

BROWN'S CREEK WATERSHED DISTRICT

455 HAYWARD AVE N
OAKDALE, MN
55128

651.330.8220 X26 [PHONE]
651.330.7747 [FAX]
WWW.BCWD.ORG

SPECIAL & REGULAR MEETING OF THE BOARD OF MANAGERS Wednesday, July 12, 2023 at 5:00 PM

NOTE MEETING LOCATION

Meeting will be held at
Family Means
1875 Northwestern Ave, Stillwater, MN 55082

- 1) Call Special Meeting to order at 5:00PM
- 2) 2024 Budget Discussion
- 3) Call Regular Meeting to order at 6:30PM
- 4) Approve Regular Meeting Agenda and Discussion Agenda -**Board Action**
- 5) Public Comments
- 6) Consent Agenda – **Board Action** *(all items listed under the consent agenda are considered to be routine by the Board of Managers and will be enacted by one motion. There will be no separate discussion on these items unless a Manager removes an item from the consent agenda for discussion or there is a request to remove the item from the consent agenda, in which event the board will consider whether to remove the item from the consent agenda and consider it separately.)*
 - a) Approve Board Meeting Minutes of the June 14, 2023 Regular Meeting
 - b) Accept Permit Fee Statement
 - c) Approve registration and expenses for administrator for Minnesota Association of Watershed Administrators meeting in Baxter, MN on September XXX, 2023
- 7) Treasurer's Report
 - a) Review Authorized Funds Spreadsheet
 - b) Current Items Payable-**Board Action (Roll Call Vote)**
 - c) 4M Fund
 - (1) Presentation – Corey Boyer
 - (2) Resolution 23-03: 4M Fund Membership– **Board Action**
- 8) Project
 - a) Brown's Creek Restoration Project - Next Steps Scope (Task #1) – **Board Action**
 - b) Marketplace Reuse Study Presentation – Brett Emmons
- 9) Discussion Agenda - No Action Required
 - a) Updates
 - (1) Administrator
 - (a) Budget meeting – August 16, 2023 prior to regular meeting 5-6:30pm
 - (b) MN Watershed Request for Resolutions
 - (c) Groundwater Wellhead Protection Plan meeting Stillwater/OPH

Managers:

BCWD Board Packet 7-12-2023
Klayton Eckles, President • Celia Wirth, Vice-President • Gerald Johnson, Treasurer • Chuck LeRoux, Secretary

- (d) MN Watersheds Summer Tour
- (e) MN Watersheds – Board feedback for events
- (2) Legal
- (3) Engineer
 - (a) Permit Inspection Update
 - (b) North & East Metro Groundwater Management Area quarterly meeting update
- (4) Managers
- b) August 16, 2023 Regular Meeting BCWD Board Agenda – ***NOTE this is THIRD Wednesday and location change to Stillwater Township Hall: 13636 90th Street North, Stillwater***

10) Adjournment

Project Name | BCWD Annual Budget**Date** | 7/10/2023**To / Contact info** | BCWD Board of Managers**Cc / Contact info** | Karen Kill, District Administrator**From / Contact info** | Camilla Correll, PE and BCWD Team**Regarding** | 2024 Budget Recommendations

Objectives

District staff has developed a list of potential activities for the BCWD Board of Managers to consider during its 2024 budget discussions. These activities reflect what the BCWD could undertake in 2024 and includes projects identified in the BCWD 2017-2026 Watershed Management Plan as well as initiatives identified in the BCWD Plan Amendment and the Brown's Creek Watershed Nine Key Element Bridge Document.

This list is intended to serve as a starting point for Board discussion recognizing that the BCWD Board of Managers will make the final determination on priorities for implementation in 2024.

Proposed 2024 Budget Recommendations

Potential activities are organized under the categories included in the BCWD 2017-2026 Watershed Management Plan as identified below. Only those categories with recommendations for implementation activities are included in this memorandum. Recommended activities that are not identified in the Watershed Management Plan (and would require a plan amendment prior to implementation) are *italicized* and marked "NEW". All of the recommendations are summarized in a table on the last page of this memorandum.

- Stormwater Runoff Management (see page 12 of the 2017-2026 WMP)
- Erosion, Prevention and Sediment Control (see page 17 of the 2017-2026 WMP)
- Stream Management (see page 20 of the 2017-2026 WMP)
- Lake Management (see page 25 of the 2017-2026 WMP)
- Wetland Management (see page 29 of the 2017-2026 WMP)
- Floodplain Management (see page 32 of the 2017-2026 WMP)
- Groundwater Management (see page 34 of the 2017-2026 WMP)
- Ecological Health (see page 41 of the 2017-2026 WMP)
- Monitoring and Data Collection (see page 46 of the 2017-2026 WMP)
- Regulations (see page 50 of the 2017-2026 WMP)
- Climate Change Adaptation (see page 54 of the 2017-2026 WMP)
- Education, Outreach and Stewardship (see page 59 of the 2017-2026 WMP)
- Land Conservation (see page 65 of the 2017-2026 WMP)

WATERSHED MANAGEMENT PLAN UPDATE

- BCWD Watershed Management Plan Update – The current watershed management plan was adopted in 2017 and is operational through 2026. In 2026, the BCWD will need to adopt its updated plan to reflect what it plans to accomplish in the next 10-year cycle (2027- 2036). To facilitate budget discussions for 2027, the BCWD will want the draft plan

completed by June of 2026. As a result, district staff recommends initiating the planning process two years in advance of this date to allow for the plan development process (1+ years) and the formal review process (9 months). The BCWD has been setting aside \$25,000 annually to build the funds needed for the plan update.

Estimated cost: TBD – *District staff is looking for Board direction on the scope of what it would like to address in the next 10-year watershed management plan (see BCWD Watershed Management Plan Update – Framework for Discussion)*

STORMWATER RUNOFF MANAGEMENT

Includes *Monitoring and Maintenance of Stormwater Management Facilities.*

Operation & Maintenance Costs from CIP Standard Operating Procedures Manual (SOPM) – The costs in the following table reflect the anticipated annual cost from the CIP SOPM unless otherwise noted. Some of the District's projects are approaching the age that require more substantial restoration or replacement than budgeted for annually, e.g., THPP and the IESF. The District may wish to begin planning for these additional costs in their annual budget.

Table 1. Projects that the BCWD has obligated maintenance activities through agreements

Project (Year Complete)	Anticipated Annual Cost
<p>THPP (Flood Mitigation - 2000) <i>Annual inspection of structures (culverts and drop structures) and infiltration basins (when dry), inspection reporting, vegetation maintenance (spot treatments, weed whipping), prescribed burns. Create a video of how to open the gate valve and a QR code to access the information. Estimated cost for these activities is \$6,000.</i></p> <p><i>Per the THPP Trench Inspection Results memorandum presented at the May Board Meeting, EOR recommends testing the lower elevations of the infiltration basin following the protocols of a Level 2 Assessment that is used to determine infiltration capacity or rates. The cost to perform that work can be found in the following table and will take approximately 2 days to complete the field testing and 1 to 2 days to prepare a summary of the testing. This work will primarily be performed by a geotechnical testing firm using a Double Ring Infiltrometer or similar device. Estimated cost for these activities is \$6,500.</i></p>	\$12,500
<p>Kismet Basin (Flood Mitigation - 2001) <i>Annual inspection of structures (culverts & drop structures) & reporting, vegetation maintenance (spot treatments, weed whipping).</i></p>	\$3,700
<p>State Highway 95 & 96 Fish Baffles (Habitat Improvement - 2011) <i>Annual inspection & reporting.</i></p>	\$500
<p>Oak Glen Golf Course Buffer (Habitat Improvement - 2011) <i>Biannual inspection & reporting.</i></p>	\$500
<p>Iron-Enhanced Sand Filter at Settlers Glen (Water Quality - 2013) <i>(1) On-going remote monitoring with seasonal operation inspections. Coordinate pump performance inspection and vegetation maintenance with contractors (incl. estimated contractor cost), annual reporting & SOPM update - \$15,000; (2) Filter media replacement budgeting for 2025 - \$50,000</i></p>	\$65,000
<p>Countryside Auto Repair BMP (Water Quality - 2011) <i>Inspections, clearing of debris, coordination of and including system vacuum cleaning of one underground tank and velocity checks (Tanks - Biennial, last conducted 2022).</i></p>	\$6,000
<p>Brown's Creek Floodplain Restoration Project (2014) <i>Inspection, vegetation maintenance (mowing, invasive removal, re-plant/seed as needed).</i></p>	\$3,200
<p>Brown's Creek Park Rock Crib (Water Quality – 2017) <i>Inspections, clearing of debris, coordination of and including system vacuum cleaning of one underground tank (Tanks -Biennial).</i></p>	\$3,700
<p>Long Lake Tributary Headcut Stabilization (Water Quality – 2018) <i>Inspection & Reporting; vegetation maintenance and managing invasive species.</i></p>	\$3,600
<p>McKusick Road Water Quality Improvement Project <i>Coordination of and including system vacuum cleaning of three underground tanks and eight sump manholes (Tanks -Biennial, last conducted 2022).</i></p>	\$24,700

Applewood Golf Course Reuse (Water Quality – 2022) <i>Operation and Maintenance activities.</i>	\$22,500
TOTAL	\$145,900

Table 2. Projects that the District has an interest in providing maintenance/oversight assistance

Project	Anticipated Annual Cost
<p>Norell Avenue Pond Water Quality Retrofit (2016) <i>Per the cooperative agreement, BCWD was responsible for inspections the first year following the retrofit and the City of Oak Park Heights will do inspections thereafter. The City’s MS4 permit is to cover maintenance needs for this pond. The District may wish to assist the City with inspecting the sediment depth to see that the pond sediment removal efficiency is maintained.</i></p>	\$500
<p>Indian Hills Golf Course Fen Vegetation Maintenance <i>BCWD is not responsible for the fen but has conducted this annually in the interest of maintaining the vegetation quality of this unique natural resource.</i></p>	\$4,000
<p>Oak Glen Golf Course Reuse Water Quality Project (2022) <i>The golf course is responsible for ongoing operation and maintenance (O&M). The District may consider keeping budget to see that O&M activities are being conducted. These can involve system startup and winterization guidance and coordination, monthly volume accounting end of year pump monitored volume summary (runoff reuse vs. well pumped) and update the O&M Manual.</i></p>	\$6,300
<p>Tributary Floodplain Restoration Project (2022) <i>Three years of site inspections and maintenance are currently under contract with Minnesota Native Landscapes through September 2024. However, the District may have an interest in conducting long-term operation and maintenance work such as vegetation maintenance and occasional prescribed burns. Native species seeded for the project are beginning to establish but regrowth of invasive species is likely without long-term management (i.e., spot treatments, prescribed burning, etc.).</i></p> <p><i>The District could also pursue the following types of management/ restoration work along the tributary floodplain including:</i></p> <ul style="list-style-type: none"> - <i>Evaluate the banks that have more severe erosion issues to see if they self-heal as anticipated. If in the next couple of years, they aren’t improving this BCWD may want to go in and do something more active utilizing materials on-site (e.g., using harvested woody invasive species to create brush bundles for bank stabilization).</i> - <i>Pursue additional opportunities for invasive species management along the corridor. The project managed within 20-50 feet of the tributary but there is a lot of buckthorn beyond that buffer width. BCWD could use any additional budget to perform buckthorn removal outside of the buffer (e.g., similar to work completed for Millbrook buffer).</i> - <i>Could revisit the tributary repair work proposed downstream of the</i> 	\$1,000

<p><i>Jackson WMA. There is more work that could be done in this area. The headcut was a small component of the needs so additional work on this tributary would be beneficial.</i></p> <ul style="list-style-type: none"> - <i>Wetland downstream of Boutwell (between Boutwell and the rock checks installed by the BCWD previously) is also severely downcut and could benefit from an improvement which would bring the wetland elevation up. If there was landowner willingness, this would be a good spot for additional restoration activity.</i> 	
<p>Kittentail / Bluff Prairie Restoration Work <i>Following initial invasive shrub & tree cutting within the approved MNDOT Highway Sponsorship Program project area in February 2022, EOR will continue to work with MNDOT, BCWD, and WCD as needed to conduct spot treatments of invasives and monitor re-sprouting of buckthorn within the bluff prairie.</i></p>	\$2,100
Brown's Creek Trail Vegetation Maintenance	\$2,400
Long Lake Shoreline Vegetation Maintenance	\$3,500
TOTAL	\$19,800

- **BCWD Cost-Share Program** - Expand participation in the BCWD's Cost-Share Program by targeting neighborhoods like Rutherford, Marylane Meadows, Gateway, BC Preserve to participate in a rain barrel program or a turf conversion which would offset the impact of additional (incidental) impervious coverage due to patios, decks, sheds, etc.
Estimated Cost: \$10,000 (assumption is 50 rain barrels at \$200 each)
- **Chloride Source Assessment** - This assessment should include discussing road salt application with Washington County and local governments and performing a review of homeowners in the watershed that may use water softeners. As the Trend Analysis suggests, this assessment should be conducted watershed wide to address chloride loads to Long Lake and Brown's Creek. Water softener salt and road salt are the two largest sources of chloride in the Twin Cities Metropolitan Area.
Estimated Cost: \$2,500
- **E. coli Source Reduction** - The BCWD has evaluated the sources of *E. coli* to Brown's Creek in the past. While evidence points to historic/naturally occurring sources of bacteria, the recommended action has been to continue private education to private landowners to reduce sources to Brown's Creek and coordination with Washington County. As the BCWD works towards its goal of improving stream health and increasing the number of access points along the creek, it may want to better understand the potential impacts of this water quality concern to public health and safety in this setting.
Estimated Cost: NA

EROSION, PREVENTION AND SEDIMENT CONTROL

- **Brown's Creek Bluff Stability** - Both bluffs were surveyed in April 2021. Data analysis indicated further bluff erosion had occurred since 2016, particularly along the eastern bluff.

EOR, BCWD, and DNR staff conducted a site visit in June 2021 to review site conditions and discuss potential options for bluff stabilization. DNR staff are currently pursuing funding & developing draft design plans with a goal to implement a stabilization project in the fall of 2021 or spring 2022. The budget recommendation for 2024 includes time for EOR to assist with project design and construction plan reviews if requested by the MNDNR.

Estimated cost: \$2,500 (*This is already included in the 2023 budget – carry forward*)

STREAM MANAGEMENT

- Biological Assessment - The goals of BCWD's routine fish and macroinvertebrate assessments are to develop a more robust understanding of the variability of species composition over time and to develop a long-term trend analysis of changes to the biological community in Brown's Creek in response to on-going water quality projects implemented in the watershed.

At the May 2023 Board Meeting, Mike Majeski (EOR) and Joel Chirhart from MPCA reported on the improvements in stream health. During this presentation, the Board discussed the need to conduct macroinvertebrate sampling twice a year. The Board also discussed the changes to fish sampling given that a number of the local universities are no longer providing these services. The Board decided to reduce macroinvertebrate sampling to the collection of fall samples only.

Macroinvertebrate sampling will occur in September of 2024, and specimens will be sent to RMB Labs for taxonomic identification. The results of the assessments will be summarized in a brief technical memo that will include a comparison of 2024 data to previously collected data.

Estimated cost: \$4,000 (includes lab analysis of samples estimated at \$2,100)

- Brown's Creek Stream Restoration Project In January 2023, the Brown's Creek Watershed District secured funding through a MPCA 319 grant to develop a 30% project design for the proposed Brown's Creek Park Restoration Project. As part of the 30% design, EOR held a design charrette with MNDNR to discuss a preferred approach to address the degraded stream conditions within the project reach. It was agreed the design should prioritize reconnection of cutoff meanders, pattern adjustments to increase stream sinuosity, and grade control to reconnect the floodplain. Following the design charrette, EOR advanced the conceptual design and developed a 30% construction plan and cost estimate. A scope of services was prepared in July 2023 to advance the project through final design and implementation.

Estimated cost: \$90,400 (engineering fees)

- Potential new project upstream of McKusick / HOA Reach - Geomorphic survey, data analysis, conceptual design and drafting, high-level construction cost estimate, and landowner outreach for project feasibility. Watershed to determine if they are interested in a project along this reach & how to fund it (watershed \$'s only, or grants like Brown's Creek Park project). This area was second priority for restoration based on the SVAP /

geomorphic assessments completed in 2022 that was recently presented to the Board in May 2023.



- **Estimated cost: \$20,000**
- Routine drone flights of Brown's Creek - A drone will be used to fly Brown's Creek from the headwaters wetland to Highway 95 / St. Croix to assess the corridor and to locate channel obstructions or areas of bank erosion. The flight will occur during base flow conditions and before leaf-out to maximize visibility of the creek banks. A continuous video will be developed for this reach with a summary of findings provided in the memo.
Estimated cost: \$4,700

From BCWD Watershed Management Plan – Lower Priority Implementation Plan

- Explore feasibility of using property adjacent to OGGC for location of large-scale rock crib - During the McKusick Road water quality improvement project, the District explored the feasibility of constructing a rock crib on the downstream end of the system along Brown's Creek. While the District decided not to move forward with this component of the project, it did stub out a connection so that if the rock crib were constructed, stormwater collected along McKusick Road would be routed to the rock crib before discharging to Brown's Creek.

Before including the estimated cost of vetting this project further, District staff is interested in know if the Board is interested in proceeding with this project.

Estimated cost: TBD

LAKE MANAGEMENT

- South School Section/ Lynch/Goggins Lakes - The Northern Chain of Lake WRAPS identified potential BMPs in the North - South School Section, and Lynch Lake watersheds through use of the PTMApp tool. The WPAPS prioritized BMPs in each lake watershed based on their cost effectiveness in terms of pounds of Phosphorus removed.

