Wetland Conservation Act (WCA) and RCWD Rule F.

A memorandum dated October 31, 2023 by Houston Engineering, Inc. (HEI) provided an update on regulatory coordination complete to that date. Since then, additional coordination has occurred including RCWD application for a wetland replacement plan under WCA and DNR review of potential impacts to public waters.

This memorandum describes information gathered for addressing the Board-directed actions and points of consideration when evaluating the viability of maintenance options including balancing benefit and function versus cost and impact.

## **PINE STREET CULVERT**

HEI completed a field delineation of wetlands along ACD 10-22-32 Main Trunk from Pine Street to 137<sup>th</sup> Ave. in September 2023. RCWD staff submitted the delineation report to the local government unit (LGU) in October 2023 for concurrence review. The technical evaluation panel (TEP) concurred with the delineation and RCWD approved the application.

HEI then prepared a wetland replacement plan which was submitted by RCWD staff to the LGU on May 17, 2024. The replacement plan includes mitigating 1.018 acres of wetland impact by withdrawing 2.036 acres of wetland credits from the Browns Preserve wetland bank. During the comment period, DNR staff provided correspondence indicating that rare plants have been identified within the vicinity of the project, and that a rare plant survey would be required.

The proposed work is entirely within the roadway and ditch which are exempt from endangered species permitting requirements per Minnesota Statute 84.0895 subd. 2(a)(1). The associated wetland drainage does not have the potential for a rare plant takings. Therefore, a rare plant survey is unnecessary and is not a reasonable use of public dollars. RCWD staff and its consultants are in discussion with DNR to address their concerns. The RCWD as LGU will then consider the wetland replacement plan prior to proceeding with culvert lowering. RCWD staff intends to complete this work once the replacement plan is complete and as soon as lowered water levels are conducive to the work.

## **137TH AVE. AND JODRELL STREET CULVERTS**

### ***DNR ENGAGEMENT***

RCWD and HEI staff have had multiple interactions with DNR staff including meetings and exchanges of information (including modeling with additional detail) to inform DNR's consideration of the Alternative 4 repair and associated Public Waters regulation. DNR summarized its review within a letter dated July 10, 2024 (attached). The following is a summary of DNR's conclusions from this letter and other DNR correspondence related to this matter:

- A Letter of Permission from the DNR is required to complete the lowering of the 137<sup>th</sup> Ave. and Jodrell Street culverts as described in Alternative 4.

- A Letter of Permission will only be granted if the repair plan includes actions by the RCWD to mitigate impacts to the public waters.
- The state statute and rules are not prescriptive on how “impact” is to be evaluated for the proposed lowering of the culverts, and due to the rarity of such requests DNR does not have policy or substantial case history on the quantification of impacts. For this repair, DNR has considered the extent of inundation from the 2-, and 10-year rainfall events under existing and proposed (repaired conditions). Based on the model data and comparison to available storage, DNR has predicted 7.3 acres of impacts to wetlands resulting from Alternative 4.
- Likewise, state public waters laws are not specific on how public waters are to be mitigated. However, DNR staff has indicated that a starting point for mitigation is to utilize WCA requirements, though they may consider alternative mitigation approaches. Under WCA requirements, impacts to wetlands at this location would require replacement at a 2:1 ratio, or 14.6 acres in total. This could potentially be mitigated using the District’s Browns Preserve wetland bank.
- As impacts within a public water are predicted to exceed 1 acre, an Environmental Assessment Worksheet (EAW) would be required. The responsible government unit (RGU) for considering the EAW could either be the District or DNR. Prior to proceeding with development of an EAW, the DNR recommends a meeting for concurrence on process and which entity is best situated to serve as RGU.

### *COSTS AND IMPACTS OF LOWERING 137<sup>TH</sup> AND JODRELL STREET CULVERTS*

A Preliminary Opinion of Probable Construction Cost (POPCC) was developed for the recommended repairs and is included as **Appendix B. Table 1** displays a summary of project costs.

**Table 1: Anticipated Costs for Lowering 137<sup>th</sup> and Jodrell St. Culverts**

Category	Cost
Construction	\$80,000
Construction Engineering	\$25,000
EAW	\$25,000
Rare species survey	\$20,000
DNR Regulatory coordination	\$20,000
Legal/staff time	\$5,000
<b>Total</b>	<b>\$175,000</b>

1. Notes on Cost  
Construction cost includes salvaging of four culverts, reinstalling the culverts, and extending the culverts to match the road slope. Also includes curb and gutter replacement, road pavement restoration, turf restoration, and traffic control
2. Engineering cost includes plan development, staking, and contract management.

3. EAW costs include cultural resource review, EAW text preparation, and response to comments.
4. DNR regulatory coordination includes preparation of a request for letter of permission; accompanying justification, and one meeting with DNR staff

In addition to these monetary costs, the work may require up to 14.6 credits of banked wetland credits from the District's Browns Preserve wetland bank. These credits cost roughly \$12,000 per acre to generate, though the present-day value of the credits is likely substantially greater as the cost of developing wetland banks continues to rise. Market value of wetland credits in the north metro is as high as \$100,000 / acre. Based on this range of credit cost, the value of the wetland credits needed for the lowering of these culverts ranges from \$175,000 to \$1,400,000.

Note that the cost estimate includes a rare species survey (which likely will be a required component of an EAW and/or DNR approval) but does not include the cost of a rare species taking permit (which may or may not be required depending on where and what type of rare species are identified).

#### *BENEFITS OF LOWERING 137<sup>TH</sup> AND JODRELL STREET CULVERTS*

Lowering the 137<sup>th</sup> St. and Jodrell St. culverts consistent with Alternative 4 will restore drainage function in the ACD 10-22-32 Main Trunk as close as possible to the condition as it was originally constructed in 1898 (as constructed and subsequently improved condition – ACSIC), noting that climatic variations and land use has placed additional burdens on the system that did not exist at the time of original establishment.

However, this work is not anticipated to convert wetland into non-wetland or significantly change the potential uses of adjacent lands. The peak water levels for the 2- and 10-year rainfall events on the properties potentially affected by the lowering of these culverts is wholly contained within a designated Public Water (see **Figures 1 and 2**). As such, most modifications to these lands that would enable a different land use would require a permit from the DNR. Further, given the position of these wetlands within a much larger wetland complex, numerous other complexities exist that make modification of these lands for a different land use expensive and improbable. As such, it is unlikely that any significant changes to land values or uses will result from the lowering of these culverts.

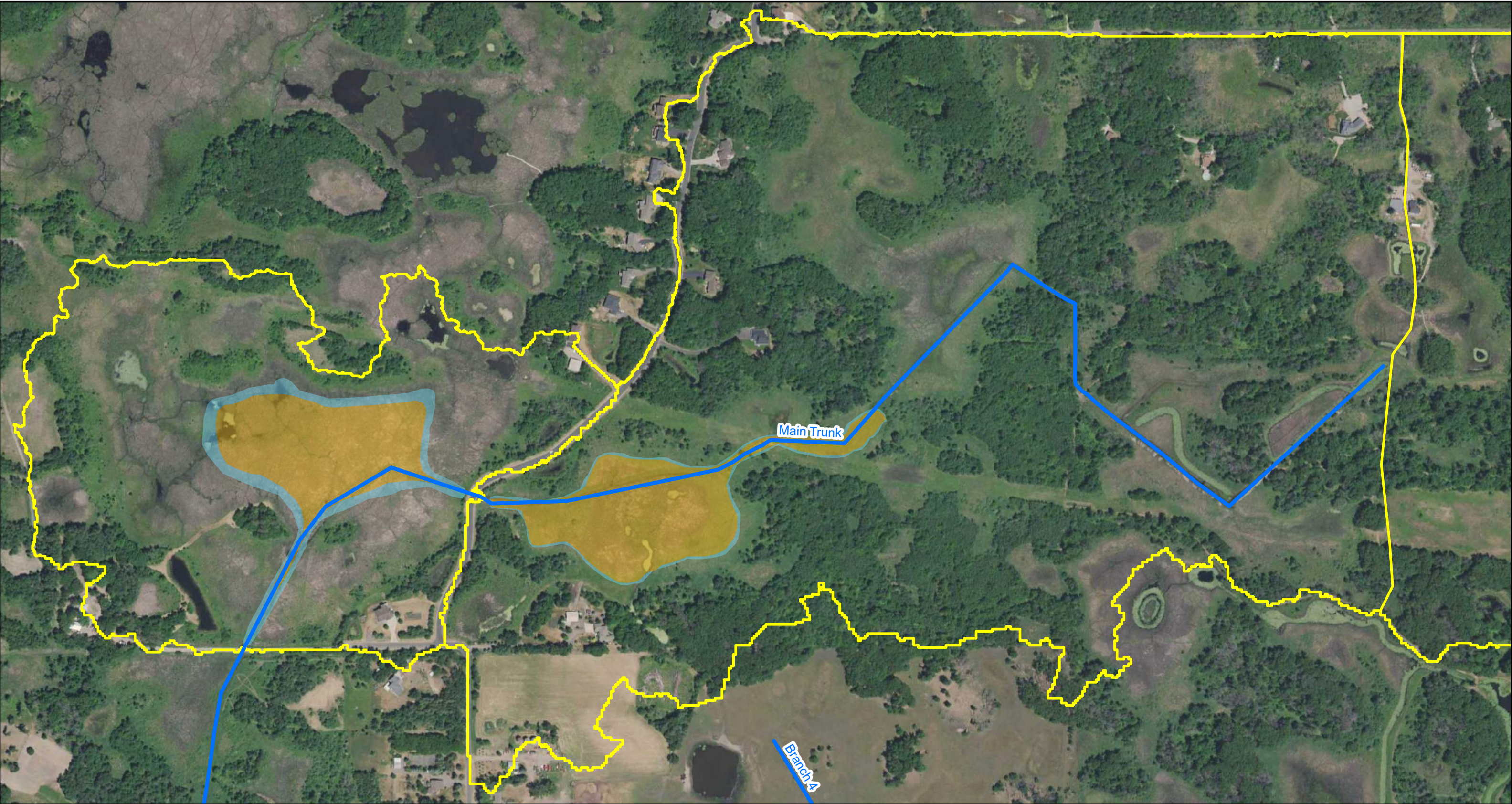
#### *EVALUATING COST VS. BENEFIT*

As noted in the drainage attorney's comments at the beginning of this memorandum, Minnesota Statute 103E identifies that Drainage Authorities must consider both monetary cost and environmental impacts in evaluating drainage system projects and repairs. Section 3.2.1 of RCWD's Watershed Management Plan also identifies the weighing of multiple factors in repairs, indicating that repairs "must plan for the current and future need of municipalities to use the public drainage system while considering and weighing other resource issues and needs." Further, the Plan states, "This means that a repair depth, in some cases, may be less than the ACSIC; or that the public drainage system may coexist within or adjacent to municipal stormwater management features."

In an ideal scenario, the feasibility of a project or other work would be evaluated by simply monetizing the benefits and costs and determining if there is a positive economic value that results. However, economic benefits and costs can be challenging if not infeasible to monetize for many types of projects. One of these types is drainage restoration on lands not in agricultural production. There is an intrinsic value of having predictable, efficient drainage that can perform for a variety of climatic and hydrologic conditions.

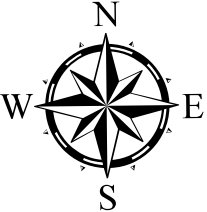
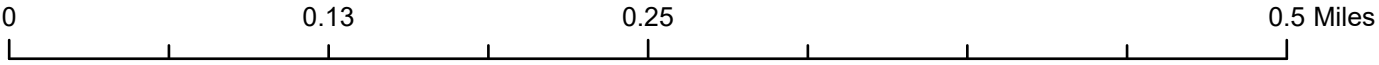
One frame of reference that is useful for decision making is to compare the costs and qualitative benefits of similar types of work that have been successfully completed. Only one District repair effort (Judicial Ditch 4) has required a similar amount of wetland mitigation (also 14.6 acres): The JD 4 repairs requiring this mitigation created a predictable, efficient outlet for agricultural land and a municipality where one did not exist previously; provided significant decrease in 2- and 10-year flood elevations over miles of the drainage system; and substantially increased the efficiency of the system. Other District repair efforts each have required less than 3 acres of wetland mitigation and had multiple miles of restoration in system efficiency for agricultural and/or urban landscapes.

Conversely, the proposed lowering of 137<sup>th</sup> St. and Jodrell St. culverts will only have an impact on the lands immediately upstream of each roadway crossing, on lands that are currently wetland and will continue to be wetland if the repairs are completed. The work will not improve the predictability of the system as an outlet, but rather will have its primary effect of lowering water levels in portions of wetland, designated as public waters, during dry weather periods. Although there is intrinsic value in having a lower outlet, it is far less valuable than restoration of efficiency and predictability, particularly when the land affected will not be made viable for agricultural or land development use as a result of the work.



**Legend**

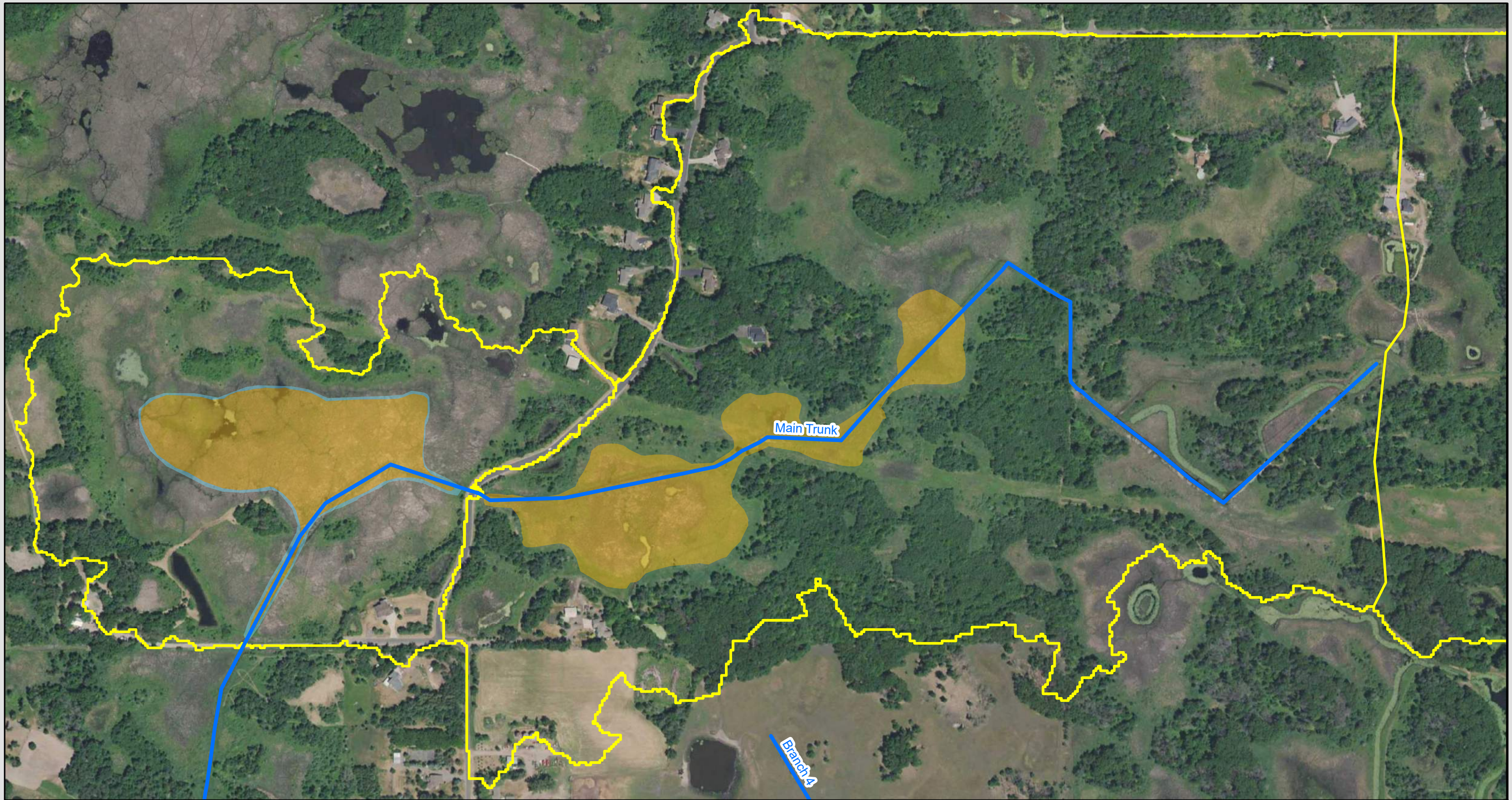
- ACD 10-22-32
- Catchments
- Alt. 4 2-yr Flood Pool
- Existing Conditions 2-yr Flood Pool



**Figure 1 - 2-yr Flood Extent**

Scale: AS SHOWN	Drawn by: CJC	Checked by: BTZ	Project No.: 5555-0333	Date: 8/22/2024	Sheet:
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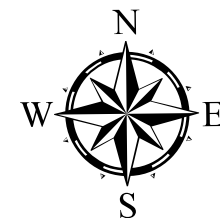




### Legend

- ACD 10-22-32
- Catchments
- Alt. 4 10-yr Flood Pool
- Existing Conditions 10-yr Flood Pool

0 0.13 0.25 0.5 Miles



## Figure 2 - 10-yr Flood Extent

Scale: AS SHOWN	Drawn by: CJC	Checked by: BTZ	Project No.: 5555-0333	Date: 8/22/2024	Sheet:
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**Anoka County Ditch  
10-22-32  
Reference Materials**

# Technical Memorandum

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**To:** Nick Tomczik; Rice Creek Watershed District Administrator  
**From:** Bret Zimmerman, PE  
Cait Caswell, EIT  
**Through:** Chris Otterness, PE  
**CC:** Tom Schmidt, RCWD  
Ashlee Ricci, RCWD  
**Subject:** Anoka County Ditch 10-22-32 Evaluation of Maintenance Alternatives  
**Date:** January 23, 2023  
**Project:** 5555-0321

## INTRODUCTION

The purpose of this project is to evaluate potential alternatives to restore drainage capacity to a portion of Anoka County Ditch (ACD) 10-22-32, specifically those portions of the Main Trunk upstream (north) of Pine Street (see **Figure 1**). In 2021, the Rice Creek Watershed District (RCWD) completed a review of the As-Constructed and Subsequently Improved Condition (ACSIC) of ACD 10-22-32 north of Pine Street, which culminated in a reestablishment of the public drainage system record per Minnesota Statue 103E. The ACSIC review and associated survey indicated that three road crossings utilize culverts higher than the ACSIC grade. In addition, a pipeline managed by Flint Hills Resources / Minnesota Pipeline is just below the ACSIC grade (creating maintenance challenges), and another pipeline managed by Northern Natural Gas is a location of chronic beaver activity.

Per the RCWD drainage management flowchart, observed isolated deficiencies in capacity along the public drainage systems are addressed through evaluation of minor maintenance alternatives. To understand the benefit, cost, and feasibility of maintenance approaches, HEI evaluated several maintenance alternatives for restoring drainage capacity in this location. These alternatives were modeled, with peak water levels compared at critical locations along the drainage system. This report will summarize these results, along with performance, cost, and regulation considerations, and provide a recommendation for maintenance.

## ALTERNATIVES AND MODELING

### *Modeling Approach*

The analysis was performed using XPSWMM (v. 2019.1.3) hydrologic modeling software. All models used the Curve-Number (CN) hydrologic theory, which estimates runoff volumes based on the combination of rainfall input, soil type, and land use at any given location. Hydrologic parameters in all alternatives remain identical, so any changes are directly related to the changes in elevation and/or capacity of drainage system components. The modeling completed for this analysis is short-duration based analysis according to the 24-hour storm. As with all of the District's hydrology/hydraulics models, it does not account for subsurface flow through soil or other long-term hydrologic changes.

### *Alternative 1 – Existing Conditions*

The existing conditions model assumes ACSIC grade in the ditch (including at the two pipeline crossings that have shallow cover) and that culverts are at elevations taken during recent survey in 2020 and 2021. This model was created as a baseline to compare the effectiveness/value of all other alternatives. Note that “existing conditions” along ACD 10-22-32 have changed substantially in the last 10 years as repairs and minor maintenance have been completed along the entire drainage system.

### *Alternative 2 – Pre-pipeline Hump Cleanout*

The pre-pipeline hump cleanout model assumes ACSIC grade in the ditch, culverts at surveyed elevations, and a 2.5-foot-tall hump in the ditch to represent a beaver dam that existed at the Northern Natural Gas pipeline prior to the 2021 maintenance completed at this location by the RCWD. The field crossing culvert at station 275+03, the northernmost culvert, was also modeled at the size and elevation it was prior to the 2021 maintenance activity. This model was created to evaluate the hydraulic impact of this recent maintenance effort with respect to other alternatives.

### *Alternative 3 – Permitted Grade*

The permitted grade model assumes ACSIC grade in the ditch and lowers Pine Street to ACSIC grade. The culverts at 137th Ave are both lowered to the permitted grade established in the 2015 DNR Public Waters Work Permit. All other crossings remain at their surveyed elevations, including Jodrell Street. This alternative is intended to represent the maximum maintenance to ACD 10-22-32 that can be completed without additional regulatory approvals from the DNR.

### *Alternative 4 – Full ACSIC*

The full ACSIC model assumes ACSIC grade in the ditch and lowers the Pine Street, 137<sup>th</sup> Ave and Jodrell Street culverts to ACSIC grade. All other crossings remain at their surveyed elevations. This is intended to represent a full restoration of drainage system capacity to ACD 10-22-32 to the ACSIC.

### *Alternative 5 – Full ACSIC with Additional Capacity*

The full ACSIC with additional capacity model assumes ACSIC grade in the ditch, lowers the Pine Street, 137<sup>th</sup> Ave and Jodrell Street culverts to ACSIC grade and adds an additional 24-inch HDPE culvert at all crossings. The purpose of this alternative is to evaluate whether increasing size/number of culvert crossings under any of the roadways will significantly change peak flooding elevations.

## RESULTS

Modeling results for each of the five alternatives are provided in **Tables 1 and 2** for the 2-year rainfall (2.7 inches) and 10-year rainfall (4.1 inches), respectively. Peak water surface elevations are reported at seven different locations, each of which is upstream of an existing culvert crossing (see **Figure 1**).

From the modeling results, we can derive the following conclusions:

- The recent maintenance completed in 2021 drastically lowered peak water surface elevations upstream of the Northern Natural Gas pipeline crossing (up to 2-feet). No other maintenance on the public drainage system has the ability to significantly lower peak water surface elevations in this location.
- Lowering the culvert at Pine Street will substantially lower peak water levels on lands between 137<sup>th</sup> Ave and Pine Street (up to 1.3 feet)
- Lowering the 137<sup>th</sup> Ave. culvert to the previously permitted grade (Alternative 3) will reduce the peak water surface elevation by 0.3-0.4 feet between 137<sup>th</sup> Ave. and Jodrell Street and by 0.1 – 0.2 feet just upstream of Jodrell Street. Although this decrease will not substantially affect/enhance adjacent land use, lowering these culverts does provide a nominal increase in capacity and the cost is relatively low.
- Lowering the 137<sup>th</sup> Ave. culverts and Jodrell Street culverts to the ACSIC grade will further lower peak elevations from 137<sup>th</sup> Ave to just upstream of Jodrell Street by 0.4-0.7 feet (compared to the Permitted Grade alternative). The benefit of this lowering of peak water elevation is relatively minimal, for a couple of reasons:
  - The decrease in peak water surface elevation extends only to approximately the Northern Natural Gas pipeline crossing. Upstream of the pipeline, these modifications have no discernable effect.
  - The land adjacent to the portion of the ditch affected by the Full ACSIC alternative consists of wetlands. The modeled peak flood events rise up out of the banks of the ditch, but not significantly higher than the grade variations within the wetland. As such, the difference in flood extent in this location for any alternative cannot be discerned when mapped. Further, the flooded areas (most of which are public waters) will remain wetlands under all alternatives due to the high water table in the area and lateral inflows. Therefore, there does not appear to be any significant flood extent change or land use value provided by this alternative
- Increasing the number or size of culverts under any of the crossings has no significant effect on peak flood elevations.

**Table 1 – Peak water surface elevations during a 2-year rainfall event**

2 year	Location 1 Sta. 275+03 Field Crossing		Location 2 Sta. 264+79 Field Crossing		Location 3 Sta. 230+16 Jodrell St		Location 4 Sta. 216+00 137 <sup>th</sup> Ave <sup>[1]</sup>		Location 5 Sta. 204+54 Field Crossing		Location 6 Sta. 190+65 Field Crossing		Location 7 Sta. 185+90 Pine St	
	WSE <sup>[2]</sup>	Diff. <sup>[3]</sup>	WSE <sup>[2]</sup>	Diff. <sup>[3]</sup>	WSE <sup>[2]</sup>	Diff. <sup>[3]</sup>	WSE <sup>[2]</sup>	Diff. <sup>[3]</sup>	WSE <sup>[2]</sup>	Diff. <sup>[3]</sup>	WSE <sup>[2]</sup>	Diff. <sup>[3]</sup>	WSE <sup>[2]</sup>	Diff. <sup>[3]</sup>
Alt 1. Existing Conditions	901.0	---	900.8	---	900.4	---	900.3	---	899.5	---	899.5	---	899.5	---
Alt 2. Pre-pipeline Hump Cleanout	902.6	1.6	902.6	1.8	900.4	0.0	900.3	0.0	899.5	0.0	899.5	0.0	899.5	0.0
Alt 3. Permitted Grade	901.0	0.0	900.8	0.0	900.2	-0.2	899.9	-0.4	899.2	-0.3	898.9	-0.6	898.3	-1.2
Alt 4. Full ACSIC	901.0	0.0	900.8	0.0	899.5	-0.9	899.3	-1.0	899.3	-0.2	898.9	-0.6	898.3	-1.2
Alt 5. Full ACSIC with Additional Capacity	900.9	-0.1	900.8	0.0	899.5	-0.9	899.3	-1.0	899.2	-0.3	898.7	-0.8	898.2	-1.3

**Table 2 – Peak water surface elevations during a 10-year rainfall event**

10 year	Location 1 Sta. 275+03 Field Crossing		Location 2 Sta. 264+79 Field Crossing		Location 3 Sta. 230+16 Jodrell St		Location 4 Sta. 216+00 137 <sup>th</sup> Ave <sup>[1]</sup>		Location 5 Sta. 204+54 Field Crossing		Location 6 Sta. 190+65 Field Crossing		Location 7 Sta. 185+90 Pine St	
	WSE <sup>[2]</sup>	Diff. <sup>[3]</sup>	WSE <sup>[2]</sup>	Diff. <sup>[3]</sup>	WSE <sup>[2]</sup>	Diff. <sup>[3]</sup>	WSE <sup>[2]</sup>	Diff. <sup>[3]</sup>	WSE <sup>[2]</sup>	Diff. <sup>[3]</sup>	WSE <sup>[2]</sup>	Diff. <sup>[3]</sup>	WSE <sup>[2]</sup>	Diff. <sup>[3]</sup>
Alt 1. Existing Conditions	902.1	---	901.7	---	900.8	---	900.6	---	900.1	---	900.0	---	900.0	---
Alt 2. Pre-pipeline Hump Cleanout	904.1	2.0	903.0	1.3	900.8	0.0	900.6	0.0	900.0	-0.1	900.0	0.0	899.9	-0.1
Alt 3. Permitted Grade	902.1	0.0	901.7	0.0	900.7	-0.1	900.3	-0.3	899.5	-0.6	899.5	-0.5	898.9	-1.1
Alt 4. Full ACSIC	902.1	0.0	901.7	0.0	900.2	-0.6	899.9	-0.7	899.9	-0.2	899.6	-0.4	899.0	-1.0
Alt 5. Full ACSIC with Additional Capacity	901.8	-0.3	901.7	0.0	900.2	-0.6	899.7	-0.9	899.7	-0.4	899.5	-0.5	899.2	-0.8

[1] Permitted Grade at 137<sup>th</sup> Ave is 899.60

[2] Peak Water Surface Elevation Upstream of Crossing

[3] Change Relative to Existing Conditions

## RECOMMENDATION

Based on the analysis, the maintenance activities on ACD 10-22-32 providing the greatest impact to drainage system capacity are the continued maintenance of grades at the two pipeline crossings and the lowering of the Pine Street culvert. The RCWD should continue to monitor and maintain the open channel regularly and take actions to control the beaver populations, particularly at the two pipeline crossings. We recommend the RCWD proceed with repairs to lower the culvert under Pine Street. This will require a review of potential wetland impacts under the Wetland Conservation Act and may require a mitigation plan. This will also require coordination with the Cities of Columbus and Lino Lakes as joint road authorities.

Additionally, the culverts under 137th Ave should be lowered to the previously permitted elevation. Although the incremental decrease in water surface elevation is relatively small, there is minimal cost and regulatory engagement required to complete this action.

The analysis revealed no significant benefit or necessity of lowering 137th Ave and Jodrell Street culverts to ACSIC grade. Lowering these culverts to ACSIC grade would have no measurable reduction in flooding extent and will not affect the landowner's ability to modify their use of this land. Construction cost for lowering the Jodrell Street culvert would be substantially greater than any of the other maintenance activities, and feasibility and cost of obtaining regulatory approval from the DNR is uncertain.

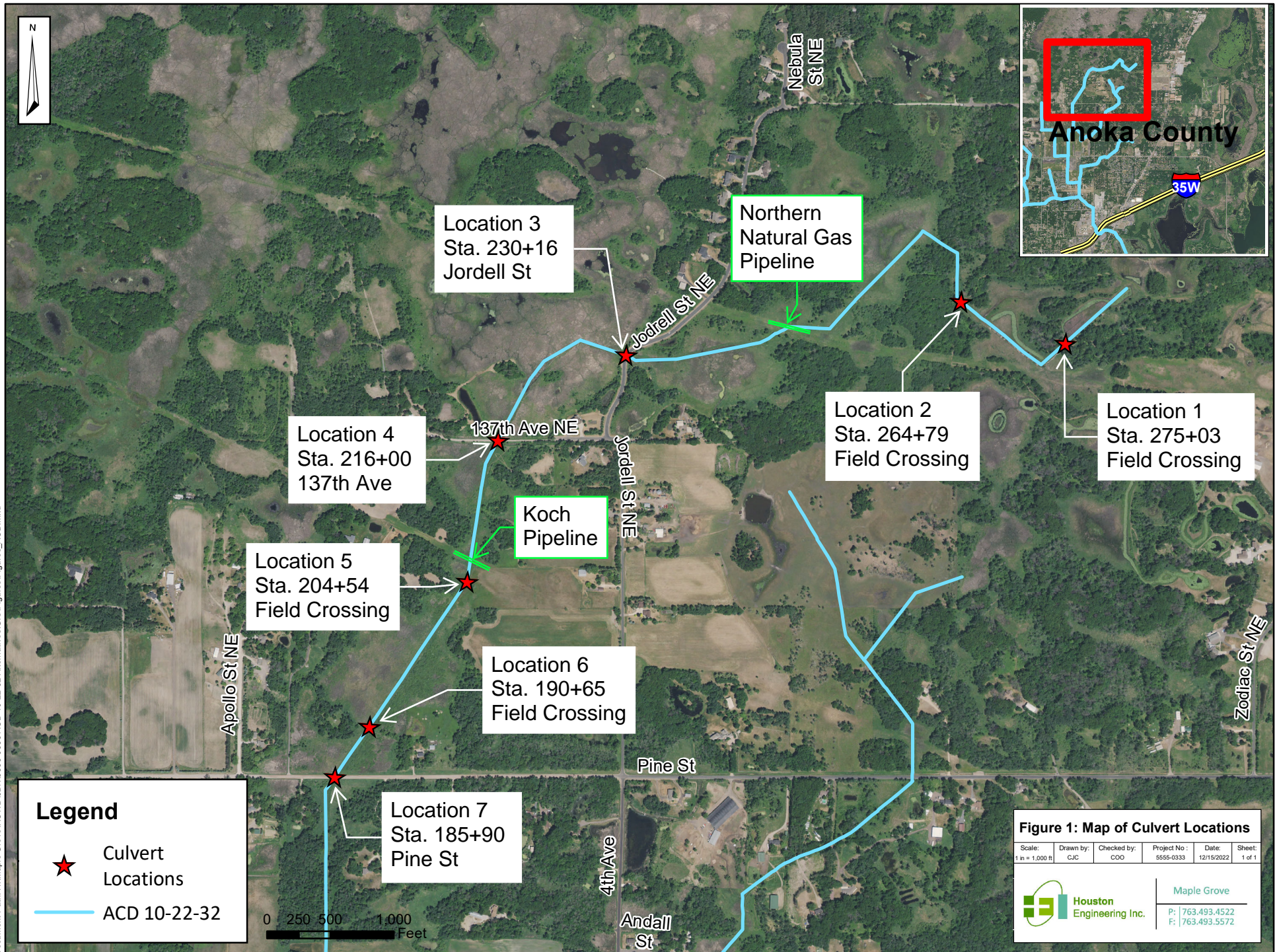
The two pipeline crossings of the upper portion of ACD 10-22-32 (Flint Hills Resources pipeline between Pine Street and 137<sup>th</sup> Ave. and Northern Natural Gas pipeline east of Jodrell Street) are both lower than the as-constructed grade of ACD 10-22-32. Though they do not project into the ditch bottom, they have historically impacted maintenance of the public drainage system in multiple ways:

1. Cleanout of the ACD 10-22-32 ditch over each pipeline location has at times been disallowed by pipeline representatives citing pipeline safety guidelines. However, recent cleanout over the Northern Natural Gas pipeline crossing occurred successfully under the authorization and observation of pipeline representatives.
2. Work scheduling in these locations is subject to the availability of pipeline representatives to be onsite. This has delayed the initiation of work in these areas by weeks or even months, and has prevented timely response to observed deficiencies.
3. The elevated hump/berm providing cover over the pipeline on either side of the ditch creates an attractive location for beaver damming efforts. This requires more frequent inspection and maintenance than other portions of the District's public drainage systems.

The preferred solution to these maintenance issues is the lowering of the pipeline. However, due to the significant expense and impact of lowering a pipeline, and given that the pipelines in these locations are not projecting into the original ditch bottom, other near term solutions should be pursued. We recommend continued engagement with the pipeline companies to clarify process, responsibilities, and timeframes when addressing needed maintenance at these and other pipeline crossings in the RCWD.

# ACD 10-22-32 Alternatives

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**PUBLIC MEETING: ANOKA COUNTY DITCH 10-22-32 EVALUATION OF  
MAINTENANCE ALTERNATIVES**

Manager Wagamon stated after careful research into this issue, he has decided not to recuse himself from this matter and clarified that he had spoken with both District Attorney Smith and District Attorney Holtmann who were in support of this decision. He stated that he also contacted a private attorney and his analysis was that he was under no obligation to recuse himself from this matter and District Attorney Smith was comfortable with this because it was an informed decision.

District Administrator Tomczik stated that there has been a lot of interest in this topic and clarified that this is a public information meeting. He noted that some of the communications that have come to the District include terms that are in Statute and discussion needs to be careful about those and what the term means to the District as a governing entity of the public drainage system. He suggested care with the acronyms that are used during the meeting. He clarified that the District, as drainage authority, is not currently under drainage proceeding and this is a public information meeting.