Lake Watershed	BMP Type	Cost Estimate Range	Effectiveness Estimate
North- South School Section	Six Sediment Basins	\$9K-\$30K	2 – 73 lbs P removal
Lynch Lake	Wetland Restoration, Sediment Basin, Grassed Waterway	\$2K - \$246K	2 – 125 lbs P removal
Goggins Lake			

These practices were prioritized and carried into the watershed management plan as being appropriate for the District’s cost share program. Individual projects were not carried into the WMP. No effort has been made to date to pursue these individual projects. An approach to actively pursue these projects would be to develop further schematic designs, update cost estimates and meet with interested landowners to determine interest and willingness to construct project. The existing BMP cost share program has a \$2,500 cap which would require landowners to potentially pick up a large portion of the project expense. Reviewing the cost share element of these practices may be necessary.

EOR will further investigate the feasibility & likelihood of landowner willingness of these potential projects prior to making any further recommendation.

Estimated Timeline: To be discussed at the August Board meeting

- Monitor for aquatic invasive species and implement controls as needed – BCWD has established a protocol for monitoring aquatic invasive species on School Section, Lynch, Goggins and Benz Lakes on 3 year interval. No sampling is scheduled for 2024.

Estimated cost: NA

- Regional Treatment Options in Long Lake Drainage Area
 - Marketplace Re-Use Next Steps (landowner coordination and concept design) – The analysis for stormwater harvesting and reuse in the Marketplace drainage area has been completed. EOR has drafted the report and presented the findings to the City of Stillwater for review and comment. Brett Emmons, EOR will present the findings at

the July Board meeting. District staff would like the Board to provide direction on next steps at the July Board meeting before developing a cost estimate. District staff will plan to revisit this budget item at the August Board meeting.

Estimated Cost: *To be discussed at the August Board meeting.*

- 62nd Street Pond Flood Risk Reduction Cost Share - The Long Lake flood evaluation conducted in 2020 identified a lack of freeboard from the 100-year event at the nearby Long Lake Villa buildings. The city worked with BCWD to determine flood risk reduction options in 2023 and anticipate contracting the work in 2024. This budget amount is for cost-sharing of the project and any on-going coordination that is needed.

Estimated Cost: \$15,000

- Local Long Lake Improvements - The 2017-2026 Watershed Management Plan identifies a number of potential water quality improvement projects in the Long Lake drainage area. Since Long Lake is so close to being delisted, it is recommended that the BCWD continue to monitor the lake water quality data and revisit the need for a water quality improvement project if there is a change in the trend analysis.

Estimated Cost: No additional cost at this time.

- Brewers Pond Drainage Area BMP Assessment - Water quality has been declining in Brewers Pond and erosion issues have been identified along the storm sewer outfall from Northland Avenue. Northland Avenue and Court both drain to Brewers Pond without any stormwater treatment. This feasibility study will involve reviewing treatment options along the street as well as within the drainage and utility easement for the storm sewer corridor to Brewers Pond. The City of Stillwater will be engaged to discuss potential partnerships. *Can we connect Brewer's Pond to the Long Lake subwatershed to be eligible for the NKE \$.*

Estimated Cost: \$20,000

WETLAND MANAGEMENT

- Mendel Wetland - Given the 2021 drought, and lack of data, groundwater monitoring was carried through 2022. Provision for further restoration concept refinement and associated cost-benefit analysis and/or landowner engagement is recommended for 2023.

Estimated Cost: *To be discussed at the August Board meeting.*

FLOODPLAIN MANAGEMENT

- Hydrologic and Hydraulic Model Update - The BCWD typically update its H/H model every 2 to 3 years to reflect new development land use/land cover changes, as well as new hydraulic structure data. Since the BCWD will be starting its next Plan update in 2024, it is recommended that the District complete the following model improvements District-wide to inform the plan development process:

- Model Hydrology Update - The current BCWD H/H model hydrology was parameterized using Minnesota Land Cover Classification data from 2004, impervious coverage data based on the 2008 Farm Service Area aerial photography, and LiDAR elevation data that was flown in 2011. More accurate datasets are scheduled to be available such as 1-meter resolution vegetation and impervious cover (To be available in late 2023 or early 2024). The Minnesota LiDAR Plan estimates that a new LiDAR elevation dataset will be collected in 2023 and become available in 2024. Updating the model with these datasets will result in more accurate impervious coverage, and better elevation accuracy in challenging terrain areas than was previously available. These factors greatly impact runoff rates when analyzing high intensity rainfall events.

Sub-Total Estimated cost: \$TBD

- Evaluate Impacts Related to Climate Change - There are a number of methods for simulating the impacts of climate change as it relates to precipitation and extreme rainfall events. For example, the University of Minnesota has developed down-scaled precipitation data which can be used to estimate the impacts of climate change mid- and end-of century. It has also become a common practice to use NOAA's precipitation frequency estimates with 90% confidence interval to represent more extreme (future) design events. It will be important to evaluate these scenarios as part of the watershed management planning process to better identify at-risk portions of the watershed in order to evaluate climate adaptation and resilience strategies.

Sub-Total Estimated cost: \$TBD

- 2D Evaluation in Market Place - Review of the Atlas 14 100-year rainfall event in the Long Lake drainage area revealed flooding concerns around stormwater ponds within this urban area of the subwatershed. The modeled flood footprints will result in road overtopping along County Road 5, Washington Avenue, the Trunk Highway 36 Frontage Road, and Curve Crest Boulevard. The pond flooding footprints have impacted re-development decisions near the Lakeview Medical ponds and Washington Avenue Pond, e.g., Curio Dance Permit 23-10, future Lakeview EMS service center garage. Model refinements are required to better characterize the flood extent, the timing of this potential flooding, and overflow routes. It is recommended that a 2-dimensional hydraulic model be created for discrete portions of the Marketplace Area. This will allow the District to conduct a more thorough analysis of the flood risk and create visualization tools which will help the City, local businesses and residents better understand potential for flooding in this portion of the subwatershed. The Stillwater storm sewer GIS data does not contain comprehensive information for model construction. Surveying and updating the GIS with as-built information is assumed to be accomplished by the City of Stillwater or assumptions can be made within the model for invert and pipe slope. The accuracy of these parameters is less important when the objective is flooding review since storm sewer systems are often designed for the 10-year event

and larger events result in overland and street flow. In addition to model construction, visualizations such as inundation mapping, reporting, and presentations to District staff, Board, and city are assumed. Next steps will be identified, though iterations of proposed improvements would be part of a future phase.

Sub-Total Estimated cost: \$33,500

- Flood Risk Assessment - By intersecting the flood extents with other spatial datasets the BCWD can evaluate the consequences of flooding in order to prioritize the issues and opportunities. For instance, a dataset representing low-income areas and another dataset showing the areas with high infrastructure costs can be superimposed to show the areas in which flooding would have the highest social and economic impact.

Estimated cost: *To be discussed at the August Board Meeting.*

GROUNDWATER MANAGEMENT

Groundwater Level Measurements

- Annual Groundwater Level Measurements - EOR recommends that BCWD continue to collect groundwater levels from its network of residential and golf course wells once every year. By sponsoring this data collection effort over several years, BCWD has started to accumulate a significant database of changing groundwater elevations over time in different aquifers and in different parts of the district. This data has been helpful in documenting and understanding the very low baseflow observed in Brown's Creek in 2013 and the extraordinarily high water levels experienced in Kimbro Basin in 2020. The data has also been useful in calibrating the regional groundwater model produced by consultants for 3M. The key value to this data has been the consistency in data collection and the duration of the data set.

Estimated cost: \$4,000

Groundwater Coordination

- Continue to participate in the North and East Metro Groundwater Management Area Plan project advisory team.
- Provide government agencies with new information so that the North and East Metro Groundwater Model can be updated. DNR and Met Council continue to revise and improve the model. Working with their consultants to add BCWD data to the DNR model will help in the future when BCWD is ready to create a groundwater model that focuses on Brown's Creek.
- Continue to participate in meetings held by the Metropolitan Council to discuss the groundwater model being used to investigate the impacts of climate change on TCMA groundwater levels.

- Continue to investigate the effect of high volume pumping wells on Brown's Creek. This could include reviewing pumping records from Oak Glen golf course wells (and the new stormwater reuse system) and the City of Stillwater wells. Pumping records would be compared to changes in groundwater levels recorded in DNR observation wells and in stream piezometers (if installed in 2023).
- Continue discussing the possibility of installing other observation wells as part of MNDNR's Observation Well Program.

Total Estimated Cost: \$8,000

EOLOGICAL HEALTH

Items addressing ecological health are located elsewhere in the 2023 Budget Recommendations memorandum.

MONITORING AND DATA COLLECTION

- Weather Station - Continue collecting climatology data in 2023. This information is being collected to support a variety of District programs such as hydrologic and hydraulic model upgrades and calibration (which require 15-minute precipitation data), thermal modeling efforts, and other projects including the Settlers Glen iron-enhanced sand filter, THPP, and the Biological Monitoring Program. Recommend calibrating precipitation logger and making any replacements to sensors if needed.

Estimated cost: \$3,700

- THPP Monitoring - The BCWD has committed to monitoring the THPP on a 3-year cycle and the last monitoring effort was completed in 2021. As a result, it is recommended that the District budget for the installation of 3 level loggers to monitor infiltration rates at the Basin 1-3 complex, as well as a temperature logger at the THPP outlet to record temperatures during discharge events. This budget include the cost to prepare a memorandum summarizing the data.

Estimated cost: \$6,500

- Comprehensive Stormwater Structure Inventory - The Management Plan includes an estimated cost of \$20,000 to develop a comprehensive stormwater structure inventory database, combining and categorizing all surveyed structures with available structure data from the communities within the District. Washington County is in the process of inventorying the stormwater structures, though a completion date remains unknown. Oak Park Heights recently became an MS4 community in which the Stormwater Pollution Prevention Program requires storm sewer mapping and waterbody inventorying. It is recommended that the District's Stormwater Structure Inventory follow the completion of the community datasets. However, this may be a more valuable initiative if it were to expand county-wide which is perhaps more appropriately led by Washington County with input from all communities, watershed districts and organizations. District staff will plan to meet with Washington County to explore the need to create a clearinghouse for establishing and maintaining a centralized stormwater structure atlas.

Estimated cost: TBD (pending conversations with Washington County and Water Consortium)

REGULATIONS

Rule Review

- Rule Revisions – As the District continues to implement its rules, it evaluates the how well the rules are understood and applied via the permitting program. The following topics have been flagged for further discussion and potential modifications to the rule language:
 - Consider changes to the rule language to allow mitigation without exacerbating onsite flood risk.
 - Evaluate simplifications to permitting and permitting thresholds to ensure we are balanced in our effort and treatment of properties (e.g., Single Family Residential) and make revisions as identified.
 - Application of pretreatment standards (currently only applies to infiltration practices).
 - Evaluating chloride management plan requirements.
 - Consider formalizing a treatment-in-lieu of requirement (e.g., something similar to Nine Mile Creek WD).
 - Evaluate how to address soil decompaction/soil amendment implementation concerns.
 - Address smaller rule language clean-up issues.

Estimated cost: \$30,000

CLIMATE CHANGE ADAPTATION

See the activities identified as part of the H/H model update.

EDUCATION, OUTREACH AND STEWARDSHIP

EMWREP Activities

- Groundwater Education - Develop and implement an expanded education program for citizens and public officials on the interaction between groundwater and surface water, why water levels are so high, the value of and need to protect groundwater recharge areas and wetlands, and implementation of BMPs and LID and redevelopment strategies to protect groundwater resources.
Estimated cost: NA
- Diversity, Equity, and Inclusion (DEI) Visioning -The Brown's Creek Watershed District (BCWD) is situated in a prime location for recreation, land stewardship, and economic development. To enhance the capacity and value of BCWD's services and to unify the community as new changes arise, EOR recommends the BCWD develop an equity framework in advance or in tandem with the Flood Risk Assessment and the WMP Update. An equity framework will equip the BCWD with tools and knowledge to achieve the following:

- meet people where they are at,
- remove barriers that are unique to those in and around BCWD's borders,
- develop flexible policies and programs based on need, and
- implement more equitable and targeted programming strategies

Development and application of an equity framework requires taking the following actionable paths (a number of which the Board has discussed and budgeted for in previous years):

- Diversity, Equity, and Inclusion (DEI) Training (included in the 2023 budget)
- Characterizing Diverse Needs in the BCWD (included in the 2023 budget)
- Creating an Equity Framework (recommendation for the 2024 budget)
- Expanding the District's Network / Partnership Development (recommendation for 2025 budget)

Estimated cost: \$15,000

- HOA Maintenance Support – EOR to provide engineering support to address the questions people have regarding maintenance of stormwater BMPs and how to create the materials needed to provide education and outreach re: maintenance. This may include support for an annual HOA conference.

Estimated cost: \$15,000

- Flood Management Program – While the discussion of Flood Management will be important to revisit as part of the watershed management plan update, the District may want to budget for those items identified during the BCWD Plan Amendment discussions which took place in 2022:
 - Develop outreach and guidance materials (or make existing materials available) related to flood-risk management. (Assume \$2,500)
 - Develop a request for proposals template for homeowners seeking engineering design and construction services. (Assume \$4,000)
 - Provide technical assistance to homeowners experiencing or at risk of flooding. (Assume \$2,500 each instance)

Estimated Cost - \$15,750

LAND CONSERVATION

- Evaluate Resource Protection Needs - Review and revise land protection corridors and priorities to reflect current resource protection needs.

Estimated cost: \$20,000

- Acquisition of Easements – The BCWD has been setting aside funds for the potential acquisition of property as the opportunity arises (e.g., acquisition of the property at 110th street in partnership with Washington County). The District currently has \$100K in its budget for a future acquisition and should plan to grow this by \$50K annually.

Estimated cost: \$50,000

- Easement Restoration – The BCWD has an easement over the property at 110th Street which is called the Brown’s Creek Conservation Easement. In 2017 the District developed the Brown’s Creek Conservation Area Management plan which identifies restoration activities for this easement. The following budget amount builds the funds available for larger restoration efforts slated for the future.

Estimated cost: \$25,000

DRAFT

BCWD WATERSHED MANAGEMENT PLAN UPDATE – FRAMEWORK FOR DISCUSSION

Date	O7/06/2023
To / Contact info	BCWD Board of Managers; Karen Kill, District Administrator
From / Contact info	Camilla Correll, EOR
Regarding	2024-2025 WMP Update

Background

In 2017 the Brown’s Creek Watershed District adopted its fourth Watershed Management Plan. This Plan contained an effective 10-year implementation plan which guided many of the activities implemented by the organization. As Minnesota Statutes 103B.231 Watershed Plans articulates the period covered by a watershed management plan may not be more than 10 years from the date the board approves the plan. In order to complete the next Brown’s Creek Watershed Management Plan, the 2027 Watershed Management Plan, the District needs to begin the plan development process in 2024. The goal is to complete the 2027 Watershed Management Plan by June of 2026 so that the BCWD has the information it needs for 2027 budget discussions.

This memorandum identifies the tasks associated with the development of a DRAFT 2027 Watershed Management Plan. It is being presented at the July 2023 Board Meeting for discussion by the Board of Managers. District Staff needs more direction from the Board on what it would like to accomplish with this next Plan Update.

New Information / Emerging Concerns

Since the adoption of the 2017-2026 Watershed Management Plan, a number of initiatives have been completed by the District as well as other entities which will likely inform the content of the Plan update. These initiatives include:

Existing Initiatives

- Rule Update/Amendment (Application of MIDS District-Wide)
- BCWD’s role in Flood Management
- Manager and staff involvement in the DEI in Watershed Management working group

New Plans

- BCWD Progress-to-Goals/Trend Analysis (2021)
- Lower St. Croix Comprehensive Watershed Management Plan (2020)
- Brown’s Creek Watershed Nine Key Element Bridge Document (2021)
- BCWD District-Wide Pond Management Plan (2023)
- Bass Lake East & West Management Plan (2022)
- Long Lake Flood Risk Analysis – *Community Meetings* (2021)

New Information

- TMDL Listings - Chlorides
- Availability of Climate Change Data
- 2020 Census Data
- LiDAR (topographic) data
- Land cover data

Emerging Concerns

- Social and Environmental Justice
- Chlorides
- Climate Adaptation and Resiliency
- How HOA's are maintaining their stormwater management systems
 - New, small HOA's that don't have the capacity to operate and maintain their BMPs
 - Older HOA's (developments) where the stormwater BMPs may be reaching the end of their life-cycle
 - What role should the WD play in the management of these systems (assumptions protocol)
- BMP Maintenance Program (RWMWD Cost-Share Program – collective clean out program for communities)
- How to identify who is responsible for Maintenance Declaration and ensuring people are submitting their annual reports. Consider adopting a policy stating that the BCWD will routinely (i.e., every 5 years) perform inspections and then follow up with responsible entities for those BMPs that aren't performing as designed/planned.
- Maintenance of BCWD's CIPs. Inventory of maintenance status of everything built as part of the permitting program and the District's CIP? How big is the problem? Focus groups or conversations to identify barriers and potential solutions.
- Flood Management – pick up the plan amendment discussion
- Local Rule Adoption – Now that the District has adopted MIDS within the drainage area to the Diversion Structure, the District may want to revisit the conversation about having the cities of Stillwater and Oak Park Heights implement all or portions of the District's rules.

Framework

The following outline identifies the tasks that the District is required to undertake as part of the watershed management plan update. These tasks are being presented at the July Board meeting to gauge interest in how much effort the Board wants to put into each of these tasks. The goal for the July Board meeting will be to discuss each of these tasks to make sure we are on the same page and that we aren't missing anything that the Board is hoping to include in the next 10-year Plan. EOR will bring a more refined cost estimate to the August Board meeting as part of the 2024 Budget Recommendations.