Drainage Inspector Schmidt gave an overview of the background of the ACD 10-22-32 system and shared a brief history of the maintenance and management efforts over the last 17 years or so. He reviewed the acronym ACSIC and explained that it meant As Constructed and Subsequently Improved Condition and noted that it represents the as-built condition and the maximum depth and cross section of a public drainage system repair. He noted that the drainage authority is not required to repair to the ACSIC depth, and alternative repair depths are common in many parts of the State. He gave a brief explanation on why a drainage authority may elect for an alternative repair depth. He reviewed the system performance and original design and noted that it was not designed to facilitate rapid run-off for large events. He explained that it was designed for a 2 year storm event which limits the drainage authority's ability to go beyond that in a repair because the idea is to return it to the original function that it was designed for. He explained that the topography is flat and not conducive to natural drainage. He noted a communication sent by a resident prior to the construction of Jodrell Street indicating that temporary flooding was common in the area. He reviewed the various maintenance and management efforts and their outcomes including accelerated system flow, beaver dam removal, cleaning, and culvert replacements/modifications. He noted that he feels it is important to remember that the ACSIC profile, has been adopted.

District Engineer Otterness gave an overview on the maintenance alternatives for ACD 10-22-32. He stated that they were asked to begin this study based on continued landowner concerns regarding the function of the system, including the capacity and grade. He stated that they had completed a field survey in 2021 which indicated that there was relatively little sediment in the ditch. He reiterated that the District has been doing maintenance on the system for about the last 15 years and there are portions that have been cleaned out multiple times which has also involved excavating sediment out to the bottom, or hard pan of the open ditch. He noted that they found through their study that the culverts at 3 of the road crossings are higher than the as

built ditch grade. He stated that maintenance over and near the pipeline crossings continues to be a concern due to beaver activity that the District has been managing through trapping. He explained that they have proposed a study that would evaluate alternatives to drainage management in order to further restore drainage function. He gave an overview of Alternative 1 – maintain existing conditions; Alternative 2 – pre-pipeline hump cleanout; Alternative 3 – permitted grade; Alternative 4 – full ACSIC; and Alternative 5 – full ACSIC with additional capacity. He stated that in order to conduct this analysis, they utilized the District-wide modeling and evaluated 2 year and 10 year rainfall events. He reviewed the results they found in their report and outlined the comparison between existing conditions and each of the alternatives that were modeled. He noted the regulatory considerations that were part of the study of the alternatives as well as past challenges related to coordination with pipeline representatives. He reviewed value, cost and feasibility for a few of the options for Board consideration. He explained that their recommendation is to continue coordination with the road authorities to lower the Pine Street Culvert; reset the 137<sup>th</sup> culvert to the permitted grade; found that Jodrell Street is not substantively obstructing the public drainage system; that the road authority may elect to lower or increase capacity of culverts under the streets; and continue frequent inspections and maintenance of pipeline crossings, including beaver management.

Manager Weinandt asked if she was correct that ACD 10-22-32 was consolidated in 2015 and in doing so it meant that all the finances that were charged into each of the systems was them in one pot. She asked when they talk about work in the northern section, whether that meant that the payment for any work that occurs there is charged to the entire drainage system. She asked if the work that has been done previously had been at the 60/40 proportions.

Drainage Attorney Kolb stated that the consolidation of ACD 10-22-32 took place prior to 2015 and believes it was around 2010. He explained that at that time, none of the systems had functional financial accounts, so part of the consolidation process included a discovery and determination and adoption of functional alignments, profiles, capacities, and the consideration of how future expenditures and construction/repair costs on the system would be handled. He stated that, at the time, the Board established, with the consent of the local municipalities, a water management district for the watershed area of the newly consolidated drainage system. He stated that within the construct of the water management district charge system, the Board acknowledged that there was a historical impediment created by a lack of maintenance and some of those types of things. He explained that the Board adopted, as a matter of policy, a process to allocate costs between the water management district charge and ad valorem taxes which is what they are addressing in the 60/40 split. He noted that the major repairs that occurred to the portions of ACD 10-22-32 south of Pine Street were funding by the water management district charge throughout the entire watershed area of the consolidated system and apportioned by the ad valorem tax. He stated that future costs have been limited to ad valorem collected funds under the District's minor maintenance program. He noted that if there was a major reconstruction of a portion of ACD 10-22-32 north of Pine Street, as discussed, the Board would still have to make a decision about how it wanted to handle those costs. He explained that if it did become a major reconstruction, the likely outcome would be a recommendation from staff

to reinitiate the watershed management district charge for a percentage and allocate a percentage of costs to the ad valorem.

President Bradley noted that he wants to make sure that the questions and responses from the City of Lino Lakes are part of the record. He asked what the ditch bottom elevation would be at Jodrell under ACSIC and noted that he thought he had previously been told it was 898.5.

District Engineer Otterness stated that he does not have that information in front of him and would have to check the records to verify.

President Bradley asked if he could tell him what the ACSIC elevation would be at the permitted location at 137<sup>th</sup> Avenue.

District Engineer Otterness noted that he also did not know that elevation without checking the records.

President Bradley asked if he knew whether the permitted elevation at 137<sup>th</sup> Avenue was higher or lower than the ACSIC at Jodrell.

District Engineer Otterness stated that he believes that it is higher.

President Bradley noted that to him this shows that even if it is repaired, there will always be a pinch point at 137<sup>th</sup> Avenue because the ACSIC is higher at that point.

District Engineer Otterness stated that the permitted elevation of the culvert at 137<sup>th</sup> Avenue would be a little higher than what the ACSIC elevation at Jodrell would be.

Manager Waller expressed appreciation to District Administrator Tomczik for the reminder to be careful in the use of acronyms. He noted that there may be plans and records that show it was a different elevation but there has been an ACSIC adopted which is the permitted elevation that has been considered by the DNR and noted that the District does not have the authority to override the DNR. He noted that the culvert at 137<sup>th</sup> Avenue is going to be lowered back to the permitted elevation because a frost heave has pushed it up. He stated that it does not necessarily mean that what may have been in the past is the ACSIC.

President Bradley asked if Alternative 4 would lower 137<sup>th</sup> Avenue culvert below the current permitted level.

District Engineer Otterness stated that was correct and would lower it below the current permitted elevation.

Manager Weinandt asked about 137<sup>th</sup> and asked if it was a private crossing.

District Engineer Otterness stated that it is a driveway but the maps label it as 137<sup>th</sup> Avenue.

Manager Weinandt asked if it was considered part of the ditch system.

District Engineer Otterness explained that the driveway crosses the drainage system but is not a component of the drainage system.

Manager Weinandt asked if lowering it would be the responsibility of the private property owner or if it would be the ditch system's responsibility.

District Administrator Tomczik stated that the District's position on crossings is that the 'crosser' is responsible for their crossing and having it align with the public drainage system, however, in situations where there has been past District communications about the elevation and the size of the culvert to parties alternatives considered. He explained that the District has departed from that practice and has participated in the payment for those adjustments. He stated that for this culvert, they would need to take a look at the record and see what was communicated to the landowner.

President Bradley opened the meeting for public comment.

Mike Kettler, Civil Engineer, Sunde Engineering, stated that he was asked by Perry Wagamon to study the alternatives developed by the District as they relate to his property which is upstream of the Jodrell crossing. He explained that originally his property did not drain to ditch that is being discussed and noted that the natural drainage was towards what is now the Jodrell Street alignment. He noted that it was just because of the Jodrell Street construction that his drainage pattern changed to be directed to that existing ditch profile. He stated that part of the construction of Jodrell Street was a requirement from the Army Corps of Engineers to not impound water behind that roadway. He stated that he believes that the higher original culvert crossing of Jodrell Street essentially conflicted with that Corps requirement of impounding water and was essentially providing a pond behind the Jodrell Street crossing. He explained that Mr. Wagamon has witnessed significant flooding over a period of time on his property to his home, structures, septic, and other useable areas. He stated that he studied the alternatives that the District has presented and felt the modeling by District Engineer Otterness provided a lot of great information. He stated that it is very flat and would hesitate to even call it a ditch because it is essentially ponding water behind a lot of culvert crossings, which are storm sewer crossings. He stated that he believes it makes sense to provide in this model a 100 year storm event analysis and feels that would be beneficial information to see the relationship it would have to upstream flooding. He stated that he thinks for a 100 year storm event there would be a difference in water elevations behind the culvert crossings and asked that the District compare those flood elevations with some critical elevations on the Perry Wagamon property. He explained that Mr. Wagamon is essentially sitting in a landlocked area and feels that makes it a bit more relative to provide a 100 year storm event for an analysis and not just general pipe sizing in the District. He stated that he thinks all the alternatives that were presented are very well played out and thinks

Alternative 4 with some amendments, such as the 100 year event information, the Jodrell Street crossing, and making the pipe large enough to not flood upstream structures. He stated that it would basically either be amending Alternative 4 or creating a new Alternative 6. He stated that they feel lowering Jodrell down to the spirit of the Corps permit down to the original ditch bottom and not ACSIC in order to give Mr. Wagamon the condition that existed prior to the construction of Jodrell Street, which he believes was the intent of the Corps of Engineers. He explained that he believed this approach would be better suited for upstream flooding. He reiterated that he thought the model and the report given by District Engineer Otterness was very thorough but believes the other items should be considered for Mr. Wagamon's property.

President Bradley asked if he was correct that the Army Corps of Engineers was telling the city how it would build a road.

Mr. Kettler stated that he believed the jurisdiction of the Corps was some conditions on how they would allow the street construction when it took place.

President Bradley stated that the Board is here today to talk about how they are going to repair and maintain a ditch. He explained that part of that is that downstream will have effects on a particular road which means working within the city. He stated that they will not order the city in this proceeding to set culverts which would happen later in the process when the city comes to the District with a permit request because then they will have a proposal for the size of the culverts and those kinds of details. He noted that if the District did choose Alternative 4, they would not, as part of today's process, determine what the city would do as part of their responsibility as the road authority.

Drainage Attorney Kolb stated that this statement was correct to the extent that the road authority has separate and independent authority and planning jurisdiction over actions that would be taken to ensure that in the construction of its roadways is not causing an adverse condition and also to design the road and any hydraulic features of the road for the protection and integrity of both the road base and the traveling public.

President Bradley stated that it was also his understanding that whether or not the District using the 100 year rainfall event is not relevant to repair and maintenance of the ditch and is relevant to what the road authority will do with its culverts that cross out ditch. He noted that this would again be a separate proceeding. He stated that the information shared by Mr. Kettler is very important to the Board, but reiterated that today they were just trying to determine the elevation of the ditch. He stated that his question earlier about the original elevation of the ditch at 898.5 was relevant because he was looking at Mr. Kettler's drawing where he proposed it at 897.5, which is one foot lower than Alternative 4. He asked if Mr. Kettler had done any studies to see what impact that one foot difference would have.

Mr. Kettler stated that they have not done any studies and explained that his intent was not to recreate District Engineer Otterness' model because they think it is accurate, but would ask that the District plug in some different elevations and different storm events.

President Bradley explained that when the Board walks out of the room today he did not think they would have addressed the 100 year rainfall event or the bridge issue, but assured Mr. Kettler that he was not being ignored or that this information would not be considered if they adopt Alternative 4.

Perry Wagamon, stated that he has heard a lot of things today that he feels make a lot of sense regarding ditch cleaning. He stated that what does not make sense to him is that he lived in his home for 25 year prior to this road being constructed and had no flooding issues. He stated that the trees on his property that were killed by the flood were 40-50 years old. He stated that he does not think there is a question that when they built the road, it flooded, killed the trees, and ruined his home. He stated that he came to the District when the road was built and they were putting in the culvert. He explained that he had reported that a neighbor had told him that they were putting the culvert in 3 feet too high and requested help to take care of the flooding problem. He stated that they promised to do that and mentioned cleaning up ACD 10-22-32. He noted that he did not come to the District and ask them to clean ACD 10-22-32 because he did not know what that was, he just knew that his land was flooding. He reiterated that his land was not flooding prior to the road being built but did after it was built and the culvert was placed too high. He stated that he thinks it is obvious why his land was flooding and did not believe it should take a 15-20 year ditch cleaning process in order to take care of the problem. He stated that, to him, it would be common sense to go lower the culvert to the as constructed condition. He stated that if that would have been done, his land would not have been flooded, his property would not have been destroyed, and his trees wouldn't be dead. He stated that he feels this is a lot more simple than this group is trying to make it. He reiterated that he has never requested that any kind of kind of ditch cleaning be done and simply asked to have relief from the flooding. He expressed frustration that the expectation is that the Board would believe that it took them 15 years to figure out that there was a beaver dam over the pipeline and get it cleaned out. He stated that it was not a beaver dam and was a 2.5 foot obstruction that continued for 50-100 feet on either side of the pipeline. He explained that he mentioned that as an example of how much they can believe of what is being shared today.

Manager Wagamon asked if he could ask questions.

President Bradley clarified that he could ask questions as a Manager, but not as a son.

Mr. Wagamon stated that, in his opinion, there has to be some kind of nefarious reasons that they did not want to lower the culvert 3 feet.

President Bradley explained that the city had sent the District a letter outlining their position with regard to this situation and asked if there was a representative of the city who would like to place that into the record.

Kevin Bittner, Bolton & Menk, explained that he was also the appointed City Engineer for the City of Columbus. He stated that had provided the letter to the District and wanted to reiterate that, as a city, they are very supportive of activities that maintain the ditch systems within the city because they are very critical to their drainage. He stated that as it has been noted, Columbus is a very flat community so maintaining the ditches are critical. He stated that regarding the alternatives that were shared, from a technical perspective and his evaluation, he would support Alternative 4, but noted that they are open to consideration of other alternatives if other information comes forward. He noted that there was a statement from the presentation regarding lowering Jodrell culverts not measurably changing flood extent in upstream properties. He stated that he would agree with that from the perspective of the model, but when it comes to the event itself, he can see where the profiles may not change considerably based on the elevation of the culverts, but he thinks this is really a problem with saturation levels after the event is over. He stated that he believes at that point it acts less like a ditch and ends up being pools behind culverts and would say that the culverts play a really big part in controlling the saturation level and lowering them to the ASCIC level would be very beneficial.

Janet Hegland, Columbus City Council, stated that she has attended a few meetings and has learned a tremendous amount and understands the District has done a lot of work trying to solve this problem. She stated that the letter presented by Mr. Bittner reflect the position of the Columbus in terms of their interests, but noted that she had heard this morning that there is additional information and additional perspectives that may be considered. She stated that it would be very reassuring to the City of Columbus if that information was considered as part of the selection of the alternatives. She stated that the District has done a lot to try to solve this problem and it has been tremendously frustrating for Columbus to have residents have repeated flooding events and not get relief. She stated that the attempts that they have tried thus far, have not solved the problem. She stated that it may have kept them ahead of the development and increased pressure on the ditch system to handle storm water run-off, but it has not solved the problem. She stated that if it requires taking another meeting or two in order to look at the alternative perspectives and additional information and incorporate that into the selection process, that would offer some assurance to Columbus.

Manager Waller stated that he received a huge packet of information this morning from Mr. Wagamon and asked if Mr. Wagamon wanted this information to be added into the record.

Mr. Wagamon stated that he would like the information he submitted dated April 25, 2023 to become part of the official record. He explained that he had put this packet together because he did not think the Board had all the information they needed in order to vote on this issue.

360 President Bradley asked Ms. Hegland what other information she felt was available other than  
361 the information submitted by Mr. Kettler and Mr. Wagamon.  
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363 Ms. Hegland stated that she was referring to the information presented by Sunde Engineering.  
364 She clarified that she was asking the Board to consider the additional information as part of their  
365 alternative selection process.  
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367 President Bradley stated that it will be considered in part of their decision making process.  
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369 Ms. Hegland stated that what she heard from Sunde was something he referred to as Alternative  
370 6 or that it be considered Alternative 4, with modifications.  
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372 Manager Weinandt stated that she believed the additional considerations as indicated, would  
373 happen with the District talks to the city about Jodrell and that would include some additional  
374 modeling on the 100 year event.  
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376 President Bradley stated that, for example, if Alternative 4 is selected, that adopts the ACSIC that  
377 this Board has previously approved as the goal and noted that the additional issues of what to do  
378 with Jodrell's ability to pass water and the additional question of whether they will or will not be  
379 successful in getting the DNR to cooperate.  
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381 Manager Waller stated that his understanding is that this is a public meeting to receive  
382 information and not necessarily to make a redetermination at this time. He stated that he wants  
383 to make sure that Columbus has presented all of the information that they want to present to  
384 the Board. He stated that Ms. Hegland made a statement that 'she had become aware of  
385 additional information' and would like to clarify that all of the information that she was aware of  
386 had been entered into the record.  
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388 Ms. Hegland stated that was correct.  
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390 Roger Nase, 6636 141<sup>st</sup> Avenue NE, Columbus, explained that this property is adjacent to the  
391 Wagamon property. He stated that they have 20 acres in that location and noted that he had  
392 also submitted a letter to the District. He stated that in wet years, they see a flow of water  
393 coming from the large pond at the Wagamon's that then flows onto his property behind the pole  
394 barn and noted that it can stay for a significant period of time. He stated that they have also had  
395 about 10 mature trees that have died. He expressed concern that the water level could be higher  
396 in year with heavier rainfall and make its way to the pole barn. He stated that he appreciates the  
397 effort and study that has been put into resolving this issue. He asked if the hump over the  
398 pipeline had already been removed or if it was just proposed.  
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400 District Engineer Otterness stated that the hump was removed a few years ago.  
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Mr. Nase stated that the property directly to the south of them had two 40 acre plots that were converted into commercial industrial property from residential property. He stated that in the last request for a CUP, they were permitted to allow 12-15 acres of the 30 acre plot to be impervious which was scheduled to flow into a pond, however the pond was at 904-906 in elevation and the wetland delineation line is right around 905-906 which means the pond will be full in the spring. He stated that if there was a large rain, their concern was that water would flow from the impervious surface and go toward the pond, but because it would be full it would then spill over onto his property and the Wagamon's property and exacerbate the problems that they are already seeing. He asked that Board to keep this in mind as they look at possibly having more water that could flow into the area.