1. Public Engagement Process
 - a. Develop Public Consultation Plan
 - Incorporate characterization of who lives in the watershed and who is benefiting/not benefiting from the work.
 - Who should participate on the TAC?
 - Who should participate on the CAC?
 - Geographic representation since issues, goals and strategies may be different?
 - Formal public survey to establish a baseline of understanding and measure change in behavior.
 - b. Implement Public Consultation Plan (meetings from last plan update):
 - Initial Planning Meeting with BWSR to review plan goals and requirements
 - Issues Identification Meetings with CAC – 2
 - Issues Identification Meeting with TAC – 1
 - Goals and Policies Meetings with CAC – 2
 - Goals and Policies Meeting with TAC – 1
 - Implementation Plan Meetings with CAC – 2
 - Implementation Plan Meeting with TAC – 1
 - *Consider attending other events in the watershed and meeting people where they are.*

Questions:

- *What are the Board's goals for engagement?*
- *What would successful engagement look like?*
- *Does the Board want to create a project website to share information and solicit feedback?*

2. Inventory and Assessment of Resources

- a. Review and incorporate new information generated in reports, feasibility studies, planning documents developed since 2017.
- b. Add new sections to the 2027 Watershed Management Plan
- c. Update the H/H model to evaluate impacts related to climate change.
 - o Are there portions of the watershed that we need to evaluate in more detail?
- d. Update the wetland function and value assessment which is outdated
- e. Update and clarify the GDNR inventory
- f. Rules audit (i.e., inspecting stormwater management facilities and buffers)
- g. Update existing figures to reflect new information.

Questions:

- *Are there any other initiatives that the BCWD should be considering as part of the plan update process?*

3. Issues Identification

- a. Develop issues for the following geographic areas drawing on information collected via Public Engagement Process and Inventory and Assessment of Resources:
 - o Headwaters Area
 - o Central Area
 - o Long Lake Tributary Area
 - o Lower Ravine Area
 - o Watershed-Wide Issues

Questions:

- *Does the Board like this structure?*

4. Establishment of Goals and Strategies

- a. Develop goals and strategies for the issue statements developed for the following geographic areas:
 - o Headwaters Area
 - o Central Area
 - o Long Lake Tributary Area
 - o Lower Ravine Area
 - o Watershed-Wide Goals and Strategies
 - o Develop procedure(s) to evaluate measurable goals

Questions:

- *Does the Board like this structure?*

5. Development of Implementation Plan

- o Description of existing and new programs
- o Develop 10-year Implementation Plan

Questions:

- *None.*

6. Draft Watershed Management Plan

- a. Executive Summary
- b. Introduction and Plan Requirements
- c. Member Authorities and Responsibilities
- d. Land and Water Resource Inventory
- e. Watershed Issues, Goals and Strategies
- f. BCWD Implementation Plan
- g. BCWD Administration

Questions:

- *Does the Board want to make any of the Watershed Management Plan web-based (i.e., a StoryMap of the Plan)?*

7. Watershed Management Plan Review Process
 - a. Submittal for 60-day review period by all agencies, affected counties, SWCDs, cities and towns
 - b. Response to comments
 - c. Submittal for 90-day review and approval to all scope

RULE REVIEW PROCESS

Date	07/10/2023
To / Contact info	BCWD Board of Managers; Karen Kill, District Administrator
From / Contact info	Camilla Correll, EOR
Regarding	Recommendations for Rule Review Process and Revisions

Background

The BCWD Board of Managers have been discussing various issues related to the District's Permitting Program and Rules for the last year. Over a series of Board Meeting discussions and workshops, the Board hasn't really identified the specific changes it would like to see made to the program or the rules. Since the District is about to start the 2026-2037 Plan Update, it is our recommendation that the Board wait to explore these issues with a broader stakeholder group in order to identify and address the needs of the community. This memorandum describes the approach that we recommend taking with respect to the rule review process and revisions.

Recommendation

2023 Activities

- **MIDS Evaluation** (August Board Meeting) – Present the MIDS evaluation conducted in 2015 so the Board is familiar with what has already been evaluated and what the results of the evaluation demonstrated.
- **Stormwater Management Facilities Tour** (Fall, 2023) – The Board may be interested in visiting a couple of development sites to see what the various types of stormwater management facilities look like on the ground. The Managers could visit sites with catch basins, raingardens, infiltration basins, wet ponds, underground infiltration basin, SWQU, permeable pavement (Bradshaw, Stillwater Middle School ECFE), iron enhanced sand filter (ours and Stillwater middle school with no pump), and a green roof.

2024 Activities

- **Plan Update** – Given that the District will be updating the Plan in 2024, it is an opportunity to explore the need to revise the roles more intentionally with a broader audience including the Technical Advisory Committee, the development community and the public. An evaluation of the District's Permitting Program could be a component of the Plan Update as indicated in the *Watershed Management Plan Framework memorandum*.

Recommended Action

1. Provide staff with direction.



1
2 DRAFT Minutes of the workshop and regular meeting of the Brown's Creek Watershed District
3 Board of Managers, Wednesday June 14, 2023
4

5 ROLL CALL

Managers Present:	Others Present:
Klay Eckles, President	Karen Kill, BCWD administrator
Celia Wirth, Vice President	Camilla Correll, EOR, BCWD engineer
Charles LeRoux, Secretary	Michael Welch, Smith Partners, BCWD counsel
Gerald Johnson, Treasurer	Cameron Blake, BCWD staff
	John Sarafolean, EOR, BCWD engineer
	Patricia Schaber, Curio Dance Studio
	Dario Mejia, Curio Dance Studio
	Camillo Mejia, Curio Dance Studio

- 6
7 **1) Call Regular Meeting to order**
8 President Klay Eckles called the regular meeting to order at 6:30 p.m.
9
- 10 **2) Approve Regular Meeting Agenda and Discussion Agenda**
11 **Manager Johnson moved, seconded by Manager Wirth, to approve the agenda as**
12 **presented. Motion carried, vote 4/0.**
13
- 14 **3) Public Comments**
15 There were no public comments.
16
- 17 **4) Consent Agenda**
18 On the administrator's recommendation, the managers pulled items 4c, 4d and 4e from
19 the consent agenda.
20 **Manager LeRoux moved, seconded by Manager Wirth to approve the consent**
21 **agenda as amended:**
22 **a) Approve minutes of the May 10, 2023, regular meeting**
23 **b) Accept permit fee statement**
24 **Motion carried 4/0.**
25
- 26 **5) Treasurer's Report**
27 **a) Review Authorized Funds Spreadsheet**
28 **Manager Wirth moved, seconded by Manager Johnson, to accept the authorized**
29 **funds spreadsheet as presented. Motion carried, vote 4/0.**

1
2 **b) Current Items Payable**

3 **Manager Johnson moved, seconded by Manager Wirth, to approve the payment of**
4 **bills as presented in the amount of \$177,226.68**

	Yea	Nay	Abstain	Absent
5 <u>Manager Eckles</u>				X
6 <u>Manager Johnson</u>				X
7 <u>Manager LeRoux</u>				X
8 <u>Manager Wirth</u>				X
9 <u>Motion carried 4/0.</u>				

10
11
12 **6) Permitting**

13 **a) BCWD Permit 23-10 Curio Dance Studio**

14 Camilla Correll presented the engineers’ analysis of the application for BCWD
15 regulatory approval. For background, she explained that the project location is within a
16 Drinking Water Supply Management Area for both Stillwater and Oak Park Heights.
17 Under the state Construction Stormwater General Permit stormwater infiltration is not
18 allowed in an Emergency Response Area if the DWSMA if it is classified as having high,
19 very high or moderate vulnerability nor is it allowed outside of the Emergency Response
20 Area if the DWSMA is classified as having high or very high vulnerability. Stillwater has
21 classified the DWSMA here as having moderate vulnerability while Oak Park Heights’
22 Wellhead Protection Plan classifies it as having high vulnerability. Both cities’
23 Wellhead Protection Plans have been approved by the Minnesota Department of Health.
24 Given that the site is located within the City of Stillwater which has classified its
25 DWSMA as having moderate vulnerability, stormwater infiltration would be allowed
26 under the Construction Stormwater General Permit. Ms. Kill said she will meet with the
27 cities and Minnesota Department of Health to address the conflict.

28 Ms. Correll presented the engineers’ review and recommended conditions on
29 approval. The board discussed the engineer’s recommendation that the applicant be
30 required to provide information on the type of roofing material it would use. Ms. Correll
31 explained the main concern is that the commercial roof runoff is entering the infiltration
32 basin without pre-treatment; confirming the roof material to ensure no pretreatment is
33 necessary is consistent with the BCWD rules.

34 Patricia Schaber, the applicant, confirmed that she understood the condition and
35 agreed to provide information on the roofing material.

36 **Manager LeRoux moved, seconded by Manager Johnson, to approve permit #23-10**
37 **under all conditions and stipulations from the engineer’s report, with the addition of**
38 **the applicant submitting data on roofing materials. Motion carried 4/0.**

39
40 **b) BCWD Permit 23-03 Boutwell Farms**

41 Ms. Kill provided an update on staff efforts to secure compliance of GreenHalo
42 Builders with permit 23-03. She said GreenHalo has restored the stormwater basin on the
43 property at 2545 Boutwell Farm Road North, and has provided a plan for plant
44 establishment. But GreenHalo has not submitted the \$5,000 permit fee as required by the
45 May 24, 2023, order. Michael Welch explained the district could issue an amended order
46 requiring work to stop on the property until the fee has been received, but he does not

1 recommend this. The managers asked if the district could decline to approve any future
2 permits from this developer. Mr. Welch said the board could be take past performance
3 into account in assessing new permit applications. Ms. Kill noted this was already an
4 after-the-fact permit. The managers discussed the benefits of keeping the city informed
5 about issues with individual builders and developers. President Klayton Eckles said the
6 permitting process should clearly make the developer responsible for the end results
7 achieved by individual builders within a development.

8 The managers directed Mr. Welch to send a letter documenting the failure to provide the
9 required fee, copying the city, and noting that a lien could be placed on the property.

10
11 **c) Resolution 23-02 Permit Fee Schedule**

12 Ms. Kill noted that the managers have expressed interest in simplifying the permitting
13 process, especially for single-family residential property applicants. Staff has prepared a
14 resolution with two changes to be considered by the board. One would double fees
15 associated with after-the-fact permits because they are significantly more costly for the
16 district, she explained, and doing so would incentivize completing the permitting process
17 before starting a project. The second change is a flat fee for single-family residential
18 projects, as the cost to those applicants has been one of the concerns the board has
19 expressed. Mr. Welch explained that state law requires that fees cannot be punitive and
20 the district must charge only to offset costs. The flat-fee proposal could be nuanced in
21 that no more funds would be requested but they also wouldn't be returned. Ms. Kill noted
22 the district keeps a detailed permit fee database, which could be used to adjust fee values
23 based on what the district has learned about these kind of reviews. There was discussion
24 around what would be considered a single-family residential project. Staff will revise the
25 resolution and bring it back for further consideration. Ms. Kill explained that the district
26 is likely to see more of applications for infill projects, as most of the space for larger
27 developments have been permitted.

28
29 Manager Eckles said he wanted to simplify the district's rules to reduce the time and cost
30 for applicants. He does not feel like these changes accomplish this bigger goal. The board
31 discussed making these changes in the meantime which would improvement to the
32 system while the board continues to consider larger changes to the rules and permitting
33 process. Mr. Welch said staff will clarify the scope of the resolution and bring it back for
34 consideration.

35
36 **7) Projects**

37 **a) Stillwater Cost-Share Request – 62nd Street Trail Flood Risk Reduction**

38 Ms. Kill explained the proposed cost-share project was among those
39 recommended by the BCWD in the Long Lake flood-risk assessment. The City of
40 Stillwater is requesting cost-share assistance to raise the 62nd Street trail, which acts as an
41 overflow outlet of the stormwater pond. Since the request was made, Stillwater received
42 one quote that exceeded its construction estimate, so the city is planning to seek new
43 quotes in 2024. The board expressed agreement in partnering in these type of projects and
44 will consider cost-share in the 2024 budget.

45
46 **b) Nagle Residence Cost-Share Project**

1 Ms. Kill presented the request for \$5,000 in cost-share assistance for construction of a
2 swale and rain garden, along with planting native species for a single-family home
3 property on Bass Lake. She noted that BCWD shifted its cost-share program to small
4 amounts last year and has not adjusted since then, but this presents an opportunity she
5 wanted to present. She noted that BCWD has budgeted funds that could be allocated to
6 the project. The managers agreed this project creates a stewardship example that could
7 result in neighboring properties also installing water-quality practices. The board clarified
8 there would be a 10-year maintenance agreement and this practice will be inspected
9 annually for that time, with guidance provided to the landowner on its care. The
10 landowner is also willing to participate in district stormwater tours in the future.

11 **Manager Wirth moved, seconded by Manager LeRoux to approve not to exceed**
12 **\$5,000 in cost-share funding for basin installation, turf conversion to native prairie,**
13 **and other eligible activities highlighted in the ‘Nagle Native Landscape’ concept**
14 **plan from account 914-0000. Motion carried 4/0.**
15

16 **c) Applewood Hills Reuse Project Change Order No. 2**

17 Mr. Welch noted that he requested that the change order be removed from the consent
18 agenda just to clarify the extension of the timeline for substantial completion and final
19 completion to July 15, 2023 and July 31, 2023 respectively. He said the order will be
20 edited the order to remove the number of days because the date range listed is clear.

21 **Manager Eckles moved, seconded by Manager Johnson to approve change order**
22 **No. 2 for the Applewood Hills Reuse Project. Motion carried 4/0.**
23

24 **d) Approve registration and expenses for administrator and managers, as well as**
25 **per diem for managers, for the Minnesota Council of Nonprofits annual conference**
26 **in Duluth, September 20-21, 2023**

27 Ms. Kill explained the BCWD will be starting the next 10-year management plan process
28 next year and the conference would provide relevant training to staff and interested board
29 managers.

30 **Manager Eckles moved, seconded by Manager Johnson to approve registration and**
31 **expenses for administrator and managers, as well as per diem for managers, for the**
32 **Minnesota Council of Nonprofits annual conference in Duluth, on September 20-21,**
33 **2023. Motion carried 4/0.**
34

35 **8) Discussion Agenda**

36 **a) Updates**

37 **(1) Administrator**

38 **(a) Budget meeting – July 12, 2023 prior to regular meeting 5-6:30pm**

39 There will be a presentation about the 4M fund at the next board meeting
40 which the managers can consider for the BCWD. The Brown’s Creek
41 Restoration project is moving forward and the public hearing will be
42 scheduled later this summer. Ms. Kill is working with the Department of
43 Natural Resources on the district’s reuse permit for the Oak Glen project.
44 The project may fall under the exception for stormwater management.
45 Manager Eckles asked for there to be more promotion for the district’s
46 community event. The managers discussed the current promotional

1 activities occurring and Manager Eckles said he would be supportive of
2 spending money on promotion.
3

4 **(2) Legal**

5 **(a) Sackett decision from the US Supreme Court**

6 Mr. Welch explained a recent decision made by the United States Supreme
7 Court which greatly reduces the scope of federal wetland protections. The
8 district will likely not see much of an impact because Minnesota has its
9 own laws for wetland protection. The Open Meeting Law was modified to
10 allow remote attendance from a nonpublic location up to three times
11 annually for medical reasons. The \$250,000 levy cap for rural watershed
12 districts was lifted. There is now legal language to allow managed natural
13 landscapes across the state regardless of local ordinances. More funding
14 was provided to supply replacement landscapes.
15

16 **(3) Engineer**

17 **(a) Permit Inspection Update**

18 John Sarafolean explained the lack of rain has helped with erosion and
19 sediment control compliance across the district.
20

21 **9) Adjournment**

22 **Manager Johnson moved, seconded by Manager Wirth, to adjourn the regular meeting at**
23 **8:38 p.m. Motion carried 4/0.**
24

25 Respectfully submitted by

26 Cameron Blake, BCWD staff and Charles LeRoux, Secretary

BROWN'S CREEK WATERSHED DISTRICT															
	7/6/2023														
APPLICANT/PERMIT NO.	PERMIT DATE	RULES							TYPE				FEES OWED		
		2	3	4	5	6	7	Dec omp acti on	GOV	SF RES	RES DEV	COM	EXEMPT	AMT DUE	
Bergmann Development/Sanctuary Permit No. 05-12	10/14/2005	X	X	X			X			X				\$	-
Cannon Parking - Trellis Weddings & Events Permit 11-14		X	X									X			(\$2,480.25)
Brown's Creek Preserve Permit 13-10		X	X	X			X			X					\$11,734.20
Stillwater Medical Center Parking Permit 13-26		X	X				X				X				\$3,039.10
Brown's Creek Cove Permit 15-07		X	X	X			X			X					\$997.91
Heifort Hills Permit 16-03		X	X	X	X		X			X					\$778.49
Farms of Grant/White Oaks Savannah Permit 17-01		X	X	X			X			X					\$16,157.18
The Lakes of Stillwater Permit 17-04		X	X	X			X				X				(\$154.75)
West Ridge Permit 17-17		X	X	X			X	X		X					(\$1,155.08)
Heifort Hills Estates Permit 18-02		X	X	X			X	X		X					\$40,654.17
Boutwell Farms Permit 18-04A		X	X	X			X	X		X					(\$1,178.20)
Hazel Place/Hertiage Ridge Permit 18-05 (Was 17-09)		X	X	X			X	X		X					(\$2,558.41)
Nottingham Village Permit 18-06		X	X	X			X			X					\$650.03
Ridgecrest Permit 18-11		X	X				X	X			X				\$16.68
St Croix Valley Recreation Center Expansion Permit 18-14			X				X	X	X	X				\$6,970.28	
Rogness Residence Permit 18-15	7/26/2018		X							X					\$73.69
Central Commons Permit 19-05	11/11/2025	X	X	X			X	X			X				(\$5,000.00)
TC_Orthopedics Permit 20-03	8/24/2020										X				\$1,436.99
Neal Ave Road Reconstruction Permit 20-05	(around June 2020?)	X	X						X					\$19,029.81	
CSAH 15-36 Interchange Permit 20-08	3/24/2021 3 year approval		X			X	X		X						\$19,233.85
Wahlquist Permit 20-10	9/10/2022		X							X					(\$1,025.66)
White Pine Ridge	6/7/2021		X					X		X					(\$631.32)

APPLICANT/PERMIT NO.	PERMIT DATE	RULES							Dec omp acti on	TYPE				FEES OWED	
		2	3	4	5	6	7	GOV		SF RES	RES DEV	COM	EXEMPT	AMT DUE	
Permit 20-12	surety redution request 1/12/23														
Boutwell Farms Lot 2 Permit 21-05	5/13/2021		X					x		x					(\$436.54)
Boutwell Farms Lot 4 Permit 21-06	5/13/2021		X					x		x					(\$788.82)
Brown's Creek Cove Lot 11 Permit 21-07	5/13/2021		X							x					\$258.02
Brown's Creek Cove Lot 14- 1855 White Pine Ct Permit 21-08	5/13/2021		X							x					\$260.64
Westridge Block 1 Lot 1 Permit 21-09 - NOPV, no permit received	8/6/2021		X					x		x					\$2,699.78
White Oak Savannah Lot 107 Permit 21-11 -Sharkey	4/8/2022		X							x					(\$95.36)
Maryland Gateway Addition Permit 21-13	9/29/2021	x	x					x			x				(\$999.89)
Divine Custom - Heritage Ridge Lot 3- Permit 21-14	3/1/2022		x					x		x					(\$406.60)
Schwartz Residence Permit 21-15	5/6/2021 erosion control only	x	x							x					(\$319.38)
Ignagni Residence WOS B1L2 Permit 21-16	5/6/2021		x							x					(\$2.79)
Boutwell Farm (Lot 8)- Sharkey Permit 21-18	3/28/2022		x					x		x					(\$479.25)
Meron Residence-7950 Minar Ave Permit 21-19	no application		x							x				\$322.23	
Westridge (Block 2, Lot 2) - Sharkey Permit 21-20	3/28/2022		x					x		x					(\$491.82)
Millbrook Park- City of Stillwater Permit 21-21	8/25/2021	x	x	x					x					\$5,588.87	
Bond Residence Permit 21-22	8/12/2021		X	X						x					(\$92.56)
White Oak Savannah Lot 105- 7120 Lone Oak Trail Permit 21-24	8/18/2021		x							x					(\$260.56)
Juliene/Guerinno Permit 21-28	no permit fee		x							x					\$469.62
Lakeview EMS Permit 21-32	pre-application		x									x		\$15.50	
Fahey Permit 21-34	11/4/2021		x							x					(\$743.78)
White Oak Savannah B2L2 Permit 21-35	12/8/2021		x					?		x					(\$669.02)
White Oak Savannah B2L5 Permit 21-36	12/8/2021		x					?		x					(\$904.27)
White Pine Ridge 152 Northland Terrace Permit 21-38	sent repeatedly march/april 2022, called/made contact		x					x		x					(\$509.46)

APPLICANT/PERMIT NO.	PERMIT DATE	RULES							Dec omp acti on	TYPE				FEES OWED		
		2	3	4	5	6	7	GOV		SF RES	RES DEV	COM	EXEMPT	AMT DUE		
White Pine Ridge 454 Northland Terrace Permit 21-39	sent repeatedly march/april 2022, called/made contact		x						x		x					(\$904.46)
White Pine Ridge 507 Northland Terrace Permit 21-40	sent repeatedly march/april 2022, called/made contact		x						x		x					(\$906.19)
White Pine Ridge 256 Northland Terrace Permit 21-41	sent repeatedly march/april 2022, called/made contact		x						x		x					(\$906.19)
White Pine Ridge 559 Northland Terrace Permit 21-42	sent repeatedly march/april 2022, called/made contact		x						x		x					(\$906.19)
MNDOT TH-36 Permit 21-43	1/19/2022		x							x				\$2,123.00		
Norell Ave N Improvements Permit 21-45	(Fall 2022 BMP still needs to be finalized spring 2023)	x	x						x					\$10,458.63		
Wash Co. CSAH 15 Permit 22-01	3/14/2022		x							x				\$971.22		
Gonyea (8 lots) Permit 22-02	sent repeatedly march/april 2022, called/made contact		x								x					(\$1,426.58)
Wetridge (12 lots) - Sharkey/GreenHalo Permit 22-03 (Transferred 21-30 and 21-31)	3/25/2022		x								x					(\$759.20)
Boutwell Farm Lot 9 - Sharkey/GreenHalo Permit 22-04	3/25/2022		x								x					(\$263.26)
13290 Boutwell Road N - Sharkey/GreenHalo Permit 22-05	3/25/2022		x								x					(\$619.76)
Heritage Ridge Lot 2 (605 Heritage Place) - Sharkey/GreenHal Permit 22-06	3/25/2022		x								x					(\$545.73)
Liberty Classical Academy Permit 22-07	6/15/2022	x	x													(\$2,478.25)
Boutwell Farm- Sharkey remaining lots- Transferred to 23-03 Permit 22-08	placeholder, no app received		x								x					\$818.72
Helmer Residence (Thomas Building Co.) Permit 22-09	8/15/2022 (returned LOC 6/14/23)		x							x						(\$1,459.81)
Caribou (Herberger's Redevelopment) Permit 22-10	9/29/2022	x	x									x				(\$3,721.26)
7125 Lone Oak Trail (WOS L106) Permit 22-11	9/25/2022		x							x						\$5,782.52
7171 Mid Oaks Ave N Permit 22-12	7/15/2022		x							x						(\$799.74)
Cahill Residence Permit 22-14	8/1/2022		x							x						\$340.92
13199 Dellwood Rd Permit 22-15	???		x							x						\$169.37
Stillwater Streets Improvement- paving 72nd st Permit 22-16	pre-application		x							x				\$0.00		
Read Residence	11/7/2022	x	x							x						\$1,022.57

APPLICANT/PERMIT NO.	PERMIT DATE	RULES							Dec omp acti on	TYPE				FEES OWED	
		2	3	4	5	6	7	GOV		SF RES	RES DEV	COM	EXEMPT	AMT DUE	
Permit 22-17															
Stillwater Oaks Permit 22-18	new submittal 4/12/2023- incomplete (not June 14th meeting)	x	x								x			\$34,187.63	
Miller Flood Protection Permit 22-19	10/20/2022						x			x			\$2,816.00		
Popeyes OPH Permit 22-20	11/9/2022		x									x		(\$604.50)	
3837 Tending Green Permi 22-21	10/20/2022	x	x							x				(\$5,252.32)	
Fanberg Residence - Manning Estates L4B3 Permi 22-22	10/21/2022		x							x				(\$831.78)	
Carl Lee Builder - Heritage Ridge L4B1 Permi 22-23	11/3/2022		x							x				(\$578.58)	
7138 Lone Oak Trl N (WOS L109) Permit 22-24	12/6/2022		x							x				(\$435.52)	
7164 Lone Oak Trl (WOS L113) Permit 22-25	12/6/2022		x							x				(\$468.40)	
Gagne Tending Green Permit 22-26	12/6/2022		x							x				(\$843.64)	
WOS L102 Permit 22-27 transfer to 2023 permit #?	pre-permit - reviewed new lowest floor elevation		x							x				\$0.00	
WOS L118 Permit 22-29 transfer to 2023 permit #23-07	pre-permit-reviewed new lowest floor elevation		x							x				\$607.24	
Wash Co. CSAH 5 Phase II Permit 22-30	1/19/2023		x						x				\$607.24		
Wash Co. CSAH 57 culverts Permit 22-31	2/2/2023		x						x				\$0.00		
Cty Rd 61 Re-alignment Permit 23-01	4/12/2023	x	x						x				\$7,411.71		
WOS L114 - Cates (7211 Lone Oak Trail Tweden) Permit 23-02	5/4/2023		x	x			x		x				\$1,307.46		
Boutwell Farm Lot 1 (2545 Boutwell Farm Rd) Permit 23-03	5/3/2023 NOPV Board Order Items		x										\$6,109.72		
Westridge B1L4 (986 Creekside) Permit 23-04	5/3/2023		x										(\$755.25)		
Rocket Carwash Permit 23-05	conditional approval 4/12/2023	x	x										\$4,824.00		
Stillwater Street Improvements 2023 Permit 23-06	5/19/2023		x						x				\$1,241.36		
7239 Lone Oak Trail (WOS L118) Permit 23-07	5/3/2023		x										\$232.88		
72nd St Road and Trail Improvements Permit 23-08	5/26/2023												\$2,980.36		

APPLICANT/PERMIT NO.	PERMIT DATE	RULES						Dec omp acti on	TYPE				FEES OWED		
		2	3	4	5	6	7		GOV	SF RES	RES DEV	COM	EXEMPT	AMT DUE	
Kirn Residence (McLafferty 8000 Neal Ave) Permit 23-09	ready to permit upon ownership verification 6/7/23		x							x					(\$789.78)
Curio Dance Studio Permit 23-10	5/17/2023 Application and Fee received 5/12/2023 complete	x	x									x			\$5,704.75
7273 Lone Oak Trail- WOS Lot 122 - Freiroy Residence Permit 23-11	5/17/2023 Fee Received Under review		x												\$2,215.50
CSAH 9 -Keystone Ave - Culvert Replacement Permit 23-12	6/7/2023							x						\$1,484.50	
The Lakes - Phase III/Sandhill Shores Permit 23-13	6/8/2023		x												(\$747.57)
Wiskow Berm Permit 23-14	6/28/2023		x												(\$1,000.00)
TOTAL NON-EXEMPT DUE BCWD:		90	326	34	15	27	160		71	153	13	119		\$80,916.83	\$146,944.10
Total due back to applicants if closed:															(\$49,387.73)



MEMORANDUM

TO: Brown's Creek Watershed District Board
FROM: Karen Kill
RE: Minnesota Association of Watershed Administrators Meeting
DATE: July 12, 2023

Background - Attached

Requested Action:

Seeking approval for administrator attendance and expenses for the Minnesota Association of Watershed District Administrators meeting September 27-28, 2023 in Baxter, MN.

Managers:

Klayton Eckles, President • Celia Wirth, Vice-President • Chuck LeRoux, Secretary • Gerald Johnson, Treasurer

Minnesota Association of Watershed District Administrators and Soil and Water Conservation District Mangers Joint Meeting

Arrowwood Lodge and Resort, Baxter, MN

Wednesday, September 27, 1p.m. – Thursday, September 28, 2023 12p.m.

Meeting registration - \$25/person

DRAFT AGENDA:

Day 1. 1p-4:30p Separate Meeting

Each organization will meet separately.

Please contact [Mark Doneaux, Capital Region Watershed District](#) for details on WD topics.

Please contact [Nicole Bernd, West Polk Soil & Water Conservation District](#) for details on SWCD topics.

5:30p.m. – Social Mixer/Networking: Bonfire and Beverages

Day 2. 8a-12p Joint Meeting

Topics:

- WD 101 – History, Budgeting, Project Implementation - Everything you need to know about Watershed Districts.
- SWCD 101 - History, Budgeting, Project Implementation - Everything you need to know about Soil and Water Conservation Districts.
- State Agencies:
 - Constructive Cooperation: are we collaborating to achieve the desired outcomes?

Disclaimer - This draft agenda is provided for informational purposes only and may be subject to change at any time without notice.

HOTEL INFORMATION:

[Arrowwood Lodge at Brainard Lakes-Baxter](#)

6967 Lake Forest Road / Baxter, MN 56425 / 877-687-5634 / info@arrowwoodbrainerd.com / ArrowwoodBrainerd.com

A block of rooms (\$98/night + tax) has been reserved under MAWA/SWCD Managers Meeting. **Reservation need to be made by August 30th, 2023** . After this date any unused rooms will be released to the general public. Any rooms you choose to hold beyond the release date will be your responsibility.



BROWN'S CREEK WATERSHED DISTRICT
 7/12/2023
 CURRENT ITEMS PAYABLE-PAGE 1 of 2

	YES	NO	ABSTAIN	ABSENT
ECKLES	_____	_____	_____	_____
JOHNSON	_____	_____	_____	_____
LEROUX	_____	_____	_____	_____
WIRTH	_____	_____	_____	_____

VENDOR

Emmons & Olivier Resources, Invoices June 2023

	ACCOUNT #	ITEMS	TOTAL	CK NO
Inv. 41-0000-211 Retainer	300-4500	\$ 7,078.50		
Inv. 41-0000-211 Retainer	200-4500	\$ 2,359.50		
Inv. 41-0001-214 Permits 2000-2007	300-4703	\$ 9,517.05		
Inv. 41-0215-100 Permits 2013				
Permitting #13-10 Brown's Creek Preserve	300-4703	\$ 693.00		
Inv. 41-0255-60 Permits 2013				
Permitting #15-07 Brown's Creek Cove	300-4703	\$ 514.50		
Inv. 41-0307-76 Permits 2017				
Permitting #17-17 West Ridge	300-4703	\$ 16.75		
Inv. 41-0330-65 Permits 2018				
Permitting #18-02 Heifort Hills Estate	300-4703	\$ 547.55		
Permitting #18-05 Hazel Place	300-4703	\$ 83.86		
Permitting #18-06 Hazel Place	300-4703	\$ 110.25		
Inv. 41-0365-39 Permits 2020				
Permitting #20-03 TC_Orthopedics	300-4703	\$ 48.91		
Permitting #20-08 Hwy 36/Manning Avenue Interchange	300-4703	\$ 73.50		
Permitting #20-10 Wahlquist Residence	300-4703	\$ 16.75		
Permitting #20-12 White Pine Ridge	300-4703	\$ 100.61		
Inv. 41-0384-27 Permits 2021				
Permitting #21-07 Brown's Creek Cove (Lot 11)	300-4703	\$ 19.66		
Permitting #21-09 Westridge	300-4703	\$ 16.75		
Permitting #21- Meron Residence	300-4703	\$ 19.66		
Permitting #21-21 Millbrook West Park	300-4703	\$ 16.75		
Permitting #21-22 Bond Residence	300-4703	\$ 16.75		
Permitting #21-35 WOS Lot 104	300-4703	\$ 53.16		
Permitting #21-36 WOS Lot 110	300-4703	\$ 53.16		
Permitting #21-45 Norell Ave Improvements	300-4703	\$ 129.89		
Inv. 41-0402-17 Permits 2022				
Permitting #22-02 Gonyea at White Pine Ridge	300-4703	\$ 117.00		
Permitting #22-03 Sharkey/Westridge (4 lots)	300-4703	\$ 178.41		
Permitting #22-10 Caribou Coffee	300-4703	\$ 327.64		
Permitting #22-11 WOS Lot 106	300-4703	\$ 1,686.66		
Permitting #22-14 Cahill Heritage Ridge L5	300-4703	\$ 71.36		
Permitting #22-18 Stillwater Oaks	300-4703	\$ 8,600.25		
Permitting #22-22 Fanberg Residence	300-4703	\$ 16.75		

EOR (Cont.)	Permitting #22-23 Ferguson, Heritage Ridge L4	300-4703	\$	54.61	
	Permitting #22-24 WOS Lot 109	300-4703	\$	53.16	
	Permitting #22-25 WOS Lot 113	300-4703	\$	166.30	
	Permitting #22-30 CSAH 5 Ph2	300-4703	\$	88.11	
	Inv. 41-0420-6 Permits 2023				
	Permitting #23-01 CR 61	300-4703	\$	16.75	
	Permitting #23-02 WOS Lot 114	300-4703	\$	657.41	
	Permitting #23-03 Boutwell Farm Lot 1	300-4703	\$	16.75	
	Permitting #23-06 2023 Street Improvements	300-4703	\$	71.36	
	Permitting #23-07 WOS Lot 118	300-4703	\$	53.16	
	Permitting #23-08 72nd Street	300-4703	\$	171.86	
	Permitting #23-09 Kirn Residence, 8000 Neal	300-4703	\$	16.75	
	Permitting #23-10 Curio Dance Studio	300-4703	\$	9,954.75	
	Permitting #23-11 WOS Lot 122	300-4703	\$	1,831.50	
	Permitting #23-12 CSAH 9 Culvert Replacement	300-4703	\$	1,138.50	
	Permitting #23-13 Sandhill Shores	300-4703	\$	502.43	
	Inv. 41-0084-55 Cost Share Program	914-0000	\$	152.00	
	Inv. 41-0421-6 IESF OM 2023	948-4500	\$	3,526.50	
	Inv. 41-0418-7 Brown's Ck Pk Restoration	947-0022	\$	6,745.00	
	Inv. 41-0425-3 2023 THPP	903-0001	\$	148.75	
	Inv. 41-0401-4 Bluff Restoration/Highway Sponsorship	947-0022	\$	86.50	
	Inv. 41-0284-24 BCWD Education and Outreach	910-0000	\$	915.41	
	Inv. 41-0205-71 CIP Operation and Maintenance	948-4500	\$	179.25	
	Inv. 41-0391-20 Millbrook HOA Restoration	947-0022	\$	1,027.00	
	Inv. 41-0414-7 OGGC Reuse Maintenance and Monitoring	947-0023	\$	862.25	
	Inv. 41-0424-2 BCWD 2023 Weather Station	957-4500	\$	192.00	
	Inv. 41-0429-2 2023 GW Elevations	942-0004	\$	495.00	\$ 61,607.64
Washington Conservation Dis	Inv. 6077 May 2023- Water Monitoring				
	Baseline Water Monitoring- labor	300-4710	\$	10,133.33	
	Metropolitan Council- lab	300-4710	\$	612.50	
	Baseline Water Monitoring- equipment	300-4640	\$	1,036.96	
	Inv. 6095 May 2023- BMP Program	914-0000	\$	1,182.50	
Smith Partners	June Invoices				
	Inv. 44113 Retainer - Meetings, Preparation	200-4410	\$	2,060.72	
	Inv. 44114 General Legal Services	300-4410	\$	431.03	
	Inv. 44118 Capital Project Development	300-4410	\$	995.39	
	Inv. 44117 Sureities	300-4410	\$	295.90	
	Inv. 44115 Permits	300-4703	\$	1,669.06	
	Inv. 44116 Policy Issues	300-4410	\$	1,022.92	
	Inv. 44120 Brown's Creek Restoration	300-4410	\$	1,049.10	
	Inv. 44119 Highway 36/Manning Reuse	300-4410	\$	189.74	\$ 7,713.86