Manager Waller asked for clarification on where Mr. Nase's property is located in relation to Mr. Wagamon's.

Mr. Nase gave a description of his property location in relation to Mr. Wagamon's and the impervious surface area he was referencing.

President Bradley noted that the material submitted by Mr. Nase would be included within the official record.

Scott Robinson, 8179 4<sup>th</sup> Avenue, Lino Lakes, stated that his property is directly south of this area and noted that he felt that drainage rights were property rights which give an intrinsic value to the property. He asked if there was representation from the City of Lino Lakes also present at today's meeting because they mentioned a culvert on Pine Street and asked if there was a proposed size that the cities want to install.

District Engineer Otterness explained that the cities had not yet proposed anything to the District for replacement. He stated that for the purposes of evaluation, they assumed that they would either reinstall the same pipe that is there or construct a new one at the same size, but a lower elevation. He noted that he believed the current pipe size was 24 inches.

Mr. Robinson asked if that would go to the ACSIC level or to the official profile of the ditch because those are two different things.

District Engineer Otterness stated that there is no official profile here but there is an ACSIC and that is the baseline for the District's management of the system.

Mr. Robinson asked if the District was aware that there are areas of the watershed that the ACSIC level is not the official profile and is not the maintained level of the ditches.

District Engineer Otterness noted that there has historically been an extensive amount of private modification of the public drainage system throughout the system. He noted that as Drainage Inspector Schmidt had noted earlier the District identified a functional alignment and profile

445 through the drainage system back when they did the original development of repair efforts in  
446 2011-2012. He stated that when the District completed the lowering of culverts and  
447 maintenance of the ditch to that functional profile, that profile now best replicates the ACSIC for  
448 that downstream area. He reiterated that this was heavily modified over the years from what  
449 the original establishment of the drainage system was.

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451 Mr. Robinson stated that was correct but there were also surveys done of the ditch from south  
452 of the center of Section 6 which is a half mile south of Pine Street all the way down to the lake.  
453 He stated that there have been core samples done and they know the ditch was dug deeper at  
454 one time than what it was being maintained at now. He stated that his larger question is whether  
455 the Board decides to put in ACSIC upstream from them, what the effects will be on the water  
456 coming down to him when they are not doing to the ACSIC level below them and through them.

457  
458 President Bradley stated that the District had received those exact questions from Lino Lakes and  
459 have responded in writing which will be included in the record. He asked District Engineer  
460 Otterness if he would summarize that response for Mr. Robinson.

461  
462 District Engineer Otterness stated that it is important to note that lowering the culvert will not  
463 change the volume of water that is getting downstream and the same volume would be traveling  
464 despite the elevation of the Pine Street culvert. He stated that there may be some minor change  
465 in the flow that occurs for certain rainfall events but those will be minor and from the  
466 management of the drainage system, and the District has the right to manage to that ACSIC.

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468 Mr. Robinson asked if the District's hands were tied by the Corps of Engineers and the DNR.

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470 Drainage Attorney Kolb clarified that he would modify the comments made by District Engineer  
471 Otterness that they have the authority to do that, subject to regulation.

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473 Mr. Robinson referenced a 10 year rain event and stated that he knows their back fields will be  
474 flooded because the downstream culverts are not adequate enough to handle it. He stated that  
475 if they put in a 48 inch culvert or two -24 inch culverts on Pine Street, they will be flooded. He  
476 stated that he feels there is no way that it will not flood because they are downstream and their  
477 culverts are smaller.

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479 President Bradley stated that the District will deal with the size of the culverts as they proceed  
480 with implementation. He stated that District Engineer Otterness has indicated that there is  
481 no intent, at this point in time, in making the culverts larger.

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483 Mr. Robinson stated that he understood that but wanted to know if it was the District's testimony  
484 that they had done the study on downstream and have determined that they can take the water  
485 and that it will have no adverse effects.

District Engineer Otterness stated that they have done extensive modeling throughout the public drainage system in the area of study that they are looking at. He stated that they did not specifically look at modeled flood elevations for each alternative going all the back downstream, but based on what they have done in studies of other areas of the drainage system, the effects of lowering a culvert on Pine Street compared to the hydraulics a mile or two downstream, the changes are minor.

Manager Waller explained that an ACSIC already exists which is pretty much the permitted grade on Alternative 3. He stated that the only culverts that they are talking about lowering is to that ACSIC level. He stated that the District is accepting information about the possibility that there may be some change to it. He stated that as stated by District Engineer Otterness they are talking about keeping the culvert the same size, but lowering it to the profile that has already been adopted by the Board. He stated that the other Alternatives that have the word ACSIC in there, he feels are confusing.

Mr. Robinson stated that in a perfect world you would be able to say that the ACSIC is the official profile and have it maintained at that level. He stated that if the Board is doing to take the position that they will try to lower it to the ACSIC level, he would like to see that done District-wide and have it put down to the level where the ditches have been dug to.

Ron Moss, Tatonka Real Estate Advisors, stated that almost all of the discussion thus far today has been about the area north of Pine Street and he is representing a party who has property just south of Pine Street. He stated that this individual has 80 acres that they would like to sell and noted that it was platted back in 1980 as Pine Oaks Addition. He explained that at the time it was platted all the land was dry and right now, a reasonable amount of it is wet and he believes it is related to the topic being discussed today. He stated that they would like to sell it and have a potential buyer but the dryness of the land will have a great effect on the value of the land. He stated that he believes the decisions the Board makes will impact property owners south of Pine Street as well.

Manager Waller asked for more details on the location of the 80 acres he was referencing.

Mr. Moss referenced a map he brought with him and indicated the location of the 80 acres his client owns.

Mr. Wagamon expressed concern that, as he listens to the discussion, that this will go another 15 years in discussions about cleaning the ditch. He asked if that meant he would have to wait another 15 years with his property flooded to deal with the obvious reason for its flooding.

President Bradley stated that the time table would be determined by the DNR.

Mr. Wagamon asked if the Corps of Engineers would have the authority to change that and explained that they are the ones that permitted this.

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531 President Bradley stated that he did not believe the District was in a position to comment on that  
532 process at this time. There being no additional comments, he closed the public meeting portion  
533 of the proceedings.

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535 Drainage Authority Attorney Kolb asked to put a few things into context for the Board prior to  
536 them making a motion in order to frame their decision making. He stated that it is very important  
537 for the Board to receive all the comments that were shared today in order to better inform their  
538 decision. He stated that it is important to note that the Board is seated for a decision regarding  
539 ACD 10-22-32 as the drainage authority for that public drainage system and are limited in what  
540 they can do. He stated that they have been presented with a series of repair alternatives and  
541 their impact. He noted that one of the things to consider is that there is a threshold decision  
542 under the drainage code regarding repairs and that is if they are necessary and are they in the  
543 best interest of the land owners that utilize the drainage system. He stated that one important  
544 consideration is the purposes for which ACD 10-22-32, which is now a consolidated system, were  
545 originally constructed. He stated that the drainage system was not constructed to support  
546 industrial, commercial, residential development and was constructed to support agricultural uses  
547 where they were made more possible or improved by the construction of the system. He stated  
548 that when the Board listens today about a problem, he thinks it is fair to recognize that the  
549 problem is multi-faceted and the Board only has the authority to address one portion of that  
550 problem which is the function of this drainage system. He stated that its authority is not to fix a  
551 flooding problem that is caused by other things because that requires other proceedings and  
552 other regulatory approvals and possibly petitioned requirements for projects and other actions  
553 which is not before the Board at this time. He reiterated that what is in front of the Board at this  
554 time is the condition of this public drainage system and how they would proceed to meet the  
555 maintenance obligation/requirements of this ditch. He stated that the District believes the  
556 repairs are probably necessary given the fact that there are facts to indicate that there are known  
557 obstructions or impediments to the efficiency of the system. He explained that it is also  
558 important to note what constitutes a repair and noted that it is defined in the drainage code as  
559 'to restore as nearly as practicable the originally constructed or subsequently improved hydraulic  
560 efficiency'. He stated that means sizing of culverts matters, grade lines of the ditch matter,  
561 geometric configurations matter, because they all contribute to hydraulic capacity. He stated  
562 that this Board has previously considered an abundance of data and information and has  
563 determined an ACSIC condition that included alignment, grade, configuration, hydraulic capacity  
564 of culverts and crossings. He noted that he had misspoken earlier when he gave the date of 2015  
565 and noted that it was brought into Statute in 2013 and was the exact same processes that were  
566 used in determining an official profile or ACSIC hydraulic efficiency/capacity south of Pine Street  
567 and was further modified with the statutory process that resulted in the adoption of the ACSIC  
568 north of Pine Street. He stated that this represents the maximum extent to which you can  
569 reconstruct this ditch and still call it repair. He stated that if the District exceeds that by increasing  
570 hydraulic capacity, that would be considered 'improvement' which can only be accomplished  
571 through a petitioned process. He stated that if the District deepens the ditch beyond the ACSIC,  
572 as it has been established, that would also be considered an improvement, which requires a

petitioned process. He stated that when the engineer outlines Alternative 4, repair to the ACSIC, that is the maximum the District can do and anything beyond that would constitute an improvement to the system and would require a separate petitioned process as well as all the other involved regulatory processes. He noted one other consideration that the Board must give is that in any work on the ditch, including a repair, is consideration of the conservation of soil, water, wildlife, and natural resources and has to incorporate concepts found in the Minnesota Environmental Policy Act. He stated that the landowners cannot force the District to go head to head with the DNR in a fight over whether something should be approved or not. He stated that if the Board would decide that they want to repair back to ACSIC, that begins a whole separate process and they have to go see if they can get a permit to do this work. He stated that if a permit cannot be obtained, and that results in an impediment to the drainage rights of the individual land owners, the District is not obligated to vindicate that right for the landowners. He stated that even if the Board makes a decision that they want to proceed with Alternative 4, they may be prevented from doing that because they cannot get the regulatory approvals to do so. He noted that when they are considering repair to one portion of the drainage system, it is not considered in isolation which addresses the comments shared by Mr. Robinson and others. He stated that what the Board is trying to do is thread a very small needle and are trying to get to the point where they have restored the most beneficial drainage in the greatest interest of all of the competing interests. He explained that when the public comes in and talks about a problems, the Board may not be able to solve that particular problem and may only be able to address one aspect of that problem. He stated that there were comments shared that asked the Board to repair to the original ditch bottom and not the ACSIC but the Board has determined that the ACSIC which was adopted by the Board is the original ditch bottom unless there is compelling evidence that is contrary to what they had previously considered that would show that the prior decision was palpably wrong. He clarified that he wanted to manage expectations from both the Board and the public about what the Board can actually do in today's proceedings.

President Bradley thanked Drainage Authority Kolb for this clarification and explained that he had been trying to let the witnesses know that some of the things they were concerned about would be decided later. He noted that they have not had a chance to review the information that came in today and believes that if, for example, the Board adopts Alternative 4, it would be not preclude them from doing that because they would be setting a policy to set it to the ACSIC, which is the ditch bottom.

Manager Robertson stated that her understanding is that the Board was not asked to make any sort of legislative action today and was to simply hold a public information meeting in order to hear feedback from the other parties. She stated that she did not think the Board had been asked to 'do something' today. She stated that she thinks it is obvious that something needs to be done, but she does not want to do something for the sake of doing it.

Manager Wagamon stated that he agreed.

615 Manager Robertson stated that there is cause and effect here and explained that she doesn't  
616 want to do one thing and then end up, for example, flooding the Robinson property. She stated  
617 that government is not perfect, does not move fast, nor do they always get it right. She stated  
618 that she feels they have to be cautious in this instance and not act rashly. She stated that she did  
619 not believe that they had even specifically identified what the District's objectives are before they  
620 attempt to even make a decision. She stated that she thinks making a motion at this point would  
621 be irresponsible and explained that she sees what has happened today as one step of a multi-  
622 step process.

623  
624 Manager Waller stated that he did not come here to make any decisions other than to accept the  
625 information. He noted that he agreed with the earlier statement made by President Bradley that  
626 today should mark the cut off for new information. He stated that he personally needs time to  
627 ruminate over the new information that was submitted. He stated that he would suggest that  
628 the Board simply close the public meeting and move on.

629  
630 ***Motion by President Bradley, seconded by Manager Waller to close the record related to the***  
631 ***consideration of ACD 10-22-32 Evaluation of Maintenance and Repair Alternatives now that***  
632 ***the Board had received public comment and additional documentation, and direct the District***  
633 ***Engineer to review the additional information and provide a summary to the Board of the***  
634 ***relevance of the information.***

635  
636 Manager Wagamon stated that since there is not going to be a debate regarding a decision, he  
637 can hold the comments he had planned to make earlier in the meeting.

638  
639 ***Motion carried 5-0.***

640  
641 District Administrator Tomczik stated that he would estimate that this item could be brought  
642 back before the Board in a month.

643  
644 Manager Wagamon stated that the information being turned in is very different than what the  
645 District Engineer is saying. He stated that the engineer that spoke on behalf of the people today  
646 has a different opinion and has a lot of facts to back up that opinion. He noted that he did not  
647 understand why the District Engineer would end up being the one who makes a decision on what  
648 is correct when there are dueling engineering opinions.

649  
650 President Bradley stated that neither engineer would decide what is right or wrong and explained  
651 that determination would be made by the Board.

652  
653 District Administrator Tomczik stated that he believed that Houston Engineering, after reviewing  
654 the information, will have a technically responsive position for the Board and noted that he  
655 believes they will be able to address the concern raised by Manager Wagamon.

# Technical Memorandum

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**To:** Nick Tomczik  
Rice Creek Watershed District

**Cc:** Tom Schmidt  
John Kolb

**From:** Chris Otterness PE

**Subject:** Anoka County Ditch 10-22-32  
Summary of Comments Received and Next Steps

**Date:** May 23, 2023

**Project:** R005555-0333

## INTRODUCTION

On April 26, 2023, the Rice Creek Watershed District (RCWD) held a public information meeting to discuss alternatives for restoring drainage function on a portion of Anoka County Ditch (ACD) 10-22-32 north of Pine Street in the City of Columbus. At this meeting, the RCWD received commentary and questions from several landowners (including municipalities) and their representatives. One landowner (Perry Wagamon) provided paper documentation for consideration of maintenance/repair alternatives.<sup>1</sup> In addition, the RCWD received written comments from landowners prior to and following the public information meeting.

The purpose of this memorandum is to summarize the information and comments received, provide engineering responses (as appropriate) and identify how the information may be considered with respect to a decision on further management of ACD 10-22-32 in this location. The memorandum also will recommend next steps in proceeding forward with a management alternative.

## COMMENT SUMMARY

Written comments were submitted by eleven individuals, including landowner, cities, and their representatives. **Table 1** tabulates the comments, along with a technical response regarding engineering considerations related to the comment. Comments from the 4/26/23 Board meeting are quoted directly from the approved meeting minutes.

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<sup>1</sup> These documents are supplemental to documents received from Mr. Wagamon during a 2021 proceeding to reestablish the public drainage system record.

**Table 1 – Written Comments and Engineering Responses.**

ID	Comment	Engineering Response
<b>Mike Kettler, P.E., Sunde Engineering; 4/18/2023 Letter to Perry Wagamon (comments 1-10) and 4/26/23 Board Meeting (comments 11-12)</b>		
MK.01	The goal of the Watershed District is to establish a recommendation on how to best restore the drainage capacity of the ditch, referred to by Anoka County as ditch 10-22-32. The restoration will in turn alleviate flooding on the Wagamon Property and neighboring parcels of land.	The RCWD is tasked, both under its Watershed Management Plan and under Minnesota Statute (M.S.) 103E, to inspect and maintain its drainage systems. Although this maintenance facilitates the use of the system as an outlet, it cannot eliminate all flooding on the landscape.
MK.02	In reviewing the above materials, we are concerned that the analysis of flooding elevations with respect to the downstream Jodrell Street culvert crossing elevations was reviewed against the as-constructed and subsequently improved condition (ACSIC) with is higher than the ditch profile that existed prior to the construction of Jodrell Street as indicated in the profile drawings. There is no doubt the higher elevation of the current ditch contributes to higher water levels upstream of the ditch such as on the Wagamon Property and neighbor properties.	The ACSIC grade is <u>lower</u> than the ditch profile that existed prior to the construction of Jodrell Street. Two to three feet of sediment has been removed from the ditch bottom during repair activities in the last 12 years.
MK.03	To restore water levels to the condition that previously existed, we believe that the ditch profile needs to be part of the solution. We don't believe that the profile should have been raised as part of the adjacent road construction even if wetland mitigation were to be required as a result.	The construction of Jodrell Street did not change the elevation of the ditch, but rather placed a culvert above the ACSIC grade. The RCWD has since cleaned out the ditch to the ACSIC and cannot lawfully clean lower than that as a maintenance activity.
MK.04	Additionally, the culvert crossing on Jodrell Street and the soil correction that took place for the Jodrell Street construction as it crosses the ditch are wrong and have caused serious flooding problems for the Wagamon property and neighboring properties. When you built your home around 1982, the runoff from your property did not drain to the ditch. It was only as a result of the construction of Jodrell Street in 2003, in which the street acted as a dam for the surface water runoff that cause your previous drainage pattern to become altered and re-directed to the ditch. This is	As RCWD does not manage groundwater, we have not evaluated the historic effects of Jodrell Street's construction on subsurface flow.