Xcel Energy	Inv. 833588772- Iron Enhanced Sand Filter pump operation	948-4500	\$ 26.24	\$ 20.94
Dave McCord	Inv. 4096 May 2023 Accounting Services	200-4330	\$ 380.00	\$ 380.00
Great River Greening	Inv. 4062 Brown's Creek Conservation Area Restoration	935-0002	\$ 1,276.45	\$ 1,276.45
Tri-State Pump & Control	Inv. 444375 Oak Glen Reuse Pump	100-3627	\$ 855.00	\$ 855.00
Virginia Schwartz	BCWD Stewardship Grant Reimbursement 2022-10	914-0000	\$ 397.07	\$ 397.07
Manager Wirth	Quarter II 2023 Per Diem	200-4000	\$ 300.00	\$ 300.00
Manager Johnson	Quarter II 2023 Per Diem	200-4000	\$ 400.00	\$ 400.00
Manager Eckles	Quarter II 2023 Per Diem	200-4000	\$ 300.00	\$ 300.00
Manager LeRoux	Quarter II 2023 Per Diem	200-4000	\$ 300.00	\$ 300.00
Total Amount Disbursed				\$ 73,550.96

BROWN'S CREEK WATERSHED DISTRICT

7/12/2023

MONTHLY ITEMS DEPOSITED - Page 1 of 1

VENDOR	INVOICE/DESCRIPTION	ACCOUNT #	CK NO	DEPOSIT DATE	TOTAL
Bryce Wiskow	Permit Fee #23-14 Wiskow Berm	300-4703	9593	6/27/2023	\$ 1,000.00
CDS Properties, LLC	Permit Fee #23-10 Curio Dance Studio	300-4703	180	6/22/2023	\$ 3,697.00
Washington County	Tax Settlement- 1st Half 2023 Levy	100-3100	Direct Deposit	7/3/2023	\$ 591,835.30
TOTAL AMOUNT DEPOSITED:					\$ 596,532.30

Brown's Creek Watershed District		
Treasurer's Report		
12-Jul-23		
	Checking balance (9903)	\$442,538.31
	Money Market balance (6671) :	\$2,447.89
	Permit balance (6614) :	\$400,853.23
	Certificate of Deposit balance:	\$204,879.62
	Total :	\$1,050,719.05
	Accounts payable:	\$73,550.30
	Unrecorded deposits:	\$591,835.30
	Total balance :	\$1,569,004.05

4M Fund

MINNESOTA MUNICIPAL MONEY MARKET FUND



Minnesota Municipal Money Market Fund

Safety.

Service.

Performance.

These are the primary tenets of the 4M Fund.

Sponsored and governed by the League of Minnesota Cities, the 4M Fund is a customized solution designed specifically to meet the cash and investment management needs of public entities in Minnesota.

4M Fund Benefits

- ▶ Banking services
- ▶ Customized accounting
- ▶ Online account and report access
- ▶ Direct wire of state aid
- ▶ Daily liquidity through money market programs
- ▶ Fixed income trading
- ▶ Cash flow management program
- ▶ Bond proceeds management program

Contact Us



Kent Johnson
Senior Vice President,
Director-Minnesota Office
612.509.2560
kjohnson@pmanetwork.com



Corey Boyer
Vice President,
Investment Services
612-509-2570
cboyer@pmanetwork.com



Laura Hamacher
Senior Portfolio
Advisor
612-509-2563
lhamacher@pmanetwork.com

PMA Financial Network, LLC serves as the Administrator to 4M. PMA Securities, LLC serves as the marketer to 4M. PMA Asset Management, LLC serves as the investment advisor to 4M.

Investment Options

4M Liquid Asset Fund

An overnight money market portfolio providing access to reduced-cost banking services.

4M PLUS Fund

A slightly longer-term money market portfolio with an enhanced yield.

4M Term Series Investment Pools

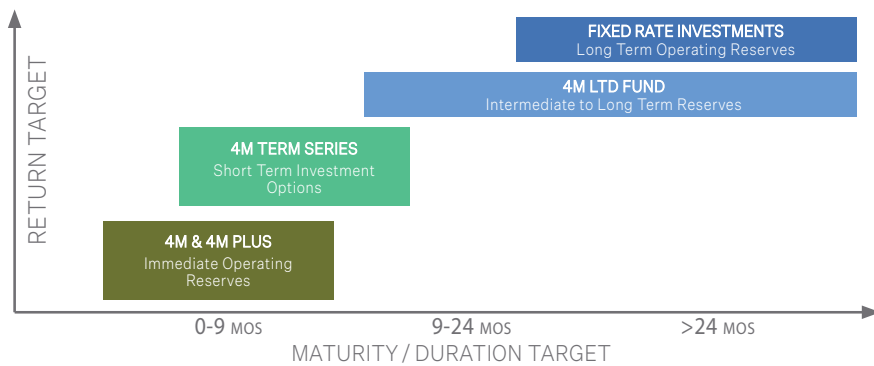
A short-term investment option that seeks higher yields and provides a fixed rate and a specific date to meet investment needs. *Offered by PMA Financial Network, LLC.*

4M Limited Term Duration Fund (4M LTD)

The 4M LTD Fund seeks to provide excess income over money market and deposit products while maintaining limited price volatility.

Fixed Income Investments

A Fixed Income Investment Program that allows investors to purchase investment instruments including FDIC insured or collateralized certificates of deposit of banks and thrift institutions ("CDs"), government securities and municipal securities. *Offered through PMA Financial Network, LLC and PMA Securities, LLC.*



Bond Proceeds Management Program

Bringing your project to life with a comprehensive investment and arbitrage management program for bond proceeds. *Offered through PMA Securities, LLC.*

Cash Flow Management Program

A complete and accurate picture of your entity's cash flow so you can put your money to work sooner... and longer. *Offered through PMA Financial Network, LLC.*



Securities, public finance and institutional fixed income brokerage services are offered through PMA Securities, LLC. PMA Securities, LLC is a broker-dealer and municipal advisor registered with the SEC and MSRB, and is a member of FINRA and SIPC. As a Municipal Advisor, PMA Securities Inc. provides financial advisory services and advice with respect to the investment of proceeds of municipal securities. PMA Asset Management, LLC, an SEC registered investment adviser, provides investment advisory services to local government investment pools. All other financial products and services are provided by PMA Financial Network, LLC. These entities operate under common ownership with the Firm. Securities and public finance services offered through PMA Securities, LLC are available in CA, CO, FL, IL, IN, IA, MI, MN, MO, NE, OH, OK, PA, SD, TX and WI. This document is not an offer of services available in any state other than those listed above, has been prepared for informational and educational purposes only and does not constitute a solicitation to purchase or sell securities, which may be done only after client suitability is reviewed and determined. All investments mentioned herein may have varying levels of risk, and may not be suitable for every investor. For more information, please visit us at www.pmanetwork.com. For institutional Investor use only. ©2021 PMA Financial Network, LLC. For Institutional Use Only

Resolution 23-03
Brown's Creek Watershed District
Board of Managers

Authorizing membership in the 4M Fund

Manager _____ offered the following resolution and moved its adoption, seconded by Manager _____:

WHEREAS Minnesota Statutes section 471.59 (the Joint Powers Act) provides that governmental units may jointly exercise any power common to the contracting parties;

WHEREAS the Minnesota Municipal Money Market Fund (the 4M Fund) was formed in 1987 pursuant to the Joint Powers Act and in accordance with Minnesota law by the adoption of a joint powers agreement in the form of the declaration of trust attached to and incorporated into this resolution as a term hereof (the Declaration of Trust);

WHEREAS the Declaration of Trust, which has been presented to the Brown's Creek Watershed District Board of Managers, authorizes municipalities of the State of Minnesota to become participants in and make use from time to time of the 4M Fund, including the 4M Liquid Asset Fund, the 4M Plus Fund, the Term Series, the 4M Limited Term Duration Fund, the Fixed Rate Programs and other services offered by the 4M Fund;

WHEREAS Brown's Creek Watershed District qualifies as a municipality, as that term is used in the Declaration of Trust, and as such may become a participant, as that term is used in the Declaration of Trust, in the 4M Fund;

WHEREAS the BCWD Board of Managers finds that it is in the best interest of BCWD to make use of, from time to time, the approved services provided by the 4M Fund's service providers, including the investment advisor, PMA Asset Management LLC; the administrator, PMA Financial Network LLC; the distributor, PMA Securities LLC; the Fixed Rate Program Providers, PMA Financial Network LLC and PMA Securities LLC; and the custodian of the 4M Fund, U.S. Bank National Association or their successors;

WHEREAS the BCWD Board of Managers designated US Bank as a depository of BCWD funds on January 11, 2023, and US Bank remains a designated depository; and

WHEREAS the BCWD Board of Managers deems it in the best interest of BCWD for BCWD to enter into the Declaration of Trust and become a Participant, as that term is defined in the Declaration of Trust (as "Participants,") in the 4M Fund for

the purpose of joint investment with other municipalities to enhance the investment earnings accruing to all.

NOW THEREFORE BE IT RESOLVED that BCWD elects to become a Participant in the 4M Fund and adopts and enters into the Declaration of Trust. The BCWD **president, secretary and administrator** are hereby authorized to execute those documents necessary to effectuate entry into the Declaration of Trust and participation in 4M Fund programs.

NOW THEREFORE BE IT FURTHER RESOLVED that BCWD may invest monies from time to time and withdraw monies from time to time in accordance with the provisions of the Declaration of Trust. The following BCWD officers or their successors in office are designated "Authorized Officials" with authority to effectuate investments and withdrawals in accordance with the Declaration of Trust:

Print Name	Title	Signature
------------	-------	-----------

Print Name	Title	Signature
------------	-------	-----------

Print Name	Title	Signature
------------	-------	-----------

The BCWD administrator will advise the 4M Fund of any changes in the roll of BCWD Authorized Officials.

BE IT FURTHER RESOLVED that the trustees of the 4M Fund are designated as official custody of BCWD monies invested in accordance with the Declaration of Trust.

BE IT FURTHER RESOLVED that BCWD Board of Managers authorizes the administrator on behalf of BCWD and with guidance of counsel and in consultation with the BCWD treasurer to open depository and other accounts, enter into wire transfer agreements, safekeeping agreements, third-party surety agreements securing deposits, collateral agreements, letters of credit and lockbox agreements with institutions administering and implementing in 4M Fund programs in accordance with the Declaration of Trust, including U.S. Bank National Association or its successor, and to facilitate participation in programs of

PMA Financial Network LLC and PMA Securities LLC for the purpose of transaction-clearing and safekeeping, and the purchase of certificates of deposit or other deposit products and that these institutions are designated BCWD depositories. PMA Financial Network LLC and PMA Securities LLC and their successors are authorized to act on behalf of BCWD as its agent with respect to accounts and agreements as described herein. BCWD funds may be deposited in such depositories, from time to time, at the discretion of the Authorized Officials.

The question was on the adoption of the resolution and there were _____ yeas and _____ nays as follows:

	Yea	Nay	Absent
Eckles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Johnson	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LeRoux	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wirth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Upon vote, the chair declared the resolution adopted, July 12, 2023.

* * * * *

I, Charles LeRoux, secretary of the Brown’s Creek Watershed District, do hereby certify that I have compared the above resolution with the original thereof as the same appears of record and on file with the BCWD and find the same to be a true and correct transcript thereof.

In testimony whereof, I have hereunto set my hand this ____ day of _____, 2023.

Charles LeRoux, Secretary

Exhibit A
4M Fund - Declaration of Trust

DRAFT

State of Minnesota

SECRETARY OF STATE

Certificate of Business Trust

I, Joan Anderson Grove, Secretary of State of Minnesota, do certify that: A copy of the Declaration of Trust of the trust listed below was filed with this office on this date, by a member of the board of trustees of that trust, who swore that the copy filed was a true and correct copy of the declaration of trust. The trustee also set forth the name and address of the agent of the trust for service of process, and met all the filing requirements of Minnesota Statutes, Chapter 318.

Name of Business Trust:

Minnesota Municipal Money Market Fund

File Number: BT-406

Name and Address of Agent for Service of Process:

League of Minnesota Cities
The League of MN Cities 183 Univ Ave E
St Paul MN 55101-

This certificate has been issued on 04/23/87.



Joan Anderson Grove
Secretary of State.

BT 406

MINNESOTA MUNICIPAL

MONEY MARKET FUND

(A Minnesota entity formed
pursuant to the
Minnesota Joint Powers Act)

DECLARATION OF TRUST
(As adopted in January, 1987)

034869

TABLE OF CONTENTS

	<u>Page</u>
RECITALS	6
ARTICLE I	
<u>The 4M Fund</u>	
Section 1.01	7
Section 1.02	7
Section 1.03	7
Section 1.04	7
Section 1.05	8
ARTICLE II	
<u>Powers of the Trustees</u>	
Section 2.01	9
Section 2.02	10
Section 2.03	11
Section 2.04	11
Section 2.05	12
Section 2.06	12
Section 2.07	12
Section 2.08	12
Section 2.09	12
Section 2.10	13
Section 2.11	13
Section 2.12	13
Section 2.13	13
Section 2.14	14
Section 2.15	14
Section 2.16	15
Section 2.17	15
Section 2.18	15
Section 2.19	15
Section 2.20	15
Section 2.21	16
Section 2.22	16
Section 2.23	16
Section 2.24	16

ARTICLE III

Technical Advisory Board, Investment Adviser, Administrator, and Custodian

Section 3.01	Appointment	16
Section 3.02	Duties of the Adviser	17
Section 3.03	Duties of the Administrator	17
Section 3.04	Duties of the Custodian	17
Section 3.05	Successors	17

ARTICLE IV

Investments

Section 4.01	Statement of Investment Policy and Objective	17
Section 4.02	Restrictions Fundamental to the Fund	18
Section 4.03	Amendment of Restrictions	19

ARTICLE V

Limitations of Liability

Section 5.01	Liability to Third Persons	19
Section 5.02	Liability to the Fund or to the Participants	19
Section 5.03	Indemnification	19
Section 5.04	Surety Bonds	20
Section 5.05	Apparent Authority	20
Section 5.06	Recitals	21
Section 5.07	Reliance on Experts, Etc.	21
Section 5.08	Liability Insurance	21
Section 5.09	No Waiver	21

ARTICLE VI

Interests of Participants

Section 6.01	General	21
Section 6.02	Allocation of Shares	22
Section 6.03	Evidence of Share Allocation	22
Section 6.04	Reduction in Number of Shares to Maintain Constant Net Asset Value	22
Section 6.05	Withdrawals	22
Section 6.06	Suspension of Right of Withdrawal; Postponement of Payment	22
Section 6.07	Minimum Withdrawal	23
Section 6.08	Defective Withdrawal Requests	23
Section 6.09	Allocation of Certain Expenses	23

ARTICLE VII

Record of Shares

Section 7.01	Share Register	23
Section 7.02	Registrar	24
Section 7.03	Owner of Record	24
Section 7.04	No Transfers of Shares	24
Section 7.05	Limitation of Fiduciary Responsibility	24
Section 7.06	Notices	24

ARTICLE VIII

Participants

Section 8.01	Voting	24
Section 8.02	Right to Initiate a Vote of the Participants	25
Section 8.03	Inspection of Records	25
Section 8.04	Meetings of Participants	25
Section 8.05	Notice of Meetings and Votes	25
Section 8.06	Record Date for Meetings and Votes	25
Section 8.07	Proxies	25
Section 8.08	Number of Votes	26
Section 8.09	Reports	26

ARTICLE IX

Trustees and Officers

Section 9.01	Number and Qualification; Non-Voting Trustees	26
Section 9.02	Meetings	26
Section 9.03	Officers	27
Section 9.04	Committees	27
Section 9.05	Reports	27

ARTICLE X

Determination of Net Asset Value and Net Income:
Distributions to Participants

Section 10.1	Net Asset Value	28
Section 10.2	Constant Net Asset Value; Reduction of Allocated Shares	28
Section 10.3	Supplementary Distributions to Participants	28
Section 10.4	Retained Reserves	28

ARTICLE XI

Custodian

Section 11.1	Duties	29
Section 11.2	Appointment	29
Section 11.3	Custodian Agreement	29
Section 11.4	Agents of Custodian	29
Section 11.5	Successors	29
Section 11.6	Custodian as Depository for Participants	29

ARTICLE XII

Recording of Declaration of Trust

Section 12.1	Recording	29
--------------	-----------	----

ARTICLE XIII

Amendment or Termination of Fund; Duration of Fund

Section 13.1	Amendment or Termination	30
Section 13.2	Power to Effect Reorganization	31
Section 13.3	Duration	31

ARTICLE XIV

Miscellaneous

Section 14.1	Governing Law	31
Section 14.2	Counterparts	31
Section 14.3	Reliance by Third Parties	31
Section 14.4	Provisions in Conflict with Law	32
Section 14.5	Gender; Section Headings	32
Section 14.6	Adoption by Municipalities Electing to Become Additional Participants; Resignation of Participants	32

Execution

WITNESSETH:

WHEREAS, Minnesota Statutes, Section 471.59 (the "Joint Powers Act") provides, among other things, that governmental units (as such term is defined therein), by agreement entered into through action of their governing bodies, may jointly or cooperatively exercise any power common to the contracting parties; and

WHEREAS, the term "governmental unit" is defined in the Joint Powers Act to include municipality as defined herein; and

WHEREAS, all of the Initial Participants are Municipalities of the State of Minnesota that desire to enter into an agreement and thereby establish an entity for joint investment, under the provisions of the aforementioned Joint Powers Act, pursuant to this Declaration of Trust for the purpose of combining their respective available investment funds not currently needed by such Municipalities so as to enhance the investment opportunities available to them and increase the investment earnings accruing to them respectively; and

WHEREAS, this Declaration of Trust is intended to be an agreement entered into pursuant to the Joint Powers Act for the purpose of better exercising the Participants' power to invest their respective funds in accordance with the Laws of the State of Minnesota; and

WHEREAS, the Board or Council of each of the Initial Participants has duly adopted a resolution authorizing the applicable Initial Participant to become a party to, and has approved, this Declaration of Trust pursuant to the Joint Powers Act; and

WHEREAS, the Board or Council of each of the Initial Participants, by its aforementioned approval of this Declaration of Trust, has authorized the investment of funds of such Initial Participant in investments of the nature permitted by Minnesota Law, as applicable, and in the manner contemplated by this Declaration of Trust; and

WHEREAS, it is proposed that the beneficial interest in the 4M Fund's assets shall be divided into non-transferable shares of beneficial interest, which shall be evidenced by a share register maintained by the 4M Fund or its agent; and

WHEREAS, the Initial Participants anticipate the other Municipalities of the State of Minnesota may wish to become Participants by adopting this Declaration of Trust and thus becoming parties to it;

NOW, THEREFORE, the Initial Participants hereby declare that all moneys, assets, securities, funds and property now or hereafter acquired pursuant to this agreement shall be held and managed in trust for the equal and proportionate benefit of the holders of record from time to time of shares beneficial interest herein, without privilege, priority or distinction among such holders, and subject to the terms, covenants, conditions, purposes and provisions hereof.

ARTICLE I

The 4M Fund

1.01 Name. The name of the common law trust created by this Declaration of Trust shall be "Minnesota Municipal Money Market Fund" (the 4M Fund) and, so far as may be practicable, the Trustees shall conduct the 4M Fund's activities, execute all documents and sue or be sued under that name, which name (and the word "4M Fund" wherever used in this Declaration of Trust, except where the context otherwise requires) shall refer to the Trustees in their capacity as Trustees, and not individually or personally, and shall not refer to the officers, agents, employees, counsel, advisers, consultants, accountants, or Participants of the 4M Fund or of such Trustees. Should the Trustees determine that the use of such name is not practicable, legal or convenient, they may use such other designation or they may adopt such other name for the 4M Fund as they deem proper, and the 4M Fund may hold property and conduct its activities under such designation or name. The Trustees shall take such actions as they, acting with the advice of counsel, shall deem necessary or appropriate to file or register such name in accordance with the Laws of the State of Minnesota or the United States of America so as to protect and reserve the right of the 4M Fund in and to such name.

1.02 Purpose: Only Certain Minnesota Municipalities to be Participants.

(a) The purpose of the 4M Fund is to provide a means through which Municipalities may jointly and cooperatively exercise their power to invest their respective available funds so as to enhance their investment opportunities pursuant to an investment program conducted in accordance with the Laws of the State of Minnesota, from time to time in effect, governing the investment of the Municipal Funds. Only Municipalities organized under the Laws of the State of Minnesota may become Participants. A Municipality may become a party to this Declaration of Trust and may place moneys in the 4M Fund only after its Board or Council has duly adopted a resolution, or taken other applicable official action, authorizing such Municipality to become a Participant of the 4M Fund and adopting this Declaration of Trust.

(b) It is not necessary for a municipality to place any funds in the 4M Fund to become a Participant, and no minimum investment balance must be maintained by a Municipality which has become a Participant in order for such Municipality to continue to be a Participant.

1.03 Location. The 4M Fund shall maintain an office of record in the State of Minnesota and may maintain such other offices or places of business as the Trustees may from time to time determine. The initial office of record of the 4M Fund shall be: c/o League of Minnesota Cities, 183 University Ave. East, St. Paul, Minnesota 55101. The office of record may be changed from time to time by resolution of the Trustees, and notice of such change of the office of record shall be given to each Participant.

1.04 Nature of 4M Fund and Declaration of Trust.

(a) The 4M Fund shall be a common law trust (also known as a business trust) organized and existing under the laws of the State of Minnesota. The 4M Fund is not intended to be, shall not be deemed to be, and shall not be treated as, a general partnership, limited partnership,

joint venture, corporation, investment company, joint stock association or joint stock company. The Participants shall be beneficiaries of the 4M Fund, and their relationship to the Trustees shall be solely in their capacity as Participants and beneficiaries in accordance with the rights conferred upon them hereunder.

(b) This Declaration of Trust is an agreement of indefinite term regarding the joint or cooperative exercise of a power common to the parties thereto within the meaning of the Joint Powers Act.

1.05 Definitions. As used in this Declaration of Trust, the following terms shall have the following meanings unless the context hereof otherwise requires:

"Administrator" shall mean any Person or Persons appointed, employed or contracted with by the Trustees under the applicable provisions of Section 3.1 hereof.

"Administration Agreement" shall mean the agreement with the Administrator referred to in Section 3.3 hereof as the same may be amended from time to time.

"Adviser" shall mean any Person or Persons appointed, employed or contracted with by the Trustees under the applicable provisions of Section 3.1 hereof.

"Affiliate" shall mean, with respect to any Person, another Person directly or indirectly controlling, controlled by or under common control with such Person, or any officer, director, partner or employee of such Person.

"Board of Trustees" or "Trustees" shall mean the Board of Directors of the League of Minnesota Cities.

reordered { "Board" or "Council" shall mean the governing body of a Municipality as defined herein.

"Custodian" shall mean any Person or Persons appointed, employed or contracted with by the Administrator under the applicable provisions of Section 11.2 hereof.

"Custodian Agreement" shall mean the agreement with the Custodian referred to in Section 11.1 hereof as the same may be amended from time to time.

"Declaration of Trust" shall mean this Declaration of Trust as amended, restated or modified from time to time. References in this Declaration of Trust to "Declaration", "hereof", "herein", "hereby" and "hereunder" shall be deemed to refer to the Declaration of Trust and shall not be limited to the particular text, article or section in which such words appear.

"Employee of a Municipality" or "Municipal Employee" shall mean a director of finance, a finance official or other managerial employee of a Municipality charged with responsibility for municipal finance.

"4M Fund" shall mean the common law trust created by this Declaration of Trust.

"4M Fund Property" shall mean, as of any particular time, any and all property, real, personal or otherwise, tangible or intangible, which is transferred, conveyed or paid to the 4M Fund or the Trustees and all income, profits and gains therefrom and which, at such time, is owned or held by, or for the account of, the 4M Fund or the Trustees.

"Information Statement" shall mean the information statement or other descriptive document or documents adopted as such by the Trustees and distributed by the 4M Fund to participants and potential Participants of the 4M Fund as the same may be amended by the Trustees from time to time.

"Initial Participants" shall mean the League of Minnesota Cities and the City of Minnetonka which Municipalities initially formed the 4M Fund by the execution and adoption of this Declaration of Trust.

"Investment Advisory Agreement" shall mean the agreement with the Adviser referred to in Section 3.2 hereof as the same may be amended from time to time.

"Joint Powers Act" shall mean Minnesota Statutes, Section 471.59.

"Laws" shall mean common law and all ordinances, statutes, rules, regulations, orders, injunctions, decisions, opinions or decrees of any government or political subdivision or agency thereof, or any court or similar entity established by any thereof.

reordered { "Municipality" shall mean county, city, town, public authority, public corporation, public commission, special district, any other political subdivision, or an agency of the state or its subdivisions and any "instrumentality" (as that term is defined in the Joint Powers Act) of a municipality. }

"Participants" shall mean the Initial Participants and the Municipalities which adopt this Declaration of Trust pursuant to Section 14.6 hereof.

"Permitted Investments" shall mean the investments referred to in Paragraph (b) or Section 2.2 hereof.

"Person" shall mean and include individuals, corporations, limited partnerships, general partnerships, joint stock companies or associations, joint ventures, associations, companies, trusts, banks, trust companies, land trusts, business trusts or other entities (which or not legal entities) and governments and agencies and political subdivisions thereof.

"Share" shall mean the unit used to denominate and measure the respective beneficial interests of the Participants in the Fund Property as described in Article VI.

"Share Register" shall mean the register of Shares maintained pursuant to Article VII hereof.

"Technical Advisory Board" shall mean the persons appointed by the Trustees to act as technical advisors to the Trust.

ARTICLE II

Powers of the Trustees

2.1 General. Subject to the rights of the Participants as provided herein, the Trustees shall have, without other or further authorization, full, exclusive and absolute power, control and authority over the 4M Fund Property and other the affairs of the 4M Fund to the same extent as if the Trustees were the sole and absolute owners of the 4M Fund Property in their own right, and

13

with such powers of delegation as may be permitted by this Declaration of Trust. The trustees may do and perform such acts and things as in their sole judgment and discretion are necessary and proper for conducting the affairs of the 4M Fund or promoting the interests of the 4M Fund and the Participants. The enumeration of any specific power or authority herein shall not be construed as limiting the aforesaid general power or authority or any specific power or authority. The trustees may exercise any power authorized and granted to them by this Declaration of Trust. Such powers of the Trustees may be exercised without the necessity of any order or, or resort to, any court.

2.2 Permitted Investments. The Trustees shall have full and complete power, subject in all respects to Article IV hereof,

(a) to conduct, operate and provide an investment program for the Participants;
and

(b) for such consideration as they may deem proper and as may be required by Law, to subscribe for, invest in, reinvest in, purchase or otherwise acquire, hold, sell, assign, transfer, exchange, distribute or otherwise deal in or dispose of investment instruments as permitted by Law (the "Permitted Investments"). Permitted Investments include, without limitation, as of the date hereof, the following:

(i) any security which is a direct obligation of or is guaranteed as to payment of principal and interest by the United States of America or any agency or instrumentality thereof;

(ii) shares of an investment company (1) registered under the federal investment company act of 1940, whose shares are registered under the federal securities act of 1933, and (2) whose only investments are in securities described in the preceding clause and repurchase agreements fully collateralized by those securities, if the repurchase agreements are entered into only with those primary reporting dealers that report to the Federal Reserve Bank of New York and with the 100 largest United States commercial banks;

(iii) any security which is a general obligation of the State of Minnesota or any of its municipalities;

(iv) bankers acceptances of United States banks eligible for purchase by the Federal Reserve System;

(v) commercial paper issued by United States corporations or their Canadian subsidiaries that is of the highest quality and matures in 270 days or less;

(vi) deposits in a national bank or in a state bank or thrift institution insured by the Federal Deposit Insurance Corporation or the Federal Savings and Loan Insurance Corporation, provided that any such deposit shall be insured, bonded or collateralized in the manner required by Law and that any such bank or thrift institution shall meet criteria designated from time to time by the Trustees;

(vii) repurchase agreements (a) with any bank qualified as a depository of money held in the debt service fund of a municipality of the State of Minnesota or (b) with any national or state bank in the United States of America which is a member of the Federal Reserve System and whose combined capital and surplus equals or exceeds \$10,000,000 or (c) with a Primary Reporting Dealer in United States Government Securities to the Federal Reserve Bank of New York as such term is defined in Minnesota Statutes, Section 475.51, Subdivision 11 or (d) a securities

14

broker-dealer having its principal executive office in Minnesota, licensed pursuant to Chapter 80A or an affiliate of it, regulated by the Securities and Exchange Commission and maintaining a combined capital and surplus of \$40,000,000 or more, exclusive of subordinated debt; and

(viii) such other investment instruments now or hereafter permitted by applicable Law for the investment of moneys of Municipalities organized under the laws of the State of Minnesota.

In the exercise of their powers, the Trustees shall not be limited, except as otherwise provided hereunder, to investing in Permitted Investments maturing before the possible termination of the 4M Fund. Except as otherwise provided in this Declaration of Trust, the Trustees shall not be limited by any Law now or hereafter in effect limiting the investments which may be held or retained by trustees or other fiduciaries, and they shall have full authority and power to make any and all Permitted Investments within the limitations of this Declaration of Trust, that they, in their absolute discretion, shall determine to be advisable and appropriate. The Trustees shall have no liability for loss with respect to Permitted Investments made within the terms of this Declaration of Trust, even though such investments shall be of a character or in an amount not considered proper for the investment of trust funds by trustees or other fiduciaries. The Trustees shall be permitted only to make Permitted Investments in accordance with Article IV of this Declaration of Trust.

2.3 Legal Title.

(a) Legal title to all of the 4M Fund Property shall be vested in the Trustees on behalf of the Participants and be held by and transferred to the Trustees, except that the Trustees shall have full and complete power to cause legal title to any 4M Fund Property to be held, on behalf of the Participants, by or in the name of the 4M Fund, or in the name of any other Person as nominee, on such terms, in such manner, and with such powers as the Trustees may determine, so long as in their judgment the interest of the 4M Fund is adequately protected.

(b) The right, title and interest of the Trustees in and to the 4M Fund Property shall vest automatically in all persons who may hereafter become Trustees upon their election to the Board of Directors of the League of Minnesota Cities and qualification without any further act. Upon the expiration of term of office, resignation, disability, removal, adjudication as an incompetent, or death of a Trustee, he (and in the event of his death, his estate) shall automatically cease to have any right, title or interest in or to any of the 4M Fund Property, and the right, title and interest of such Trustee in and to the 4M Fund Property shall vest automatically in the remaining Trustees without any further act.

2.4 Disposition of Assets. Subject in all respects to Article IV hereof and to the Laws from time to time applicable to Municipalities of the State of Minnesota, the Trustees shall have full and complete power to sell, exchange or otherwise dispose of any and all 4M Fund Property free and clear of any and all trusts and restrictions, at public or private sale, for cash or on terms, with or without advertisement, and subject to such restrictions, stipulations, agreements and reservations as they shall deem proper, and to execute and deliver any deed, power, assignment, bill of sale, or other instrument in connection with the foregoing. The Trustees shall also have full and complete power, subject in all respects to Article IV hereof, and in furtherance of the affairs and purposes of the 4M Fund, to give consents and make contracts relating to 4M Fund Property or its use.

2.5 Taxes. The Trustees shall have full and complete power: (i) to pay all taxes or assessments, of whatever kind or nature, validly and lawfully imposed upon or against the 4M Fund

or the Trustees in connection with the 4M Fund Property or upon or against the 4M Fund Property or income or any part thereof; (ii) to settle and compromise disputed tax liabilities; and (iii) for the foregoing purposes to make such returns and do all such other acts and things as may be deemed by the Trustees to be necessary or desirable.

2.6 Rights as Holders of 4M Fund Property. The Trustees shall have full and complete power to exercise on behalf of the Participants all of the rights, powers and privileges appertaining to the ownership of all or any Permitted Investments or other property forming part of the 4M Fund Property to the same extent that any individual might, and, without limiting the generality of the foregoing, to vote or give any consent, request or notice or waive any notice either in person or by proxy or power of attorney, with or without the power of substitution, to one or more Persons, which proxies and powers of attorney may be for meetings or actions generally, or for any particular meeting or action, and may include the exercise of discretionary powers.

2.7 Delegation: Committees. The Trustees shall have full and complete power (consistent with their continuing exclusive authority over the management of the 4M Fund, the conduct of its affairs, their duties and obligations as Trustees, and the management and disposition of 4M Fund Property), to delegate from time to time to such one or more of their number (who may be designated as constituting a committee of the Trustees as provided in Section 9.9 hereof) or to officers, employees or agents of the 4M Fund (including, without limitation, the Administrator, the Adviser and the Custodian) the doing of such acts and things and the execution of such instruments either in the name of the 4M Fund, or the names of the Trustees or as their attorney or attorneys, or otherwise as the Trustees may from time to time deem expedient and appropriate in the furtherance of the business affairs and purposes of the 4M Fund.

2.8 Collection. The Trustees shall have full and complete power: (i) to collect, sue for, receive and receipt for all sums of money or other property due to the 4M Fund; (ii) to consent to extensions of the time for payment, or to the renewal of any securities, investments or obligations; (iii) to engage or intervene in, prosecute, defend, compromise, abandon or adjust by arbitration or otherwise any actions, suits, proceedings, disputes, claims, demands or things relating to the 4M Fund Property; (iv) to foreclose any collateral, security or instrument securing any investments, notes, bills, bonds, obligations or contracts by virtue of which any sums of money are owed to the 4M Fund; (v) to exercise any power of sale held by them, and to convey good title hereunder free of any and all trusts, and in connection with any such foreclosure or sale, to purchase or otherwise acquire title to any property; (vi) to be parties to reorganization and to transfer to and deposit with any corporation, committee, voting trustee or other Person any securities, investments or obligations of any person which form a part of the 4M Fund Property, for the purpose of such reorganization or otherwise; (vii) to participate in any arrangement for enforcing or protecting the interests of the Trustees as the owners or holders of such securities, investments or obligations and to pay any assessment levied in connection with such reorganization or arrangement; (viii) to extend the time (with or without security) for the payment or delivery of any debts or property and to execute and enter into releases, agreements and other instruments, and (ix) to pay or satisfy any debts or claims upon any evidence that the Trustees shall deem sufficient.