ID	Comment	Engineering Response
MK.05	Exhibit A depicts a modified ditch profile that was changed by the Watershed Engineers to be higher than the elevation of the original ditch that dates back more than 100 years.	HEI has identified the ACSIC grade, replicating the condition of the ditch as it was originally constructed, based on significant field data collection. This grade was adopted by the Board as a matter of record.
MK.06	Exhibit A also shows a cross-section of Jodrell Street thru the ditch. The culvert was constructed as part of the roadway crossing to pass runoff under the street. However, it was erroneously not placed at the bottom of the ditch profile, but rather approximately 3' above the bottom of the ditch making the ditch grade irrelevant as the water levels now are controlled by the elevated culvert height, which further increased the upstream flooding on the Wagamon Property and neighboring	Correct – the developer of the project installed the Jodrell Street culvert at roughly the elevation of the existing sediment in the ditch at the time of construction, which was approximately 2.2 feet above the original ditch bottom.
MK.07	Poor soils were encountered under the proposed Jodrell Street alignment which necessitated significant soil correction during construction. Some 60' of compacted material was placed below the pavement section in order to stabilize the road. IN addition to the surface water flooding, this action trapped the flow of groundwater and raised the water table higher on the Wagamon property and neighboring properties causing severe damage to structures, septic systems, and the killing of hundreds of 50-60 year old oak trees and other valuable trees during freeze and thaw cycles due to saturated soils. These soils had not been saturated before the compacted material was installed under the new street.	As RCWD does not manage groundwater, we have not evaluated the historic effects of Jodrell Street's construction on subsurface flow.
MK.08	Attached Exhibit B depicts a proposed culvert crossing Jodrell Street at the bottom of the ditch instead of 3' above it, which would considerably reduce high water levels behind it and the flooding on the Wagamon Property and neighboring properties.	The profile identified in Exhibit B is considered an "improvement" under the drainage statute. Under M.S. 103E, a drainage authority cannot complete maintenance that is deeper or provides a greater capacity than the as-constructed and subsequently improved condition. The profile indicated in Exhibit B is also lower than downstream infrastructure which would negate most of its effectiveness in further draining this region.

ID	Comment	Engineering Response
MK.09	<p>Finally, in our opinion and as stated in the RCWD Stormwater Management Rule C the storm even for flood protection should be established is the 24-hour, 100-year rainfall event (7.12") and not simply rainfall events of 2-year and 10-year probabilities. The larger storm events will yield higher peak flood elevations and correctly change what an appropriate recommended solution to the flooding situation needs to be. It will require a larger, but necessary scope of work than what is being considered in the January 31, 2023 Memorandum. Proposed changes will be more in line with what we are outlining in Exhibit Bs. We would encourage the District's model to use this storm event to establish a better cost benefit recommendation.</p>	<p>Under the drainage statute, the RCWD cannot increase the size of the drainage system beyond what it was originally constructed (less than a 10-year rainfall event). However, RCWD can and has evaluated road culverts for their ability to pass a 100-year rainfall event without flooding upstream structures. RCWD has modeled and mapped the 100-year flood event along ACD 10-22-32 under existing conditions. We are unaware of structures adjacent to this portion of the public drainage system that are potentially inundated by the 100-year floodplain, and thus did not evaluate the 100-year rainfall for the alternatives. If potential structural flooding locations are identified, the RCWD can consider additional analysis for relief of 100-year flooding under one of its other programs.</p>
MK.10	<p>In our opinion, we believe there is a solution (see paragraphs 7 and 8) that will eliminate flooding on the Wagamon Property and neighboring property. This should be the goal even if the scope of work and permits needed to accomplish this has to broaden out from the analysis and options presented by the Watershed District in their January 31, 2023 memorandum.</p>	<p>Although there are activities, both in RCWD's role as Drainage Authority and through its other programs, that can be completed that alleviate some surface water issues in this vicinity, it should be noted that it is infeasible to eliminate all water pooling on these properties.</p>



ID	Comment	Engineering Response
MK.11	<p>Mike Kettler, Civil Engineer, Sunde Engineering, stated that he was asked by Perry Wagamon to study the alternatives developed by the District as they relate to his property which is upstream of the Jodrell crossing. He explained that originally his property did not drain to ditch that is being discussed and noted that the natural drainage was towards what is now the Jodrell Street alignment. He noted that it was just because of the Jodrell Street construction that his drainage pattern changed to be directed to that existing ditch profile. He stated that part of the construction of Jodrell Street was a requirement from the Army Corps of Engineers to not impound water behind that roadway. He stated that he believes that the higher original culvert crossing of Jodrell Street essentially conflicted with that Corps requirement of impounding water and was essentially providing a pond behind the Jodrell Street crossing. He explained that Mr. Wagamon has witnessed significant flooding over a period of time on his property to his home, structures, septic, and other useable areas. He stated that he studied the alternatives that the District has presented and felt the modeling by District Engineer Otterness provided a lot of great information. He stated that it is very flat and would hesitate to even call it a ditch because it is essentially ponding water behind a lot of culvert crossings, which are storm sewer crossings.</p>	<p>Noted. RCWD was not the permitting authority for the construction of Jodrell Street and thus does not have the authority to enforce the conditions established by the permits issued at that time.</p>



ID	Comment	Engineering Response
MK.12	<p>He stated that he thinks for a 100-year storm event there would be a difference in water elevations behind the culvert crossings and asked that the District compare those flood elevations with some critical elevations on the Perry Wagamon property. He explained that Mr. Wagamon is essentially sitting in a landlocked area and feels that makes it a bit more relative to provide a 100-year storm event for an analysis and not just general pipe sizing in the District. He stated that he thinks all the alternatives that were presented are very well played out and thinks Alternative 4 with some amendments, such as the 100-year event information, the Jodrell Street crossing, and making the pipe large enough to not flood upstream structures. He stated that it would basically either be amending Alternative 4 or creating a new Alternative 6. He stated that they feel lowering Jodrell down to the spirit of the Corps permit down to the original ditch bottom and not ACSIC in order to give Mr. Wagamon the condition that existed prior to the construction of Jodrell Street, which he believes was the intent of the Corps of Engineers. He explained that he believed this approach would be better suited for upstream flooding. He reiterated that he thought the model and the report given by District Engineer Otterness was very thorough but believes the other items should be considered for Mr. Wagamon's property. Mr. Kettler stated that they have not done any studies and explained that his intent was not to recreate District Engineer Otterness' model because they think it is accurate but would ask that the District plug in some different elevations and different storm events.</p>	See response to Comment MK.09
Kirby Becker, landowner: 4/12/23 email to RCWD		
KiB.01	<p>What land use was input into the model runs? Was it existing or future land use? If only existing, it would be nice to see results with a full 20-year build (i.e., counties, cities, townships) for each model run alternative (less Alt 1).</p>	<p>Existing land use was used for this report. The RCWD has previously completed future land-use modeling in this location. as part of other water management efforts. This modeling is relevant to municipal stormwater planning and for other District programs, but not so for the public drainage authority in completion of its drainage system maintenance decisions.</p>

ID	Comment	Engineering Response
KiB.02	<p>Why were alternatives only modeled at 2.7" and 4.1" rainfalls? "There has been a shift in recent decades for more significant rainfall events. Minnesota has seen 16 mega-rains, but 11 of these 16 events have been in the most recent 22 years (2000 through 2021), compared to five confirmed events in the 27 years from 1973 through 1999. Put another way, these major rainfall events have been over 2.5 times more common during the first few decades of the 21st century than they were during the last few decades of the 20th century. Although it is difficult to assess the statistical significance of that increase, we do know that these observations are consistent with observed increases in the frequency and intensity of heavy rainfall events at historical observing stations, and also are consistent with the expectation that Minnesota and the Upper Midwest will receive more precipitation, and more precipitation from large events opens in a new browser tab, in response to increasing global temperatures and increased available moisture for passing storm systems."</p> <p>(<a href="https://www.dnr.state.mn.us/climate/summaries_and_publications/mega_rain_events.html">https://www.dnr.state.mn.us/climate/summaries_and_publications/mega_rain_events.html</a>)</p>	<p>Alternatives were modeled for the current 2-year and 10-year rainfall depths as defined by NOAA's Atlas 14, consistent with RCWD program administration. Minnesota has experienced more high-intensity rainfalls in recent years. Some of this has been accounted for already in the Atlas 14 rainfall depths. NOAA has not updated rainfall frequency data since Atlas 14, and utilizing alternative depths would be arbitrary for the purpose of the RCWD maintenance effort.</p>
KiB.03	<p>Were downstream ditches, storage/retention ponds, and water flows modeled to determine impacts if upstream culverts were increased in size or lowered?</p>	<p>The entire ACD 10-22-32 system, down to its outlet at Marshan Lake, is included in the model. Focus on the study was critical locations upstream of maintenance locations, as the function and utility of the drainage system downstream will not be affected by lowering culverts.</p>
KiB.04	<p>Were the cities of Columbus and Lino Lakes coordinated with during the selection and modeling of alternatives (prior to)?</p>	<p>No. The RCWD Engineer and staff recommended alternatives to be evaluated (from a technical basis) to the RCWD Board, which the RCWD Board approved. When the Board makes a management decision, it will consult with the Cities regarding next steps.</p>

ID	Comment	Engineering Response
KiB.05	What is the expense and impact of lower a pipeline? Did the pipeline companies provide a cost to lower and description of impact? If not, I would suggest removing this language from memo.	We cannot provide an estimated expense – that can only be provided by a pipeline company, and we have not received that information. Due to very low tolerances for deflection, lowering a pipeline a few feet can require modification of the pipeline up to a half mile in either direction. It is this understanding (and prior experience in working with pipeline companies regarding other lowering efforts) that is the basis of this statement.
KiB.06	What are the expense/costs for alternatives 3, 4 and 5? Aside from the hydraulic modeling impacts, It would be nice to understand costs for each alternative in the near and long-term including the cost to "lower the culvert under Pine Street".	The costs for constructing these alternatives was not in the scope of this analysis. The regulatory costs of each alternative are not well understood and will require the expenditure of additional District investment in order to more accurately understand the relative cost.
KiB.07	This is the last paragraph of the memo. The last part of sentence one states "other near term solutions". Is this is reference to recommendations outlined on page 5 of 7, or are there other near term solutions not identified and included in the memo? If not, what would those solutions be?	These solutions include regular inspection of the crossing sites, beaver dam removal, beaver trapping, and coordination with the pipeline companies for maintenance activities.
KiB.08	Additionally, both Columbus and Lino Lakes should also be listed in the last sentence for continued partner/stakeholder engagement. While I understand the need to coordinate with the pipeline companies, it's also important to ensure both cities are kept in the loop and ensure the best interests of their residents.	The last sentence was intended simply to reflect the coordination necessary at the pipeline crossing sites. The RCWD has, and will continue to, coordinate with the Cities in the intersection of the ditch system with City infrastructure (i.e., public roadways) and with landowner engagement. The Cities have been invited to the public information meeting on April 26, and we look forward to further engagement with them.
Diane Hanke, City of Lino Lakes, in an email dated April 20, 2023 (comments 1 and 2) and in a Zoom chat window during the April 26, 2023 Public Meeting (comment 3)		

ID	Comment	Engineering Response
DH.01	As you know, when RCWD lowered the culvert under Pine St. to the east, some of our residents felt as though it created issues downstream in Lino.	We are aware of some of these concerns, including the perception that "we are getting more water." However, the hydrology does not bear that concern out. Lowering the culvert has a minimal effect on downstream runoff delivery. In addition, it is important to note that the RCWD is obligated to maintain the entire drainage system (including portions upstream and downstream of these landowners, and the baseline for that maintenance is the as-constructed condition. The effort to lower the Pine Street culvert on Branch 4 was intended to restore that condition.
DH.02	We will need some understanding of the impacts downstream.	No impacts downstream are intended from the maintenance work considered in Houston Engineering's memo. Again, the culvert elevations will not change the capacity or burden on the downstream system, and maintenance here is consistent with maintenance in other parts of the system, including that already completed downstream several years ago
DH.03	How does the flood elevation change impact downstream in Lino Lakes. Can you provide a map showing the pre and post project floodplain in the Lino Lakes? for the flood alternates that were ~-1'	None of the alternatives is anticipated to have a significant effect on flood elevations in Lino Lakes, as the capacity of the public drainage system is not being changed. No floodplain mapping was completed downstream of Jodrell Street.
<b>Kevin Bittner, Columbus City Engineer, in a letter dated April 19, 2023 (Comments 1-3) and testimony at 4/26/23 Board Meeting (comment 4)</b>		
KeB.01	In general, the Mayor and City Council, as well as city staff, are very supportive of maintenance and improvement activities on all the ditch systems within the city limits and those outside of the city that provide a positive drainage benefit to the city. Given its flat topography, effective drainage systems are critical to maintaining the integrity of existing residential and commercial properties as well as providing mechanisms for future development within the city.	Agreed and noted. Please note comment KeB02 below with regard to the term "improvement."

ID	Comment	Engineering Response
KeB.02	<p>In regard specifically to ACD 10-22-32, we are very supportive of improvements that provide relief to properties that have experienced high saturation levels over the past 20 years, due to numerous factors that are at play. The City also recognizes that the RCWD is the authority for this system and controls the decision-making process for any improvement.</p>	<p>Under MS 103E, the term “improvement” is specific to deepening or enlarging the drainage system. RCWD cannot lawfully initiate an “improvement” in this sense. However, understanding that Mr. Bittner’s the use of the term “improvement” here is intended to be synonymous with repairs, then the statement would be correct. It is important to note that road authorities are ultimately responsible for decision-making related to roadway culverts along the drainage system, though the District can order modification to these culverts if they are determined to be an obstruction.</p>
KeB.03	<p>From a technical viewpoint, in my review of the alternatives that are laid out in Houston Engineering’s Technical Memorandum dated January 23, 2023, I’m of the opinion that Alternative 4 would provide the maximum benefit to the city and its property owners.</p>	<p>Noted.</p>
KeB.04	<p>Kevin Bittner, Bolton &amp; Menk, explained that he was also the appointed City Engineer for the City of Columbus. He stated that had provided the letter to the District and wanted to reiterate that, as a city, they are very supportive of activities that maintain the ditch systems within the city because they are very critical to their drainage. He stated that as it has been noted, Columbus is a very flat community so maintaining the ditches are critical. He stated that regarding the alternatives that were shared, from a technical perspective and his evaluation, he would support Alternative 4, but noted that they are open to consideration of other alternatives if other information comes forward. He noted that there was a statement from the presentation regarding lowering Jodrell culverts not measurably changing flood extent in upstream properties. He stated that he would agree with that from the perspective of the model, but when it comes to the event itself, he can see where the profiles may not change considerably based on the elevation of the culverts, but he thinks this is really a problem with saturation levels after the event is over. He stated that he believes at that point it acts less like a ditch and ends up being pools behind culverts and would say that the culverts play a really big part in controlling the saturation level and lowering them to the ASCIC level would be very beneficial.</p>	<p>Noted</p>

ID	Comment	Engineering Response
<b>Roger and Sherri Nase, landowners, in a letter dated April 24, 2023 (Comments 1 and 2) and testimony at 4/26/23 Board Meeting (Comment 3)</b>		
RSN.01	We want to express our concerns regarding the high water levels that flow from the large swamp (noted below) onto our property flooding the trees behind and to the East of our pole building. Standing near the property line we could see the current in the water running from the swamp on Perry Wagamon's property onto our property. We have had about 10 trees that were in water that eventually died and many others that may die if it continues to flood. This is not a problem every year but on wet years the water really backs up in that region and doesn't seem to drain down. The ditches probably need to be cleaned back to their original depth to restore the drainage. Ditches naturally fill in as sediment deposits or bog plugs them up. They need maintenance to prevent flooding.	<p>The ditches have been cleaned out to the original depth in recent years. Minimal sediment currently exists in the ditch.</p> <p>However, as the commenter notes, ditches do experience sedimentation and other blockages, and RCWD staff remains vigilant in inspecting the drainage system and maintaining it as blockages occur.</p>
RSN.02	When we looked at the culverts at Jodrell Street they were not at the ditch bottom, which is contributing to the problem by increasing the water level from where it was before the road was built.	<p>The original culvert under Jodrell Street was at the elevation of sediment in the ditch bottom when it was constructed.</p> <p>However, as the ditches have been cleaned out to the original grade, the culvert is now substantially higher than the current ditch bottom.</p>
RSN.03	Mr. Nase stated that the property directly to the south of them had two 40 acre plots that were converted into commercial industrial property from residential property. He stated that in the last request for a CUP, they were permitted to allow 12-15 acres of the 30 acre plot to be impervious which was scheduled to flow into a pond, however the pond was at 904-906 in elevation and the wetland delineation line is right around 905-906 which means the pond will be full in the spring. He stated that if there was a large rain, their concern was that water would flow from the impervious surface and go toward the pond, but because it would be full it would then spill over onto his property and the Wagamon's property and exacerbate the problems that they are already seeing. He asked that Board to keep this in mind as they look at possibly having more water that could flow into the area.	Noted
<b>Tim and Helen Kessler, landowners, in an email dated April 24, 2023</b>		

ID	Comment	Engineering Response
THK.01	We have lived in Lino Lakes since 1986 on Main Street. Back in about 2006 there was discussion on the Blanding Turtle in Anoka County and the fact it was endangered. My wife and I express wishes that in all you do, you also consider this turtle habitats, if you still see it as threatened.	Blanding's turtles are listed as "threatened" by the Minnesota Department of Natural Resources (DNR). As the RCWD is aware of multiple sightings of these turtles in Columbus and Lino Lakes, it has taken precautions to avoid inadvertent takings of the species during ditch maintenance, including educating equipment operators.
<b>Clark Robinson, landowner: 4/26/23 letter to RCWD</b>		
CR.01	As a landowner within this drainage system my question is, has the ACSIC been applied to entire 10-22-32 system, or just in the areas north of Pine St.?	An ACSIC has been determined for the entire system. For the portions of the system south of Pine Street, the ACSIC is consistent with the Functional Grade identified in the 2011 Historical Review
CR.02	Has every culvert from Main St. south been checked to see if the culvert is set at the level that would match the ACSIC level?	Yes – every culvert has been verified for consistency with the ACSIC grade.
CR.03	In other words, if the ditch has been improved to a lower level than the original profile, shouldn't all the culverts/obstructions be lowered to match the bottom of the ditches?	Excavation of the ditch by private landowners outside of a public drainage proceeding is <u>not</u> considered to be part of the as-constructed and subsequently improved condition
<b>Perry Wagamon, landowner: Paper documentation provided to the Board on 4/26/2023 (Comment 1) and testimony at the 4/26/23 Board meeting (Comments 2 and 3)</b>		
PW.01	See <b>Appendix A</b> for summary of documentation provided	The documentation provided by Mr. Wagamon details observed historic hydrologic conditions and a partial history of water management decisions near Jodrell Street by the RCWD, City of Columbus, Coon Creek Watershed District, DNR, and Corps of Engineers.