2.9 Payment of Expenses. The Trustees shall have full and complete power: (i) to incur and pay any charges or expenses which in the opinion of the Trustees are necessary or incidental to or proper for carrying out any of the purposes of this Declaration of Trust; (ii) to reimburse others for the payment thereof; and (iii) to pay appropriate compensation or fees from the funds of the 4M Fund to Persons with whom the 4M Fund has contracted or transacted business. The Trustees shall fix the compensation, if any, of all officers and employees of the 4M Fund. The Trustees shall not be paid compensation for their general services as Trustees hereunder. The Trustees may pay themselves or any one or more of themselves reimbursement for

16

expenses reasonably incurred by themselves or any one or more of themselves on behalf of the 4M Fund.

2.10 Borrowing and Indebtedness. The Trustees shall not have the power to borrow money or incur indebtedness on behalf of the 4M Fund, or authorize the Fund to borrow money or incur indebtedness, except as provided in clause (iv) of Section 4.2 of this Declaration of Trust, but ~~not~~ if and to the extent permitted by Law.

2.11 Deposits. The Trustees shall have full and complete power to deposit, in such manner as may now or hereafter be permitted by Law, any moneys or funds, included in the 4M Fund Property, and intended to be used for the payment of expenses of the 4M Fund or the Trustees, with one or more banks, or thrift institutions meeting the requirements of Section 2.2(b)(vi) hereof. Such deposits are to be subject to withdrawal in such manner as the Trustees may determine, and the Trustees shall have no responsibility for any loss which may occur by reason of the failure of the bank or thrift institution with which the moneys, investments, or securities have been deposited. Each such bank or thrift institution shall comply, with respect to such deposits, with all applicable requirements of all applicable Laws, including, but not limited to, Laws of the State of Minnesota relating to Municipalities.

2.12 Valuation. The Trustees shall have full and complete power to determine in good faith conclusively the value of any of the 4M Fund Property and to revalue the 4M Fund Property.

2.13 Fiscal Year: Accounts. The Trustees shall have full and complete power to determine the fiscal year of the 4M Fund and the method or form in which its accounts shall be kept and from time to time to change the fiscal year or method or form of accounts. Unless otherwise determined by the Trustees pursuant to this Section 2.13, the fiscal year of the 4M Fund shall terminate on June 30 and commence on July 1 of each calendar year.

2.14 Concerning the 4M Fund and Certain Affiliates.

(a) The 4M Fund may enter into transactions with any Affiliate of the 4M Fund or of the Adviser, the Administrator, or the Custodian or of any Trustee, officer, director or employee of the 4M Fund or with any Affiliate of an agent of the 4M Fund or of the Adviser, the Administrator, or the Custodian if (i) each such transaction (or type of transaction) had, after disclosure of such affiliation, been approved or ratified by the affirmative vote of a majority of the Trustees, including a majority of the Trustees who are not Affiliates of any Person (other than the 4M Fund) who is a party to the transaction or transactions with the 4M Fund and (ii) such transaction (or type of transaction) is, in the opinion of the Trustees, on terms fair and reasonable to the 4M Fund and the Participants and at least as favorable to them as similar arrangements for comparable transactions (of which the Trustees have knowledge) with organizations unaffiliated with the 4M Fund or with the Person who is a party to the transaction or transactions with the 4M Fund.

(b) Except as otherwise provided in this Declaration of Trust or in the Laws of the State of Minnesota, in the absence of fraud, a contract, act or other transaction between the 4M Fund and any other Person, or in which the 4M Fund is interested, is valid and no Trustee, officer, employee or agent of the 4M Fund shall have any liability as a result of entering into any such contract, act or transaction even though (i) one or more of the Trustees, officers, employees or agents of such other Person, or (ii) one or more of the Trustees, officers, employees, or agents of the 4M Fund, individually or jointly with or affiliated with, such contract, act or transaction, provided that (i) such interest or affiliation is disclosed to the Trustees and the Trustees authorize such contract, act or other transaction by a vote of a majority of the unaffiliated Trustees, or (ii) such interest or affiliation is disclosed to the Participants, and such contract, act or transaction is

approved by a majority of the Participants.

(c) Any Trustee or officer, employee, or agent of the 4M Fund may, in his personal capacity, or in a capacity as trustee, officer, director, stockholder, partner, member, agent, adviser or employee of any Person, have business interests and engage in business activities in addition to those relating to the 4M Fund, which interests and activities may be similar to those of the 4M Fund and include the acquisition, syndication, holding, management, operation or disposition of securities, investments and funds, for his own account or for the account of such Person. Each Trustee, officer, employee and agent of the 4M Fund shall be free of any obligation to present to the 4M Fund any investment opportunity which comes to him in any capacity other than solely as Trustee, officer, employee or agent of the 4M Fund, even if such opportunity is of a character which, if presented to the 4M Fund, could be taken by the 4M Fund.

(d) Subject to the provisions of Article III hereof, any Trustee or officer, employee or agent of the 4M Fund may be interested as trustee, officer, director, stockholder, partner, member, agent, adviser or employee of, or otherwise have a direct or indirect interest in, any Person who may be engaged to render advice or services to the 4M Fund, and may receive compensation from such Person as well as compensation as Trustee, officer, employee or agent of the Fund or otherwise hereunder. None of the activities and interests referred to in this paragraph (d) shall be deemed to conflict with his duties and powers as Trustee, officer, employee or agent of the 4M Fund.

(e) To the extent that any other provision of this Declaration of Trust conflicts with, or is otherwise contrary to the provisions of, this Section 2.14, the provisions of this Section 2.14 shall be deemed controlling.

(f) Notwithstanding the foregoing provisions of this Section 2.14, the Trustees shall not have the power to engage in any transaction with any Affiliate that would be inconsistent with the Laws of the State of Minnesota concerning conflicts of interest, including, but not limited to, Minnesota Statutes, Sections 471.87 and 471.88, or any other Law limiting the Participants' power to enter into such transaction, and the By-Laws of the 4M Fund may contain provisions more restrictive than those set forth in this Section 2.14.

2.15 Investment Program. The Trustees shall use their best efforts to obtain through the Adviser or other qualified Persons a continuing and suitable investment program, consistent with the investment policies and objectives of the 4M Fund set forth in Article IV of this Declaration of Trust, and the Trustees shall be responsible for reviewing and approving or rejecting the investment program presented by the Adviser or such other Persons. Subject to the provisions of Section 2.7 and Section 3.1 hereof, the Trustees may delegate functions arising under this Section 2.15 to one or more of their number or to the Adviser.

2.16 Power to Contract, Appoint, Retain and Employ.

(a) Subject to the provisions of Section 2.7 and Section 3.1 hereof with respect to delegation of authority by the Trustees, the Trustees shall have full and complete power to appoint, employ, retain, or contract with any Person of suitable qualifications and high repute (including one or more of themselves and any corporation, partnership, trust or other entity of which one or more of them may be an Affiliate, subject to the applicable requirements of Section 2.14 hereof) as the Trustees may deem necessary, or desirable for the transaction of the affairs of the 4M Fund, including any Person or Persons who, under the supervision of the Trustees, may, among other things: (i) serve as the 4M Fund's investment adviser and consultant in connection with policy decisions made by the Trustees; (ii) serve as the 4M Fund's administrator or co-administrators; (iii)

furnish reports to the Trustees and provide research, economic and statistical data in connection with the 4M Fund's investments; (iv) act as consultants, accountants, technical advisers, attorneys, brokers, underwriters, corporate fiduciaries, escrow agents, depositaries, custodians or agents for collection, insurers or insurance agents, registrars for Shares or in any other capacity deemed by the Trustees to be necessary or desirable; (v) investigate, select, and, on behalf of the 4M Fund, conduct relations with Persons acting in such capacities and pay appropriate fees to, and enter into appropriate contracts with, or employ, or retain services performed or to be performed by, any of them in connection with the investments acquired, sold, or otherwise disposed of, or committed, negotiated, or contemplated to be acquired, sold or otherwise disposed of; (vi) substitute any other Person for any such Person, (vii) act as attorney-in-fact or agent in the purchase or sale or other disposition of investments, and in the handling, prosecuting or other enforcement of any lien or security securing investments; and (viii) assist in the performance of such ministerial functions necessary in the management of the 4M Fund as may be agreed upon with the Trustees.

(b) The manner of employing, engaging, compensating, transferring, or discharging any Person as an employee of the 4M Fund shall be subject to Minnesota Law. For purposes of the preceding sentence, "employee of the 4M Fund" shall not include independent contractors such as the Adviser, the Administrator, the Custodian, counsel or independent accountants and their respective employees.

2.17 Insurance. The Trustees shall have full and complete power to purchase and pay for, entirely out of 4M Fund Property, insurance policies insuring the 4M Fund and the Trustees, officers, employees and agents of the 4M Fund individually against all claims and liabilities of every nature arising by reason of holding or having held any such office or position, or by reason of any action alleged to have been taken or omitted by the 4M Fund or any such Person as Trustee, officer, employee and agent, including any action taken or omitted that may be determined to constitute negligence, whether or not the 4M Fund would have the power to indemnify such Person against such liability.

2.18 Seal. The Trustees shall have full and complete power to adopt and use a seal for the 4M Fund, but, unless otherwise required by the Trustees, it shall not be necessary for the seal to be placed on, and its absence shall not impair the validity of, any document, instrument or other paper executed and delivered by or on behalf of the 4M Fund.

2.19 Indemnification. In addition to the mandatory indemnification provided for in Section 5.3 hereof, the Trustees shall have full and complete power, to the extent permitted by applicable Laws, to indemnify or enter into agreements with respect to indemnification with any Person with whom the 4M Fund has dealings, including, without limitation, the Adviser, the Administrator, and the Custodian, to such extent as the Trustees shall determine.

2.20 Remedies. Notwithstanding any provision in this Declaration of Trust, when the Trustees deem that there is a significant risk that an obligor to the 4M Fund may default or is in default under the terms of any obligation to the 4M Fund, the Trustees shall have full and complete power to pursue any remedies permitted by Law which, in their sole judgment, are in the interests of the 4M Fund, and the Trustees shall have full and complete power to enter into any investment, commitment or obligation of the 4M Fund resulting from the pursuit of such remedies as are necessary or desirable to dispose of property acquired in the pursuit of such remedies.

2.21 Information Statement. The Trustees shall have full and complete power to prepare, publish and distribute an Information Statement regarding the 4M Fund and to amend or supplement the same from time to time.

2.22 Further Powers. The Trustees shall have full and complete power to take all such actions, do all such matters and things and execute all such instruments as they deem necessary, proper or desirable in order to carry out, promote or advance the interests and purposes of the 4M Fund although such actions, matters or things are not herein specifically mentioned. Any determination as to what is in the best interests of the 4M Fund made by the Trustees in good faith shall be conclusive. In construing the provisions of this Declaration of Trust, the presumption shall be in favor of a grant of power to the Trustees. The Trustees shall not be required to obtain any court order to deal with the 4M Fund Property.

2.23 Compliance with Laws. The Trustees shall at all times exercise all powers granted hereunder in compliance with, and the operations of the 4M Fund shall at all times be conducted in accordance with, the applicable Laws of the State of Minnesota.

2.24 Tax or Aid or Revenue Anticipation Borrowing. Notwithstanding the provisions of Section 2.10 or 4.2 or any other provision of this Declaration, the Trustees shall have full and complete power to borrow money or incur indebtedness as a part of a program of tax or aid or revenue anticipation borrowing by Participant Municipalities. They shall have the power to issue such obligations on behalf of the Participants, coordinate the issuance of such obligations by the Participants, to become members of joint powers entities authorized to issue or coordinate the issuance of such obligations, or to enter into contracts or agreements of any nature authorized by law related to the issuance of such obligations. The assets of the 4M Fund itself shall not be pledged by the Trustees to the repayment of any portion of such borrowing and any obligations issued shall not constitute a debt of the 4M Fund, shall not be payable from or be a charge upon any assets of the 4M Fund, shall not give rise to any pecuniary liability of the 4M Fund, and shall not be enforceable against any property of the 4M Fund, other than amounts received from participating Municipalities in connection with that anticipation borrowing program which are pledged to the repayment of the borrowing or obligations. The Trustees shall have such powers as necessary to conduct or participate in such anticipation borrowing programs as approved by the Trustees, including a program of investment of obligation proceeds.

ARTICLE III

Technical Advisory Board, Investment Adviser, Administrator, and Custodian

3.1 Appointment. The Trustees are responsible for the general investment policy and program of the 4M Fund and for the general supervision and administration of the business and affairs of the 4M Fund conducted by the officers, agents, employees, investment advisers, administrators, or independent contractors of the 4M Fund. The Trustees are not required personally to conduct all of the routine business of the 4M Fund and, consistent with their ultimate responsibility as stated herein, the Trustees may appoint, employ or contract with an Adviser as an investment adviser to the Trustees, an Administrator as an administrator for the 4M Fund and a Custodian. The trustees may grant or delegate such authority to the Adviser and the Administrator (pursuant to the terms of Section 2.16 hereof) or to any other Person the services of whom are obtained by the Adviser or the Administrator, as the Trustees may, in their sole discretion, deem to be necessary or desirable, for the efficient management of the 4M Fund, without regard to whether such authority is normally granted or delegated by trustees or other fiduciaries. The Trustees may appoint one or more persons to serve jointly as Co-Advisers and one or more persons to serve jointly as Co-Administrators. The same person may serve simultaneously as the Administrator and as the Adviser, but no person serving as the Administrator or as the Adviser may serve as the Custodian. Piper Capital Management, Inc., a subsidiary of Piper Jaffray, Inc., a corporation organized and existing under the Laws of the State of Delaware, is appointed as the initial

20

Administrator and Adviser for the 4M Fund. Marquette Bank Minneapolis is appointed as the initial Custodian for the 4M Fund. The Trustees shall appoint a Technical Advisory Board to assist the Trustees in the development of policies and the overseeing and reviewing of the activities of the 4M Fund. The Technical Advisory Board shall be made up of such individuals as the Trustees deem advantageous to the Fund. The composition of the Technical Advisory Board may be changed from time to time in the discretion of the Trustees.

3.2 Duties of the Adviser. The duties of the Adviser shall be those set forth in the Investment Advisory Agreement to be entered into between the 4M Fund and the Adviser. Such duties may be modified by the Trustees, from time to time, by the amendment of the Investment Advisory Agreement. Subject to Article IV hereof, the Trustees may authorize the Adviser to effect purchases, sales, or exchanges of 4M Fund Property on behalf of the Trustees or may authorize any officer, employee, agent or Trustee to effect such purchases, sales, or exchanges pursuant to recommendations of the Adviser, all without further action by the Trustees. Any and all of such purchases, sales, and exchanges shall be deemed to be authorized by all the Trustees. The Investment Advisory Agreement may authorize the Adviser to employ other persons to assist it in the performance of its duties. The Investment Advisory Agreement shall provide that it may be terminated at any time without cause and without the payment of any penalty by the 4M Fund on sixty (60) days written notice to the Adviser.

3.3 Duties of the Administrator. The duties of the Administrator shall be those set forth in the Administration Agreement to be entered into between the 4M Fund and the Administrator. Such duties may be modified by the Trustees, from time to time, by the amendment of the Administration Agreement. The Administration Agreement may authorize the Administrator to employ other persons to assist it in the performance of its duties. The Administration Agreement shall provide that it may be terminated at any time without cause and without the payment of any penalty by the 4M Fund on sixty (60) days written notice to the Administrator.

3.4 Duties of Custodian. The duties and qualifications of the Custodian shall be those set forth in Article 11 herein.

3.5 Successors. In the event that, at any time, the position of Adviser, Administrator, or Custodian shall become vacant for any reason, the Trustees may appoint, employ or contract with a successor Adviser, Administrator, or Custodian. A predecessor shall assist and cooperate with the 4M Fund in the smooth and orderly transition in the event a successor Adviser, Administrator, or Custodian is appointed for any reason.

ARTICLE IV

Investments

4.1 Statement of Investment Policy and Objective. Subject to the prohibitions and restrictions contained in Section 4.2 hereof, the general investment policy and objective of the Trustees shall be to provide to the Participants of the 4M Fund the highest possible investment yield, while maintaining liquidity and preserving capital by investing in Permitted Investments in accordance with applicable provisions of Law, as may be set forth more fully in the 4M Fund's Information Statement, as the same may be amended from time to time.