ID	Comment	Engineering Response
PW.02	<p>Perry Wagamon, stated that he has heard a lot of things today that he feels make a lot of sense regarding ditch cleaning. He stated that what does not make sense to him is that he lived in his home for 25 year prior to this road being constructed and had no flooding issues. He stated that the trees on his property that were killed by the flood were 40-50 years old. He stated that he does not think there is a question that when they built the road, it flooded, killed the trees, and ruined his home. He stated that he came to the District when the road was built and they were putting in the culvert. He explained that he had reported that a neighbor had told him that they were putting the culvert in 3 feet too high and requested help to take care of the flooding problem. He stated that they promised to do that and mentioned cleaning up ACD 10-22-32. He noted that he did not come to the District and ask them to clean ACD 10-22-32 because he did not know what that was, he just knew that his land was flooding. He reiterated that his land was not flooding prior to the road being built but did after it was built and the culvert was placed too high. He stated that he thinks it is obvious why his land was flooding and did not believe it should take a 15-20 year ditch cleaning process in order to take care of the problem. He stated that, to him, it would be common sense to go lower the culvert to the as constructed condition. He stated that if that would have been done, his land would not have been flooded, his property would not have been destroyed, and his trees wouldn't be dead. He stated that he feels this is a lot more simple than this group is trying to make it. He reiterated that he has never requested that any kind of kind of ditch cleaning be done and simply asked to have relief from the flooding.</p>	Noted
PW.03	<p>He expressed frustration that the expectation is that the Board would believe that it took them 15 years to figure out that there was a beaver dam over the pipeline and get it cleaned out. He stated that it was not a beaver dam and was a 2.5 foot obstruction that continued for 50-100 feet on either side of the pipeline.</p>	<p>It is correct that a portion of the obstruction was remnant cover placement by the pipeline owner (NNG) when the pipeline was installed. RCWD initially cleaned off a portion of this cover material to the extent that the on-site pipeline representative would allow. Beaver dams were then built on top of the remaining hump and subsequently removed by RCWD multiple times. In 2021, RCWD in coordination with NNG representative was able to remove the remainder of the hump down to the ACSIC grade.</p>

ID	Comment	Engineering Response
<b>Janet Hegland, Columbus City Council Member, in testimony at 4/26/23 Board Meeting</b>		
JH.01	<p>Janet Hegland, Columbus City Council, stated that she has attended a few meetings and has learned a tremendous amount and understands the District has done a lot of work trying to solve this problem. She stated that the letter presented by Mr. Bittner reflect the position of the Columbus in terms of their interests, but noted that she had heard this morning that there is additional information and additional perspectives that may be considered. She stated that it would be very reassuring to the City of Columbus if that information was considered as part of the selection of the alternatives. She stated that the District has done a lot to try to solve this problem and it has been tremendously frustrating for Columbus to have residents have repeated flooding events and not get relief. She stated that the attempts that they have tried thus far, have not solved the problem. She stated that it may have kept them ahead of the development and increased pressure on the ditch system to handle storm water run-off, but it has not solved the problem. She stated that if it requires taking another meeting or two in order to look at the alternative perspectives and additional information and incorporate that into the selection process, that would offer some assurance to Columbus.</p>	Noted
<b>Scott Robinson, landowner, in testimony at 4/26/23 Board Meeting</b>		
SR.01	<p>Scott Robinson, 8179 4<sup>th</sup> Avenue, Lino Lakes, stated that his property is directly south of this area and noted that he felt that drainage rights were property rights which give an intrinsic value to the property. He asked if there was representation from the City of Lino Lakes also present at today's meeting because they mentioned a culvert on Pine Street and asked if there was a proposed size that the cities want to install</p>	<p>The Cities have not proposed an alternative size. The alternatives evaluated utilizing the same size pipe, with exception of Alternative 5.</p>
SR.02	<p>Mr. Robinson asked if that would go to the ACSIC level or to the official profile of the ditch because those are two different things. Mr. Robinson asked if the District was aware that there are areas of the watershed that the ACSIC level is not the official profile and is not the maintained level of the ditches.</p>	<p>The RCWD does not manage to an "official profile." Rather, it manages to the ACSIC alignment, grade, and cross-section. In most of the system, the ACSIC is the same as the "Functional Profile" indicated in the 2011 Historic Review.</p>

ID	Comment	Engineering Response
SR.03	Mr. Robinson stated that there were also surveys done of the ditch from south of the center of Section 6 which is a half mile south of Pine Street all the way down to the lake. He stated that there have been core samples done and they know the ditch was dug deeper at one time than what it was being maintained at now. He stated that his larger question is whether the Board decides to put in ACSIC upstream from them, what the effects will be on the water coming down to him when they are not doing to the ACSIC level below them and through them.	We are unaware of core samples that would indicate that the grade of the ditch as it was originally constructed and subsequently improved via drainage proceedings is lower than the ACSIC grade recognized by the District. Lowering the Pine Street culvert will not increase the burden on the downstream system nor change its capacity.
SR.04	Mr. Robinson asked if the District's hands were tied by the Corps of Engineers and the DNR.	The District has the authority to maintain the drainage system pursuant to M.S. 103E, but is likewise subject to other local, state, and federal laws.
SR.05	Mr. Robinson referenced a 10 year rain event and stated that he knows their back fields will be flooded because the downstream culverts are not adequate enough to handle it. He stated that if they put in a 48 inch culvert or two -24 inch culverts on Pine Street, they will be flooded. He stated that he feels there is no way that it will not flood because they are downstream and their culverts are smaller.	The District does not intend to increase the capacity of the Pine Street culvert.
SR.06	Mr. Robinson stated that wanted to know if it was the District's testimony that they had done the study on downstream and have determined that they can take the water and that it will have no adverse effects.	No increase in water volume will occur downstream as a result of any of the proposed alternatives, and thus the burden on the system will not be increased by the alternatives. That said, other factors including climatic changes have increased the frequency of higher magnitude rainfall events. The RCWD is limited in its ability to address the climatic changes through its role as drainage authority but has and will continue to address these changes through other District programs.

ID	Comment	Engineering Response
SR.07	<p>Mr. Robinson stated that in a perfect world you would be able to say that the ACSIC is the official profile and have it maintained at that level. He stated that if the Board is doing to take the position that they will try to lower it to the ACSIC level, he would like to see that done District-wide and have it put down to the level where the ditches have been dug to.</p>	<p>The RCWD has completed prior comparisons of the ACSIC grade on ACD 10-22-32 to existing road/field crossings and has replaced and/or lowered the culverts where crossings have been determined to be an obstruction.</p>
<p><b>Ron Moss, Tatonka Real Estate Advisors, in testimony at 4/26/23 Board Meeting</b></p>		
RM.01	<p>Ron Moss stated that almost all of the discussion thus far today has been about the area north of Pine Street and he is representing a party who has property just south of Pine Street. He stated that this individual has 80 acres that they would like to sell and noted that it was platted back in 1980 as Pine Oaks Addition. He explained that at the time it was platted all the land was dry and right now, a reasonable amount of it is wet and he believes it is related to the topic being discussed today. He stated that they would like to sell it and have a potential buyer but the dryness of the land will have a great effect on the value of the land. He stated that he believes the decisions the Board makes will impact property owners south of Pine Street as well.</p>	<p>The referenced property is located upstream of Branch 2 of ACD 10-22-32 and is in no way impacted by the proposed alternatives upstream of Pine Street. However, we understand the concerns, which are consistent with concerns raised by a prior owner of the property, which are unrelated to the condition of the ACD 10-22-32 drainage system. We are unaware of disrepair on Branch 2 that has cause the chronic drainage issues on the subject property.</p>

## CONSIDERATION OF COMMENTS AND DOCUMENTS WITH RESPECT TO ENGINEER'S TECHNICAL REVIEW

Written comments and additional documents are not in conflict with the technical findings summarized in the Houston Engineering, Inc. (HEI) memorandum dated January 23, 2023 regarding maintenance alternatives for ACD 10-22-32 north of Pine Street. However, a few of the comments suggested additional analysis be completed within the report, as follows:

- Comment MK.05 and MK.08 suggest an alternative repair profile (denoted as Exhibit B in the Mike Kettler letter) and recommend its consideration. This profile is considered an “improvement” under M.S. 103E. Improvements cannot be initiated by the RCWD. Therefore, we do not recommend its evaluation at this time.
- Comment MK.06 suggests modeling the alternatives utilizing the 100-year rainfall event. Although the alternatives can readily be modeled using higher rainfalls than evaluated in the report, doing so will provide limited value in determining the ditch’s ability to convey its design capacity (which is less than a 10-year rainfall event).
- Comment KiB.01 suggests modeling the alternatives under future land use conditions. Note that the drainage system was designed for land use as existed it existed in 1898, and maintenance/repair of the drainage system is limited to the capacity as it was originally constructed.
- Comments DH.02 and DH.03 request mapping and assessment of impacts downstream in Lino Lakes. It is important to note that none of the alternatives envision an increase in capacity of the drainage system from its originally established/constructed condition. The downstream portions of the drainage system were designed to accommodate the flow from the upstream portions of the system.

We can complete one or more of these suggested additional analyses upon request from the Board of Managers. However, at this time it does not appear that the results of such analysis would be pertinent to the Board’s decision regarding repair approach.

## CONSIDERATION OF COMMENTS AND DOCUMENTS WITH RESPECT TO BOARD DECISION ON REPAIR APPROACH

In considering maintenance/repair of the public drainage system, the RCWD as drainage authority under 103E and as a watershed district under 103D evaluates several factors, including but not limited to the value of the work to the landowners served by the system; the value of the work to the general public; the cost of the work, potential environmental effects, and prioritization of District efforts. The public comments provided touched on most of these factors. General themes of the comments included:



- Desire to maximize the efficiency of the drainage system, as reflected in Alternative 4. Multiple reasons cited for the critical nature of the drainage system condition, including “very flat” topography in the community and a lack of grade in the original construction of the ditch.
- Concern regarding compromising of downstream capacity and of ecological resources. These concerns have been addressed in the response to comments above.
- Requests for additional analysis of rainfall events. This is discussed in detail in the previous section of this report. The commentors did not indicate how this analysis would factor into decision-making by the Board.
- Detail on prior hydrology conditions and decision making by water management authorities (RCWD, Coon Creek Watershed District, City of Columbus, DNR, US Army Corps of Engineers). These conditions and decisions were in part directly related to the ACD 10-22-32 system and in part to other factors such as development construction. Although this history cannot be modified by current decisions, it may inform the value placed on quantified and/or observed incremental changes in performance of the drainage system in this region.

Although the hydrologic effects of the repair alternatives have been quantified within the 1/23/23 engineer’s report, the value of these changes, and the prioritization of these repairs within the RCWD’s overall public drainage system maintenance program, is subjective and can be informed by the verbal and written comments received. We recommend the Board weigh this information with respect to the factors outlined above in making a decision regarding a repair approach.

## NEXT STEPS

We recommend the RCWD proceed with the following steps in addressing drainage concerns on ACD 10-22-32 north of Pine Street:

1. Board of Managers to approve a motion to direct staff to proceed with implementation of a specified alternative from the 1/23/23 engineer’s report (either Alternative 3 or 4), subject to and dependent upon applicable regulations.
2. RCWD staff to coordinate with City staff regarding the approach and roles in executing subsequent actions in implementation of the preferred alternative.
3. If Alternative 4 is selected, RCWD staff to make formal application to DNR for lowering of the Jodrell Street and 137<sup>th</sup> Avenue culverts to the ACSIC grade. This step may include a coordination meeting with the DNR and potentially development of additional materials to support an application.
4. RCWD to complete an investigation of the wetland complex potentially affected by the lowering of the Pine Street culvert (including a wetland delineation) and make either a no-loss or wetland mitigation application to the LGU.

Depending on the outcomes of Steps (3) and (4), RCWD and Cities to develop plans and implement construction of culvert lowering projects.



APPENDIX A – SUMMARY OF DOCUMENTS RECEIVED FROM PERRY WAGAMON 4/26/23.

ID	Title	Author	Date	Notes	Relevance to ACD 10-22-32
PW_11	Sunde Memo and Cover Letter	Mike Kettler - Sunde Engineering	4/18/2023	See detail in Table 1	Recommended management
PW_12	1099-MISC Tax Statement	Precision Landscape and	2010	1099 Tax Statement for Sale of Wood Chips	Historic hydrologic conditions
PW_13	Cover Letter for Document Submittal	Perry Wagamon	4/25/2023	Cover letter for document attachments	Historic management decisions
PW_14	Excerpt from EOR Repair Report	EOR		Excerpt of profile analysis along current Main Trunk	Historic management decisions
PW_15	Tree Analysis Report	Paul Kujawa - Metro Tall	2016	Report on investigation of tree stands on Perry Wagamon property.	Historic hydrologic conditions
PW_16	Excerpt of Meeting Minutes	Coon Creek Watershed	7/14/2003	Highlighted excerpt of CCWD meeting minutes	Historic management decisions
PW_17	DNR field map/notes	Judy Davidson - DNR	3/20/1981	Notes from DNR staff regarding wetlands on Perry Wagamon property	Historic hydrologic conditions
PW_18	ACD 32 cut sheets	Anoka County Engineer	1898	Cut of cut sheets from 1898 design documents for ACD 32 Branch 15 (now ACD 10-22-32 Main Trunk near Jodrell St.)	Historic design
PW_19	ACD 10-22-32 Profile	Greg Graske - EOR	2/16/2007	Excerpt of EOR Repair Report indicated profile analysis along Main Trunk	Historic management decisions
PW_20	Carlos Avery Estates Field Inspection Notes	Unknown	5/14/2003	Notes from inspection of plat construction, indicating standing water along a road	Historic hydrologic conditions
PW_21	Completed ACD 10-22-32 Work Activities	Unknown	Unknown	Map and narrative indicating work completed on ACD 10-22-32 north of pine street prior to 2015	Historic management decisions
PW_22	Anoka County Protected Waters Map	DNR	Unknown	Excerpt from Anoka County Protected Waters map	Historic hydrologic conditions
PW_23	Property History Narrative	Perry Wagamon	4/11/23	Narrative on history of conditions at Perry Wagamon property	Historic hydrologic conditions
PW_24	Letter regarding HEI map dated 1/18/21	Perry Wagamon	6/10/21	Opinion on ACSIC grade determined by RCWD Engineer and prior RCWD management decisions	Historic management decisions
PW_25	Property History Narrative	Perry Wagamon	7/16/2021	Narrative on history of conditions at Perry Wagamon property up to construction of Jodrell St.	Historic hydrologic conditions
PW_26	Letter regarding ACSIC grade	Perry Wagamon	4/9/2022	History on ACD 10-22-32 management grade and relevance to ACSIC	Historic management decisions
PW_27	Summary of Events	Perry Wagamon	10/25/2016	Summary of water management activities related to portion of ACD 10-22-32 on Wagamon property	Historic management decisions

ID	Title	Author	Date	Notes	Relevance to ACD 10-22-32
PW_28	Cover Letter – DNR information	Perry Wagamon	Unknown	Cover letter sending historic DNR field inspection data	Historic hydrologic conditions
PW_29	COE Permit – Carlos Avery Estates	UW Army Corps of Engineers	8/6/2003	COE permit for discharge of fill in wetlands at Carlos Avery Estates. Excerpts highlighted regarding culvert sizing conditions	Historic management decisions
PW_30	Misc. correspondence related to COE permit	Multiple	2003	Miscellaneous correspondence between COE and local landowners regarding hydrologic effects of the construction of Carlos Avery Estates	Historic management decisions

145 timeline of potentially doing alum treatments in 2024. He cautioned that he did not want  
146 to present this as a certain timeline.

147 ***Motion carried 5-0.***

148 **3. Peterson Companies, Inc. Final Pay Request Long Lake Fish Barrier**

149 Lake & Stream Program Manager Kocian explained that this item was related to the final  
150 pay request for the Lake Johanna carp barrier. He reviewed photos that were taken at  
151 the site as part of the Long Lake/Lino Chain of Lakes Carp Management Program. He  
152 noted that Houston Engineering had surveyed the completed structure, compared it to  
153 the drawings they had produced, and found elevations and dimensions to be within  
154 acceptable tolerances. He noted that the District had received Watershed Based  
155 Implementation Funding Grant which meant that 90% of this cost of this project was paid  
156 for by that program.

157  
158 ***Motion by Manager Weinandt, seconded by Manager Waller, to approve final payment,***  
159 ***including release of retainage, to Peterson Companies for the Johanna Creek Fish Barrier***  
160 ***project, in the amount of \$5,487.50. Motion carried 5-0.***  
161

162 **4. Anoka County Ditch 10-22-32 Evaluation of Maintenance Alternatives Board Direction**

163 Public Drainage Inspector Schmidt stated that the Board had held a special workshop on  
164 June 5, 2023 to discuss the comments and submitted information in consideration of  
165 maintenance alternatives. He stated that the Board arrived at a general consensus for  
166 Alternative #4 and the next step in the process would be for the Board to direct staff  
167 toward final development of that alternative. He noted that included in the packet was a  
168 proposed motion, but noted that, based on advice from Drainage Attorney Kolb, that  
169 motion had been slightly modified and that language had been handed out to the Board  
170 prior to the meeting.

171  
172 District Administrator Tomczik noted that the differences in the motion language is largely  
173 a distinction between investigating and developing the alternative verses direct  
174 implementation.

175  
176 ***Motion by Manager Weinandt, seconded by Manager Bradley, to direct staff to develop***  
177 ***maintenance Alternative #4 (ACSIC Option) for ACD 10 22 32 north of Pine Street by:***

178 ***1. Identifying and quantifying regulatory requirements;***

179 ***2. Assessing the feasibility of the proposed alternative in light of the regulatory***  
180 ***requirements; and***

181 ***3. Engaging with municipal partners, DNR, and other regulatory, land use, and***  
182 ***road authorities as necessary to evaluate the feasibility of maintenance***  
183 ***Alternative #4.***

184  
185 President Bradley noted that Alternative #4 includes lowering the level of Jodrell Road  
186 and 137<sup>th</sup> Street culverts to the previously established ACSIC that was approved by the  
187 Board.

188  
189 Manager Waller stated that just because the Board has chosen this framework, it does  
190 not mean that this is the last profile that could be adopted by the Board. He explained  
191 that he sees this as a beginning in order for things to move forward and see what the  
192 DNR, Army Corps of Engineers, and the City of Columbus may have to say. He stated that  
193 in his opinion, this action does not eliminate possible adjustments to the ACSIC in the  
194 future.

195  
196 Manager Robertson stated that she has had additional dialogue with staff throughout the  
197 last week and explained that what she shared with them was her frustration that does  
198 not seem to be a finality to the issues that the residents have if the District hangs their  
199 hat on Alternative #4. She asked what type of cost is incurred with Alternative #4 and if  
200 moving forward with this alternative limits the District to the things identified within the  
201 motion. She asked if it was open to interpretation or to be modified. She stated that she  
202 understands that this is a long standing issue that has a lot of emotion surrounding it, but  
203 noted that she felt that everybody wants to come in and find the right solution. She  
204 explained that she did not want there to be bad feelings amongst the parties engaged in  
205 this and noted that she also did not want to move forward with a 'band-aid' type solution  
206 because she wants finality. She questioned what 'engage with municipal partners' meant  
207 and if merely sending an e-mail would fulfill that obligation rather than sitting down and  
208 really get into the 'weeds' of the issue. She reiterated that this action feels very vague to  
209 her and does not feel like an actual solution.

210  
211 District Administrator Tomczik stated that the District is acting as the Public Drainage  
212 Authority in this instance and are contemplating and addressing the obligations of the  
213 District specific to that authority. He stated that it may or may not result in an outcome  
214 that satisfies landowners or the municipalities. He explained that it is the District's belief,  
215 through the engineer's modeling, that alternative 4 will improve drainage. He stated that  
216 in the past, the District generally took regulatory positions at 'face value', that these  
217 matters were not surmountable by the District. He stated that this motion would direct  
218 staff to take those actions, to ask the questions because until the regulatory questions  
219 are asked, they do not know what the extent of the DNR's response and further the  
220 associated potential cost of what is being asked of the District to demonstrate. He stated  
221 that it is possible that they will just issue the District a permit, but it could also be a long,  
222 entrenched discussion where staff would return to the Board and ask for further  
223 guidance.

224  
225 President Bradley noted that he had previously asked the question about cost as well and  
226 the answer he received was that the upfront costs are those of the lawyers and engineers.  
227 He stated that responding to the DNRs questions start at approximately \$50,000 and go  
228 up which would become the cost of repair. He noted that there could be things like  
229 mitigation that they do not know the costs for and could be substantially more. He stated

that until the questions are asked, they cannot dig down and get the answers to the specific questions about cost.

Manager Robertson asked if the District would assume the cost of repair or if landowners would be assessed for those costs.

President Bradley stated that the current position is that repairs are a maintenance and valorem expense.

Manager Wagamon explained that he would abstain from discussion on this item but would like to ask a question. He stated that Columbus has a CWPMP and if he understood what he was reading correctly, that would override the other statute. He stated that stated that they do not have the mitigate for wetlands and asked if that was germane to this discussion.

Drainage Attorney Kolb stated that if there is a CWPMP that has been adopted by the LGU, the terms of it, by rule, would replace some of the specific requirements of the WCA. He noted that would only apply to consideration of mitigation required under the WCA and would not displace mitigation requirements that might be required under the Public Waters law.

Manager Wagamon stated that he thinks the District should take a look at their CWPMP to ensure what is in it.

District Administrator Tomczik stated that is part of the outcome of what is proposed in the motions. He stated that he would say this has been considered to some extent already. He stated that north of Pine Street will be a WCA consideration and is modified by a Board adopted and BWSR approved CWPMP. He stated that as Drainage Attorney Kolb stated, it does not apply to public waters and does not replace Federal wetland law.

Manager Waller stated that the emphasis today is primarily on drainage law under Chapter E, but the complaint heard throughout this entire proceeding has been about flooding, so there are other pieces that are important. He stated that he hopes the existing language is broad enough to allow these things to be considered as well. He reiterated that he did not see this action as a final step but as a step forward that will then be adjusted.

District Administrator Tomczik explained that the intent of engaging with the partners is broadly to see if there is any additional information or local authority that may assist in having the DNR, as the public waters authority, to come into alignment with the District's analysis. He stated that the District, through HEI, has studied Jodrell and noted that information is available to Columbus to collaborate with the District as it advances their storm water management.

Manager Waller stated that he specifically was thinking about the drainage that comes off of Jodrell from the north.

President Bradley stated that if this is passed, at a minimum, the city will be looking at lowering the culvert on Jodrell and will have the opportunity to consider the size and the comments from the public about 100-year rainfalls.

***Motion carried 3-1-1 (Manager Robertson opposed) (Manager Wagamon abstained).***

**5. Houston Engineering, Inc. Task Order No. 2023-003, Anoka County Ditch 53-62 Branches 5 & 6 Repair Report**

Public Drainage Inspector Schmidt stated that per the Board's prioritization of repairs to the drainage system, the next set to be repaired are Branches 5 and 6 of ACD 53-62.

***Motion by Manager Weinandt, seconded by Manager Bradley, to authorize the Board President to execute HEI Task Order 2023-003 to complete a repair report for portions of (ACD53-62), including Branches 5 and 6 and associated laterals, for an amount of \$82,200.00. Motion carried 5-0.***

**6. US Sitework, Inc. Partial Pay Request #6 Anoka County Ditch 53-62 Main Trunk Repair Project**

District Administrator Tomczik noted that Public Drainage Inspector Ricci was out in the field, so he would be handling this item. He reminded the Board that there was an incident with equipment at this site, but the work should be up and running by June 19, 2023, and explained that substantial completion is expected by July 13, 2023. He stated that this is a later time frame and will require a Change Order which is currently in process. He noted that city stormwater work will begin on July 5, 2023, and staff will engage with Circle Pines' staff.

***Motion by Manager Waller, seconded by Manager Wagamon, to approve US Sitework, Inc.'s pay request #6 as submitted and certified by the District Engineer and directs staff to issue a payment in the amount of \$4,928.13. Motion carried 5-0.***

**7. U.S. Geological Survey Joint-Funding Agreement-Streamgage on Rice Creek in Mounds View**

Lake & Stream Program Manager Kocian stated that he was seeking approval for a joint funding agreement between the District and the U.S. Geological Survey (USGS) for a streamgage that they operate on Rice Creek. He stated that the District has been partnering with the USGS since 2008 and explained that the data provided is very valuable and reviewed some of the ways that the District utilizes the data. He noted that the annual and total costs were outlined in page 58 of the packet.

## **ITEMS REQUIRING BOARD ACTION**

2. Silver Lake Carp Management Contract (Matt Kocian)

## MEMORANDUM

### Rice Creek Watershed District



**Date:** June 30, 2025  
**To:** RCWD Board of Managers  
**From:** Matt Kocian, Lake and Stream Manager  
**Subject:** 2025 agreement for Silver Lake carp management

---

#### Introduction

Seeking Board approval for a professional services agreement with WSB, Inc. for carp management on Silver Lake in 2025

#### Background

Silver Lake, located in the Cities of St. Anthony and Columbia Heights, is listed as *impaired* for excess nutrients by the State. Algae blooms are common and occasionally severe. A *Total Maximum Daily Load* (TMDL) study was completed on Silver Lake in 2010. Modeling and other diagnostic work conducted as part of this study suggested that watershed loading accounted for 74% of the total phosphorus budget. Further, watershed loading would need to be decreased by approximately 17% to reach water quality goals. Following completion of the TMDL study, the Cities of St. Anthony and Columbia Heights, with financial support from the District, completed several high-impact stormwater management projects. The phosphorus load reduction associated with these projects actually *surpassed* the goals set in the TMDL study. However, algae blooms persisted. District staff conducted additional diagnostic work on Silver Lake, focusing on aquatic plants and fisheries data. These data suggested that **common carp** were a possible contributor to the algae blooms.



**Left:** Common carp netted and removed from Silver Lake in 2013. **Center:** Water clarity improvement in Silver Lake following carp removals. **Right:** Algae bloom in 2018, following a suspected rebound in the carp population.

Beginning in 2014, the District, along with cities and their engineer, WSB, Inc., conducted investigative carp management on Silver Lake. The purpose of this management was to: 1) Provide a carp population estimate, and 2) Remove a significant number of carp and monitor the lake's response. The project succeeded in these respects; data confirmed the carp population was high, and a significant percentage of the carp population was removed in 2014 and 2015. Silver Lake responded quickly, and clarity measurements the following year were some of the best on record. However, a more comprehensive

## MEMORANDUM

### Rice Creek Watershed District



and long-term plan remained elusive, as lake residents expressed their frustration with an increased abundance of aquatic plants.

Beginning in 2024, Silver Lake residents expressed a renewed concern for algae blooms on Silver Lake. At the same time, plant surveys and DNR fisheries surveys suggested that the carp population may have rebounded. District staff met with Silver Lake residents several times, and recommended a comprehensive, long-term carp management plan. Such a plan would follow the Integrated Pest Management principles, developed by the University of Minnesota as part of their pioneering research on common carp.

WSB, Inc. is one of the few consulting firms with the expertise and equipment needed for effective carp management. District staff requested that WSB provide a proposal for carp management – a continuation of their past work on Silver Lake. Their proposal is included as an Attachment below. The cost of the proposed work is \$46,029.

The highlights of the proposed WSB carp management work on Silver Lake include:

- Carp population surveys in Silver Lake
- Surveys to check for carp reproduction in stormwater ponds adjacent to Silver Lake
- Carp aging
- Optional (but likely):
  - PIT antenna monitoring
  - Install temporary carp barrier

This work would constitute the beginning of a comprehensive, long-term carp management plan for Silver Lake.

#### **Staff Recommendation**

The proposed work is consistent with the District's Carp Management Plan, and the cost would be covered by the District's existing and approved 2025 common carp management budget. Staff recommend approving a professional services agreement with WSB, Inc. for \$46,029.00, and a 10% contingency (\$4,603).

#### **Proposed Motion**

Manager \_\_\_\_\_ moves to authorize the Administrator to enter into a professional services agreement with WSB, Inc. for an amount not-to-exceed \$46,029.00. The Administrator is further authorized to approve contract amendments for additional work, not to exceed 10% of the contract cost (\$4,603).

#### **Attachment**

WSB, Inc. Proposal: Proposal for 2025 Common Carp Management in Silver Lake, Ramsey County, MN

June 26, 2025

Mr. Matt Kocian  
Lake and Stream Manager  
Rice Creek Watershed District  
4325 Pheasant Ridge Dr. NE  
Suite #611  
Blaine, MN 55449

Re: Proposal for 2025 Common Carp Management in Silver Lake, Ramsey County MN

Dear Mr. Kocian:

I have drafted this letter proposal in regard to providing common carp (carp) management services in Silver Lake, Ramsey County, MN for the 2025 calendar year.

These services are identified in the draft Silver Lake Management Plan (2025) as an implementation project to meet the outlined goals as follows:

Goal 1. Maintain Water Quality to meet Minnesota Numerical Standards for TP and Secchi Depth on an annual basis using the growing season average (June through September).

Goal 2. Improve Water Quality to meet the Minnesota numerical standard for chlorophyll-a in three (3) consecutive years using the growing season average.

Goal 3. Meet fisheries management plan goals of 3 adult walleye/gill net and to maintain carp biomass at  $\leq 60$  lbs./acre.

Goal 6. Increase native submergent aquatic vegetation frequency of occurrence to  $>50\%$  in littoral areas except for swimming areas and navigation lanes as identified and maximum depth of plant growth to 15 ft.

Carp abundance was significantly reduced in 2014 and 2015 as part of a pilot project to improve water quality through carp removal. Water quality did improve, but has since declined which may be due to an increase in carp abundance due to a recent winterkill event.

To address this issue and provide long-term carp management, we are providing this proposal.

### **Scope**

Sustainable carp management is built upon much more than just physical carp removal. While achieving and maintaining low carp abundance is part of improving water quality in some lakes, gathering baseline data to select appropriate implementation and maintenance tasks is critical.

Baseline data includes such data points as abundance, age structure, size structure, location of nursery sites and migration routes, aggregation areas, and predator abundance. Some of this data has been collected historically for Silver Lake but needs to be updated such as abundance. Other data lines such as ageing and nursery sites have not been collected.

This scope blends baseline data collection to update existing carp datasets, with implementation such as barrier installation (if necessary) and physical removal. Other implementation tasks such as aeration and predator stocking have been or are being employed.

The following tasks aid in meeting the goal of long-term carp management in Silver Lake through an integrated approach.

Task 1- Acquire MN DNR Fisheries Research Permit  
Task 2- Trap Net Survey Stormwater Ponds in Silverwood  
Task 3- Summer Baited Box Net Removals  
Task 4- Update Carp Abundance Estimate Using Boat Electrofishing CPUE and Mark Recapture  
Task 5- Age a Subsample of Carp  
Task 6- Draft and Submit Report

#### Optional Tasks

Task 7- Install and monitor culvert to stormwater ponds with PIT station  
Task 8- Coordinate Installation of Carp Barrier on Silverwood Outlet Culvert

#### **Task 1- Acquire MN DNR Fisheries Research Permit**

WSB will prepare and submit a MN DNR Fisheries Research permit, which will authorize us to complete various field tasks proposed. We will also submit an annual permit report to MN DNR as required.

#### **Task 2- Trap Net Survey Stormwater Ponds in Silverwood**

Two (2) of the three (3) small ponds in the eastern portion of Silverwood Park have been suspected of providing carp nursery habitat as carp can swim unobstructed from Silver Lake through a culvert that leads to both ponds. The outlet for the northernmost pond is a weir structure that is 4-5' above the surface of the middle pond and is assumed to restrict carp movement into it.

WSB will set one (1) mini trap and one (1) standard trap net for one (1) net night in both the middle and southernmost ponds within Silverwood. After nets are checked and removed, WSB staff will also backpack electrofish the perimeter of the ponds to determine if additional carp may be present. All captured carp will be removed and disposed of.

#### **Task 3- Summer Baited Box Net Removals**

We propose to capture, mark, and release carp using baited box netting. One (1) box net would be installed early to mid-summer and baited daily during the week to habituate carp to feed within the confines of the net. We propose to leave the net installed for 4 weeks and complete three (3) separate lift/removal events. All captured carp would be marked with a fin clip and released in an effort to complete a mark and recapture population estimate using boat electrofishing in fall 2025.

#### **Task 4- Update Carp Abundance Estimate Using Boat Electrofishing CPUE and Mark Recapture**

A carp abundance estimate has not been completed since 2017 and recent surveys by the MN DNR indicate that carp abundance may be elevated. We propose to update the existing carp abundance estimate using the boat electrofishing CPUE method. To complete this, we would complete a minimum of three (3) separate 20-minute electrofishing transects on three (3)

separate dates in late summer/early fall 2025. We would also attempt a mark-recapture estimate as we did in 2017. To do this we propose to use carp marked during the box netting task and remove all carp captured during each electrofishing survey while adjusting the dataset to account for removed carp.

#### **Task 5- Age a Subsample of Carp**

Carp from Silver Lake have not previously been aged, but understanding recruitment and age structure is an important part of integrated and sustainable carp management. We propose to age a representative subsample of 30 carp from Silver Lake. We would use otoliths as the age structure for this effort.

Otoliths would be cross-sectioned and read by two (2) readers independently, then read in unison for those samples where there is disagreement.

This data would be used to identify the number and abundance of different years classes within Silver Lake.

#### **Task 6- Draft and Submit Report**

WSB will draft and submit a report that includes an analysis of carp abundance, size structure, and age structure as well as a description of fish assemblage and number of carp removed to identify residual carp biomass at the conclusion of this project.

#### **Optional Tasks**

##### **Optional Task 7- Install and monitor culvert to stormwater ponds with PIT station**

Carp were implanted with PIT tags in 2022 as part of an acoustic conditioning study led by the University of Minnesota. Under this task, we propose to install one (1) PIT station on the stormwater pond side (north) of the culvert that connects Silver Lake to these stormwater ponds.

The purpose of this task is to determine if carp migrate from the lake to the ponds to spawn.

The PIT station would be installed in July 2025 and removed in fall 2025.

##### **Optional Task 8- Coordinate Installation of Carp Barrier on Silverwood Outlet Culvert**

As discussed above, the connection between Silver Lake and the ponds in eastern Silverwood may provide an opportunity for carp to access and utilize these ponds as a nursery site. To mitigate this, we would coordinate with The Village of St. Anthony to install a barrier on the upstream side of the culvert to prevent movement of carp, as they have indicated previously that would support this.

### **Budget**

Task	Cost
Project Management	\$1,744
Task 1- Acquire MN DNR Fisheries Research Permit	\$1,090
Task 2- Trap Net Survey Stormwater Ponds in Silverwood	\$4,114
Task 3- Summer Baited Box Net Removals	\$15,611
Task 4- Update Carp Abundance Estimate Using Boat Electrofishing CPUE and Mark Recapture	\$10,420
Task 5- Age a Subsample of Carp	\$4,874
Task 6- Draft and Submit Report	\$3,816
<b>Base Project Total</b>	<b>\$41,669</b>
Optional Task 7- PIT station install	\$3,270
Optional Task 8- Barrier	\$1,090

The budget assumes that all work would be completed in calendar year 2025. For task 7, WSB staff would install and uninstall the PIT station, but request that RCWD staff complete data downloads between installation and uninstallation every 2-3 weeks.

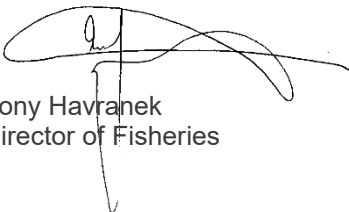
### **Schedule**

Task	July	August	September	October	November	December
1						
2						
3						
4						
5						
6						
7						
8						

The proposed schedule assumes that authorization for the project would be provided in July 2025 and that a MN DNR fisheries research permit would be issued in July 2025 as well.

Sincerely,

WSB



Tony Havranek  
Director of Fisheries

## **ITEMS REQUIRING BOARD ACTION**

3. HEI Task Order 2025-015 Lake Johanna Outlet Structure Feasibility Study (Tom Schmidt)

# MEMORANDUM

## Rice Creek Watershed District



**Date:** June 27, 2025  
**To:** RCWD Board of Managers  
**From:** Tom Schmidt, Drainage & Facilities Manager  
**Subject:** HEI Task Order 2025-015 Lake Johanna Outlet Structure Feasibility

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### **Introduction**

The Board is being asked to approve a task order for Houston Engineering (HEI) to conduct a feasibility study on the removal and replacement of the existing Lake Johanna outlet structure.

### **Background**

RCWD constructed the Lake Johanna outlet structure in the late 1970s in response to concerns about flooding and fluctuating lake levels. The outlet structure, a District facility, was constructed as part of the 1978 suite of upstream improvement projects associated with the Long Lake Chain of Lakes grant. The condition of the structure has deteriorated to the point where it can no longer be repaired and must be replaced, as noted in the HEI Lake Johanna technical memorandum, dated May 12, 2025. The structure continues to provide critical flood control for properties adjacent to Lake Johanna. Since its construction, the structure has served as a public shore-based fishing pier. Ramsey County Parks identified that there is no need to provide that fishing function in conjunction with the replacement structure.

### **Staff Recommendation**

District staff recommend that the Board approve Task Order -2025-015, not to exceed \$13,000.

### **Proposed Motion**

Manager \_\_\_\_\_ moves to approve Task Order 2025 -015, Lake Johanna Outlet Structure Feasibility Study, not to exceed \$13,000, and further authorizes the District administrator to sign the task order. Seconded by Manager \_\_\_\_\_.

### **Attachment**

- HEI Task Order 2025-015 Lake Johanna Outlet Structure Feasibility Study.
- HEI Lake Johanna technical memorandum, dated May 12, 2025

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## SCOPE OF SERVICES



HoustonEngineering Inc.

Task Order No. 2025-015  
Rice Creek Watershed District



### Lake Johanna Outlet Structure Feasibility Study

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#### RCWD Administrative Information:

Account No.: 95-03  
Account Name: District Facility Repairs

**Houston Engineering Project No.:** R005555-0369

#### Task Order Purpose:

The purpose of the task order is to provide the Rice Creek Watershed District with a feasibility study that will assess options for removing and replacing the existing outlet control structure on Lake Johanna and provide a cost estimate which can be utilized in future budgeting. This outlet, which controls and maintains the water level for the lake, is failing and due to its age cannot be repaired.

#### Professional Services Rendered:

HEI intends to provide the following professional services during the completion of this Task Order:

- Survey of outlet structure and culvert
- Development of alternative replacement structures
- Design meeting with DNR and Ramsey Parks staff
- Feasibility report of alternatives
- 30% Plan development for alternatives
- Preliminary opinion of probable construction cost (POPCC)

#### Deliverables:

The deliverables for the Task Order consist of the following:

- Survey data
- Draft and final feasibility memorandum.
- 30% plans and POPCC

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## SCOPE OF SERVICES



Task Order No. 2025-015  
Rice Creek Watershed District



### Lake Johanna Outlet Structure Feasibility Study

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#### Schedule and Compensation:

HEI recommends a budget in the amount of **\$13,000** for engineering services described within this task order. HEI shall not exceed this amount for the completion of this work without prior authorization. HEI will deliver the Feasibility Memorandum no later than **August 30<sup>th</sup>, 2025**.

#### Assumptions:

The estimated compensation for the execution of the tasks identified within the "Professional Services Rendered" section of this Task Order is based upon the following assumptions:

1. Pier will not be part of the new outlet structure
2. Final plans, preparation of an application to amend the current DNR permit, and construction management will be completed under a separate task order
3. Plan sheets
  - a. Cover sheet
  - b. Structure plan sheet
  - c. Structure detail sheet

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## SCOPE OF SERVICES



Task Order No. 2025-015  
Rice Creek Watershed District



### Lake Johanna Outlet Structure Feasibility Study

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#### SIGNATURES:

The services described by this Task Order are being provided in accordance with the Professional Services Agreement between the Rice Creek Watershed District and Houston Engineering dated May 14, 2008, as amended and extended. This **Task Order** shall be effective **June 1, 2025** as authorized by the signatures of representatives of the Rice Creek Watershed District and Houston Engineering, Inc.

#### Rice Creek Watershed District

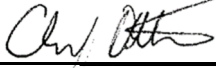
By: \_\_\_\_\_

Name: Nick Tomczik

Title: Administrator

Date: \_\_\_\_\_

#### Houston Engineering, Inc.

By: 

Name: Chris Otterness

Title: District Engineer

Date: June 20, 2025

Attachment A  
**ESTIMATED BUDGET**  
**Lake Johanna Outlet Structure Feasibility Study**



Date Prepared: June 16th, 2025

Date Revised:

Prepared by: A. Zigan

Checked by: C. Otterness

TASK DESCRIPTION	Engineer 11	Project Manager	Engineer 6	Engineer 3	2-person Crew	Expenses	Total	
							Hours	Dollars
<b>Lake Johanna Outlet Structure Feasibility Study</b>	6	11	35	15	4	0	71	\$12,986
<b>Task 1 - Site Data</b>	0	4	4	2	4	0	14	\$1,205
<b>Data Review</b>	0	1	1	1	4	0	7	\$1,205
Background data		1	1	1				
Survey					4			
<b>Meetings</b>	0	3	3	1	0	0	7	\$821
Kickoff/Site Visit Meeting (1) with District Staff		1	1	1				
Draft Alternatives Review Meeting with District Staff (1 virtual)		1	1					
Regulatory Meeting (DNR) (1)		1	1					
<b>Task 2 - Evaluation of Alternatives</b>	5	4	23	10	0	0	42	\$3,506
<b>Alternatives</b>	5	4	23	10	0	0	42	\$3,506
Modeling 3 Outlet Structure Alternatives		2		8				
Development of CAD Plans (7 sheets - 3 alternatives. Cover sheet + plan and detail sheets for each Alt)	2		20					
Preliminary Opinion of Probable Cost		1	1					
Internal Review of Alternatives and Figure	3							
Addressing Internal and District Comments		1	2	2				
<b>Task 3 - Feasibility Memorandum</b>	1	3	8	3	0	0	15	\$1,343
<b>Sections of Memo</b>	1	3	8	3	0	0	15	\$1,343
Background and Goals of Project		1	1					
Description /Results of Alternatives			3	3				
Preliminary Opinion of Probable Cost			1					
Conclusion/Recommendation		1	2					
Finalize Memo after District Feedback	1	1	1					

# Memorandum

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**To:** Tom Schmidt  
Rice Creek Watershed District

**From:** Aaron Zigan, P.E.

**Through:** Chris Otterness, P.E.

**Subject:** Lake Johanna Pier/Outlet Structure

**Date:** May 12, 2025

**Project:** File 5555-0272

Houston Engineering Inc. (HEI) is providing a technical review of the Lake Johanna outlet structure based on a site visit on May 8, 2025. The outlet structure, which is a facility constructed and maintained by the Rice Creek Watershed District, is located within Ramsey County's Tony Schmidt Regional Park. The outlet structure, consisting of a sheet-pile weir with a skimmer and drawdown valve, is located underneath a concrete fishing pier that is an amenity of the park. HEI staff visually inspected the existing structure during the site visit to determine its current state as a response to reports of damage to the skimmer. Photos of the structure are included as an attachment to this memo.

Of initial concern is the safety of the structure. The majority of the steel posts supporting the concrete platform have almost entirely rotted away at the connection to the sheet piling (see photos 2-5 below) and the concrete above is showing signs of stress, including a lateral crack across the top of the structure. The rail surrounding the underside of the platform is also severely rotted potentially allowing access to the underside of the structure. We recommend that Ramsey County immediately close the structure down from public access both to the top of the pier and the underside of the pier (as the protective railings near the water level are failing and couple potentially allow unauthorized access into the outlet structure).

The structure is deteriorated throughout, has a displaced skimmer and front sheet pile cap, and debris is clogging the overflow. The sheet piling surrounding the structure shows signs of damage and is severely rotted as well. It is unclear if the knife gate and pipe heading out into the lake are functionable. The deterioration is such that repairs are infeasible, and the structure requires a complete replacement.

Moving forward We recommend the RCWD and Ramsey County engage in discussions on future needs for the outlet structure. This may then be followed by the development of a plan to demo the existing pier/outlet structure and replace it with infrastructure that meets the current needs of the RCWD and Ramsey County.

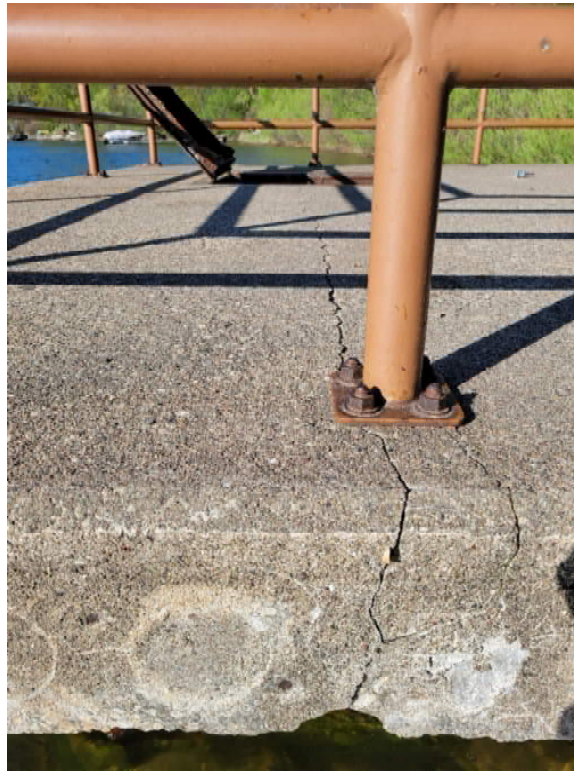


Photo 1: Cracked Concrete Slab



Photo 2: Rotted Post Supports



Photo 3: Rotted Post Supports



Photo 4: Rotted Post Supports



Photo 5: Rotted Post Supports



Photo 6: Broken Underside Railing



Photo 7: Knife Gate & Broken Sheet Pile Cap



Photo 8: Knife Gate & Broken Sheet Pile Cap



Photo 9: Debris Skimmer & Sheet Pile Cap



Photo 10: Debris Skimmer

## **ITEMS REQUIRING BOARD ACTION**

4. Check Register Dated July 9, 2025, in the Amount of \$185,611.14  
Prepared by Redpath and Company

**Rice Creek Watershed District**

**Check Register**

**June 24, 2025 - July 9, 2025**

**To Be Approved at the July 9, 2025 Board Meeting**

<b>Check #</b>	<b>Date</b>	<b>Payee</b>	<b>Description</b>	<b>Amount</b>
26522	06/26/25	Valdes Lawn Care & Snow Removal, LLC	Construction-RCD4 final pay request	\$19,947.94
26523	07/09/25	Apitz Garage, Inc.	Vehicle Expense	125.69
26524	07/09/25	Barr Engineering	Engineering Expense	938.00
26525	07/09/25	Anna Cavanaugh	Construction-Mini Grant	500.00
26526	07/09/25	Central Trailer Sales, Inc.	Vehicle Expense	5,521.18
26527	07/09/25	City of Mounds View	Professional Services	200.00
26528	07/09/25	Growing Green Hearts, LLC	Contracted Services	1,800.00
26529	07/09/25	Joseph Grubbs	Contracted Services	3,243.75
26530	07/09/25	Jeanie Miller	Construction -Mini Grant	500.00
26531	07/09/25	ODP Business Solutions, LLC	Office Supplies	48.26
26532	07/09/25	Plaudit Design	Professional Services	687.00
26533	07/09/25	Redpath & Company, LLC	Accounting Expense	5,265.00
26534	07/09/25	Rinke Noonan	Legal Expense	4,208.40
26535	07/09/25	Rybak Companies, Inc.	Contracted Services	19,810.00
26536	07/09/25	Tech Sales Co.	Equipment	6,540.65
26537	07/09/25	Timesaver Off Site Secretarial	Professional Services	172.00
26538	07/09/25	Tri-State Bobcat	Professional Services	1,425.00
26539	07/09/25	Cameron Ulmer	Construction-Mini Grant	500.00
26540	07/09/25	Washington Conservation District	Contracted Services	2,498.00
26541	07/09/25	We All Need Food and Water	Construction -Mini Grant	500.00
11464	07/09/25	Alliance Bank	Surety Release - #21-072	35,900.00
11465	07/09/25	Capital Trust Development LLC	Surety Release - #21-072	5,000.00
11466	07/09/25	Lino Lakes Custard LLC	Surety Release - #23-070	1,000.00
11467	07/09/25	Southview Design	Surety Release - #24-055	1,000.00
Payroll	07/15/25	July 15th Payroll (estimate)	July 15th Payroll (estimate)	40,591.61
EFT	07/09/25	Comcast	Telecommunications	334.89
EFT	07/09/25	Wex Bank	Vehicle Fuel	553.55
EFT	07/09/25	Xcel Energy	Telecommunications	13.19
EFT	07/09/25	Xcel Energy	Telecommunications	50.42
EFT	07/09/25	US Bank Equipment Finance	Equipment Lease	711.52
EFT	07/15/25	Internal Revenue Service	7/15 Federal Withholding (estimate)	13,738.03
EFT	07/15/25	Minnesota Revenue	7/15 State Withholding (estimate)	2,471.00
EFT	07/15/25	Empower Retirement	7/15 Deferred Compensation	1,060.00
EFT	07/15/25	Empower Retirement	7/15 Roth IRA	190.00
EFT	07/15/25	Health Equity	7/15 HSA	453.83
EFT	07/15/25	PERA	7/15 PERA (estimate)	8,112.23
<b>Total</b>				<b><u><u>\$185,611.14</u></u></b>

## **ITEMS FOR DISCUSSION AND INFORMATION**

1. District Engineer Updates and Timeline



## District Engineer - Monthly Project Report June 2025 Rice Creek Watershed District



Date Prepared:  
Prepared by:

30-Jun-25  
C. Grandbois

Project Name	Task Order Manager	Estimated Budget	Cost to Date	Remaining Budget	Project Complete / Transfer Funds?	Estimated Progress Based on Work Completed	Percentage of Budget Utilized	Within Budget? (Y/N)	District Billed for Exceedence of Budget? (Y/N)	Initial Target Completion Date	Items of Interest / Concern
RCD 4 Final Plans/Specs, Bidding and Construction Management	Adam Nies	\$68,000	\$63,916	\$4,084	Y	100.0%	94.0%	Y	N/A	31-Dec-24	Project is finalized and contract is closed out with contractor
GIS and Ditch Records Maintenance; DrainageDB Annual Subscription	Brian Fischer	\$16,000	\$8,406	\$7,595	N	50.0%	52.5%	Y	N/A	31-Dec-25	Drainage records are being added to DrainageDB on a quarterly basis.
MS4Front Annual Subscription and Implementation Services	Brian Fischer	\$16,000	\$1,714	\$14,286	N	50.0%	10.7%	Y	N/A	31-Dec-25	We continue to make updates on an as-requested basis.
ACD 15 Outlet Overflow Feasibility Study	Greg Bowles	\$7,500	\$11,411	(\$3,911)	Y	100.0%	152.2%	N	N	1-Jun-25	HEI will present the feasibility report conclusions at the July Board Workshop
East Moore Lake Stormwater Resilience and Water Quality Analysis	Adam Nies	\$77,000	\$215	\$76,786	N	0.0%	0.3%	Y	N/A	1-Feb-26	HEI will begin this project with a kick-off meeting of stakeholders
Old Central Avenue Feasibility Study	Greg Bowles	\$26,000	\$168	\$25,832	N	0.0%	0.6%	Y	N/A	30-Sep-25	This project is just getting started, which will include investigation of opportunities to enhance water quality in conjunction with an Anoka County bridge project.
JD 3 Clearwater Creek Final Plans	Adam Nies	\$110,000	\$288	\$109,712	N	0.0%	0.3%	Y	N/A	30-Jun-26	Project will commence with municipal coordination and landowner meetings
2025 District Wide Modeling Program Annual Updates	Bret Zimmerman	\$35,200	\$2,209	\$32,991	N	5.0%	6.3%	Y	N/A	1-Nov-25	HEI completes annual updates to the District Wide Model to reflect changes to the regional conveyance and public drainage systems and to adapt to software platform changes.

Values in red are either potential budget concerns or changes in schedule.

The "overage" for those projects shown as "over budget" is not billed to the District. The cost to date column reflects HEI's actual internal cost. Projects are considered within budget if  $\pm 5\%$ .

**District Engineer  
Monthly Progress Report (Actual & Estimated Progress)  
Through June 2025**