4.2 Restrictions Fundamental to the 4M Fund. Notwithstanding anything in this Declaration of Trust which may be deemed to authorize the contrary, the 4M Fund:

(i) May not make any investment other than investments authorized by the provisions of Law applicable to the investment of funds by the Participants, as the same may be amended from time to time;

(ii) May not purchase any Permitted Investment which has a maturity date more than one year from the date of the 4M Fund's purchase thereof, unless subject, at the time of such purchase by the 4M Fund, to an irrevocable agreement on the part of a Responsible Person to purchase such Permitted Investment from the 4M Fund within one (1) year;

(iii) May not purchase any Permitted Investment if the effect of such purchase by the 4M Fund would be to make the average dollar weighted maturity of the 4M Fund's investment portfolio greater than ninety (90) days, provided, however, that in making such determination any Permitted Investment which is subject to an irrevocable agreement of the nature referred to in the preceding clause (ii) shall be deemed to mature on the day on which the 4M Fund is obligated to sell such Permitted Investment back to a Responsible Person or the day on which the 4M Fund may exercise its rights under such agreement to require the purchase of such Permitted Investment by a Responsible Person;

(iv) May not borrow money or incur indebtedness except to facilitate as a temporary measure:

(a) withdrawal requests which might otherwise require unscheduled dispositions of portfolio investments;

(b) for a period not to exceed one business day, withdrawal requests pending receipt of collected funds from investments sold on the date of the withdrawal requests or withdrawal requests from Participants who have notified the 4M Fund of their intention to deposit funds in their accounts on the date of the withdrawal requests; or

(c) for a period not to exceed one business day, the purchase of Permitted Investments pending receipt of collected funds from Participants who have notified the 4M Fund of their intention to deposit funds in their accounts on the date of the purchase of the Permitted Investments;

(v) May not make loans, provided that the 4M Fund may make Permitted Investments;

(vi) May not hold or provide for the custody of any 4M Fund Property in a manner not authorized by Law or by any institution or Person not authorized by Law;

(vii) Except as permitted by Section 2.2(b)(ii) hereof, may not purchase securities or shares of investment companies or any entities similar to the 4M Fund; and

(viii) May not pledge assets except to secure indebtedness permitted by (iv) of this Section 4.2; however in the case of indebtedness secured under Section 4.2(iv)(b) or (c) hereof, it may pledge assets only to the extent of the actual funds in the account of a participant on whose behalf the permitted indebtedness was incurred plus an amount equal to that amount which that Participant has notified the 4M Fund that it intends to deposit in its account on that date.

For the purposes of this Section 4.2, the phrase "Responsible Person" shall mean a person with which the 4M Fund is authorized to enter into agreements pursuant to Section 2.2(b)(vii) hereof.

22

4.3 Amendment of Restrictions. The restrictions set forth in Section 4.2 hereof are fundamental to the operation and activities of the 4M Fund and may not be changed without the affirmative vote of a majority of the Participants entitled to vote, except that such restrictions may be changed by the Trustees so as to make them more restrictive when necessary to conform the investment program and activities of the 4M Fund to the Laws of the State of Minnesota and the United States of America as they may from time to time be amended.

ARTICLE V

Limitations of Liability

5.1 Liability to Third Persons. No Participant shall be subject to any personal liability whatsoever, in tort, contract or otherwise to any other Person or Persons in connection with 4M Fund Property or the affairs of the 4M Fund; and no Trustee, officer, employee or agent (including, without limitation, the Adviser, the Administrator and the Custodian) of the 4M Fund shall be subject to any personal liability whatsoever in tort, contract or otherwise, to any other Person or Persons in connection with 4M Fund Property or the affairs of the 4M Fund, except that each shall be personally liable for his bad faith, willful misconduct, gross negligence or reckless disregard of his duties or for his failure to act in good faith in the reasonable belief that his action was in the best interests of the 4M Fund and except that the Investment Advisory Agreement and the Administration Agreement shall provide for the personal liability of the Adviser or the Administrator, as the case may be, for its willful or negligent failure to take reasonable measures to restrict investments of 4M Fund Property to those permitted by Law and this Declaration of Trust.

5.2 Liability to the 4M Fund or to the Participants. No Trustee, officer, employee or agent (including, without limitation, the Adviser, the Administrator and the Custodian) of the 4M Fund shall be liable to the 4M Fund or to any Participant, Trustee, officer, employee or agent (including, without limitation, the Adviser, the Administrator and the Custodian) of the 4M Fund for any action or failure to act (including, without limitation, the failure to compel in any way any former or acting Trustee to redress any breach of trust) except for his own bad faith, willful misfeasance, gross negligence or reckless disregard of his duties and except that the Investment Advisory Agreement and the Administration Agreement shall provide for the personal liability of the Adviser or the Administrator, as the case may be, for its willful or negligent failure to take reasonable measures to restrict investments of 4M Fund Property to those permitted by Law and this Declaration of Trust; provided, however, that the provisions of this Section 5.2 shall not limit the liability of any agent (including, without limitation, the Adviser, the Administrator and the Custodian) of the 4M Fund with respect to breaches by it of a contract between it and the 4M Fund.

5.3 Indemnification.

(a) The 4M Fund shall indemnify and hold each Participant harmless from and against all claims and liabilities, whether they proceed to judgment or are settled or otherwise brought to a conclusion, to which such Participant may become subject by reason of its being or having been a Participant, and shall reimburse such Participant for all legal and other expenses reasonably incurred by it in connection with any such claim or liability. The rights accruing to a Participant under this Section 5.3 shall not exclude any other right to which such Participant may be lawfully entitled, nor shall anything herein contained restrict the right of the 4M Fund to indemnify or reimburse a Participant in any appropriate situation even though not specifically provided herein.

23

(b) The 4M Fund shall indemnify each of its Trustees and officers, and employees and agents (including, without limitation, the Adviser, the Administrator and the Custodian) designated by the Board of Trustees to receive such indemnification, against all liabilities and expenses (including, without limitation, amounts paid in satisfaction of judgments, in compromise or as fines and penalties, and counsel fees) reasonably incurred by him in connection with the defense or disposition of any action, suit or other proceeding by the 4M Fund or any other Person, whether civil or criminal, in which he may be involved or with which he may be threatened, while in office or thereafter, by reason of his being or having been such a Trustee, officer, employee or agent (including, without limitation, the Adviser, the Administrator and the Custodian), except as to any matter as to which he acted in bad faith or with willful misfeasance or reckless disregard of his duties or gross negligence; in addition, in the case of the Adviser, Administrator, or the Custodian in willful or negligent violation of the restrictions on investments of the 4M Fund Property; provided, however, that the provisions of this Section 5.3 shall not be construed to permit the indemnification of any agent (including, without limitation, the Adviser, the Administrator and the Custodian) of the 4M Fund with respect to breaches by it of a contract between it and the 4M Fund; and further provided, however, that as to any matter disposed of by a compromise payment by such Trustee, officer, employee or agent (including the Adviser, Administrator or the Custodian), pursuant to a consent decree or otherwise, no indemnification either for said payment or for any other expenses shall be provided unless: 1) The 4M Fund receives a written opinion from independent counsel approved by the Trustees to the effect that if the matter had been adjudicated, the defenses that could have been presented on behalf of such Trustee, officer, employee or agent (including the Adviser, the Administrator or the Custodian), were meritorious; and 2) If in the opinion of the Board of Trustees, the Trustee, officer, employee or agent (including the Adviser, the Administrator or the Custodian) were not acting in bad faith or with willful misfeasance or reckless disregard of their duties or gross negligence. The rights accruing to any Trustee, officer, employee or agent (including, without limitation, the Adviser, the Administrator and the Custodian) under the provisions of this paragraph (b) of this Section 5.3 shall not exclude any other right to which he may be lawfully entitled; provided, however, that no Trustee, officer, employee or agent may satisfy any right of indemnity or reimbursement granted herein or to which he may be otherwise entitled except out of the 4M Fund Property, and no Participant shall be personally liable to any Person with respect to any claim for indemnity or reimbursement or otherwise. The Trustees may make advance payments in connection with indemnification under this paragraph (b) of this Section 5.3, provided that the indemnified Trustee, officer, employee or agent (including, without limitation, the Adviser, the Administrator and the Custodian) shall have given a written undertaking to reimburse the 4M Fund in the event that it is subsequently determined that he is not entitled to such indemnification.

(c) Any action taken by, or conduct on the part of, the Adviser, the Administrator, a Trustee, an officer, an employee or an agent (including, without limitation, the Adviser, the Administrator and the Custodian) of the 4M Fund in conformity with, or in good faith reliance upon, the provisions of Section 2.14 or Section 5.7 hereof shall not, for the purpose of this Declaration of Trust (including, without limitation, Sections 5.1 and 5.2 and this Section 5.3) constitute bad faith, willful misfeasance, gross negligence or reckless disregard of his duties.

5.4 Surety Bonds. ~~No Trustee shall,~~ as such, be obligated to give any bond or surety or other security for the performance of any of his duties.

5.5 Apparent Authority. No purchaser, seller, transfer agent or other Person dealing with the Trustees or any officer, employee or agent of the 4M Fund shall be bound to make any inquiry concerning the validity of any transaction purporting to be made by the Trustees or by such officer, employee or agent or make inquiry concerning or be liable for the application of

money or property paid, transferred or delivered to or on the order of the Trustees or of such officer, employee or agent.

5.6 Recitals. Any written instrument creating an obligation of the 4M Fund shall be conclusively taken to have been executed by a Trustee or an officer, employee or agent of the 4M Fund only in his capacity as a Trustee under this Declaration of Trust or in his capacity as an officer, employee or agent of the 4M Fund. Any written instrument creating an obligation of the 4M Fund shall refer to this Declaration of Trust and contain a recital to the effect that the obligations thereunder are not personally binding upon, nor shall resort be had to the property of, any of the Trustees, Participants, officers, employees or agents of the 4M Fund, and that only the 4M Fund Property or a specific portion thereof shall be bound, and such written instrument may contain any further similar recital which may be deemed appropriate; provided, however, that the omission of any recital pursuant to this Section 5.6 shall not operate to impose personal liability on any of the Trustees, Participants, officers, employees or agents of the 4M Fund.

5.7 Reliance on Experts, Etc. Each Trustee and each officer of the 4M Fund shall, in the performance of his duties, be fully and completely justified and protected with regard to any act or any failure to act resulting from reliance in good faith upon the books of account or other records of the 4M Fund, upon an opinion of counsel or upon reports made to the 4M Fund by any of its officers or employees or by the Adviser, the Administrator, the Custodian, accountants, appraisers or other experts or consultants selected with reasonable care by the Trustees or officers of the 4M Fund.

5.8 Liability Insurance. The Trustees shall maintain insurance for the protection of the 4M Fund Property and the Trustees, Participants, officers, employees and agents (not including Advisor, Administrator, or Custodian) of the 4M Fund in such amount as the Trustees shall deem adequate to cover all foreseeable tort and contract liability to the extent available at reasonable rates.

5.9 No Waiver. Nothing in this Declaration of Trust shall be construed as constituting the waiver of any immunity from liability available to the 4M Fund or the Trustees, Participants, officers, employees or agents of the 4M Fund pursuant to any applicable provision of Law.

ARTICLE VI

Interests of Participants

6.1 General. The beneficial interest of the Participants hereunder in the 4M Fund Property and the earnings thereon shall, for convenience of reference, be divided into Shares, which shall be used as units to measure the proportionate allocation to the respective Participants of the beneficial interest hereunder. The number of Shares that may be used to measure and represent the proportionate allocation of beneficial interest among the Participants is unlimited. All Shares shall be of one class representing equal distribution, liquidation and other rights. The beneficial interest hereunder measured by the Shares shall not entitle a Participant to preference, preemptive, appraisal, conversion, or exchange rights of any kind with respect to the 4M Fund or the 4M Fund Property. Title to the 4M Fund Property of every description and the right to conduct any affairs hereinbefore described are vested in the Trustees on behalf and for the beneficial interest, of the Participants, and the Participants shall have no interest therein other than the beneficial interest conferred hereby and measured by their Shares, and they shall have no right to call for any partition or division of any property, profits, rights, or interests of the 4M Fund nor can they be called upon to share or assume any losses of the 4M Fund or suffer an

assessment of any kind by virtue of the allocation of Shares to them, except as provided in Section 10.2 hereof.

6.2 Allocation of Shares

(a) The Trustees shall credit a Participant with additional Shares upon receipt of funds (including, without limitation, income from the investment of 4M Fund Property) for the account of such Participant, based on the net asset value per Share as determined pursuant to Section 10.1 hereof. In connection with any allocation of Shares, the Trustees may allocate fractional Shares. The Trustees may from time to time adjust the total number of Shares allocated without thereby changing the proportionate beneficial interests in the 4M Fund. Reductions or increases in the number of allocated Shares may be made in order to maintain a constant net asset value per Share as set forth in Section 10.2 hereof. Shares shall be allocated and reduced in numbers as whole Shares and/or one hundredths (1/100ths) of a Share or multiples thereof.

(b) Shares may be allocated only to a Municipality which has become a Participant of the 4M Fund in accordance with Section 1.2 hereof. Each Participant may establish more than one account within the 4M Fund for such Participant's convenience.

(c) The minimum amount of funds which may be placed in the 4M Fund by a Participant at any one time shall be as determined by the Trustees from time to time. Unless otherwise determined by the Trustees pursuant to this paragraph (c) of this Section 6.2, the minimum amount of funds which may be placed in the 4M Fund by a Participant at any one time shall be One Dollar (\$1.00).

6.3 Evidence of Share Allocation. Evidence of Share allocation shall be reflected in the Share Register maintained by or on behalf of the 4M Fund pursuant to Section 7.1 hereof, and the 4M Fund shall not be required to issue certificates as evidence of Share allocation.

6.4 Reduction in Number of Shares to Maintain Constant Net Asset Value. The Shares of the 4M Fund shall be subject to reduction in number pursuant to the procedure for reduction of outstanding Shares set forth in Section 10.2 hereof in order to maintain the constant net-asset value per Share.

6.5 Withdrawals. Funds may be withdrawn from the 4M Fund at the option of a Participant, upon and subject to the terms and conditions provided in this Declaration of Trust. The 4M Fund shall, upon application of any Participant, promptly pay to such Participant the amount requested and shall reduce the number of Shares allocated to such Participant to the number of Shares which shall reflect such Participant's proportionate interest in the net assets of the 4M Fund after such withdrawal of funds. The procedures for effecting a withdrawal shall be as adopted by the Trustees and as set forth in the Information Statement of the 4M Fund, as the same may be amended from time to time; provided, however, that such procedures shall not be structured so as to substantially and materially restrict the ability of the Participants to withdraw funds from the 4M Fund.

6.6 Suspension of Right of Withdrawal; Postponement of Payment. Each Participant, by its adoption of this Declaration of Trust, agrees that the Trustees may, without the necessity of a formal meeting of the Trustees, temporarily suspend the right of withdrawal or postpone the date of payment pursuant to withdrawal requests for the whole or any part of any period (i) during which there shall have occurred any state of war, national emergency, banking moratorium or suspension of payments by banks in the State of Minnesota or any general suspension of trading or limitation of prices on the New York or American Stock Exchange (other than customary week-end

and holiday closing) or (ii) during which any financial emergency situation exists as a result of which disposal by the 4M Fund of 4M Fund Property is not reasonably practicable because of the substantial losses which might be incurred or it is not reasonably practicable for the 4M Fund fairly to determine the value of its net assets. Such suspension or postponement shall not alter or affect a Participant's beneficial interest hereunder as measured by its Shares or the accrued interest and earnings thereon. Such suspension or payment shall take effect at such time as the Trustees shall specify but not later than the close of business on the business day next following the declaration of suspension, and thereafter there shall be no right of withdrawal or payment until the Trustees shall declare the suspension or postponement at an end, except that the suspension or postponement shall terminate in any event on the first day on which the period specified in clause (i) or (ii) above shall have expired (as to which, the determination of the Trustees shall be conclusive). In the case of a suspension of the right of withdrawal or a postponement of payment pursuant to withdrawal requests, a Participant may either (i) withdraw its request for withdrawal or (ii) receive payment based on the net asset value existing after the termination of the suspension.

6.7 Minimum Withdrawal. There shall be no minimum amount which may be withdrawn from the 4M Fund at any one time at the option of a Participant; provided, however, that no request by a Participant for the withdrawal of less than one dollar (\$1.00) need be honored.

6.8 Defective Withdrawal Requests. In the event that a Participant shall submit a request for the withdrawal of a greater amount than is then credited to the account of such Participant, such request shall not be honored, and each Participant, by its adoption of this Declaration of Trust, agrees that the Trustees shall have full and complete power to withdraw funds from the account of a Participant, and to reduce proportionately the number of Shares allocated to such Participant in accordance with Section 6.5 hereof, in an amount sufficient to reimburse the 4M Fund for any fees, expenses, costs or penalties actually incurred by the 4M Fund as a result of such defective withdrawal request.

6.9 Allocation of Certain Expenses. Each Participant will, at the discretion of the 4M Fund, indemnify the 4M Fund against all expenses and losses resulting from indebtedness incurred on that Participant's behalf under Section 4.2(iv)(b) or (c) hereof. Each Participant authorizes the Trustees to reduce its Shares to the number of Shares which reflects that Participant's proportionate interest in the net assets of the 4M Fund after allocation of those expenses and losses to it.

ARTICLE VII

Record of Shares

7.1 Share Register. The Share Register shall be kept by or on behalf of the Trustees, under the direction of the Trustees, and shall contain (i) the names and addresses of the Participants, (ii) the number of Shares representing their respective beneficial interests hereunder and (iii) a record of all allocations and reductions thereof. Such Share Register shall be conclusive as to the identity of the Participants to which the Shares are allocated. Only Participants whose allocation of Shares is recorded on such Share Register shall be entitled to receive distributions with respect to Shares or otherwise to exercise or enjoy the rights and benefits related to the beneficial interest hereunder represented by the Shares. No Participant shall be entitled to receive any distribution, nor to have notices given to it as herein provided, until it has given its appropriate address to such officer or agent of the Fund as shall keep the Share Register for entry

thereon.

7.2 Registrar. The Trustees shall have full and complete power to employ a registrar. Unless otherwise determined by the Trustees, the Share Register shall be kept by the Administrator which shall serve as the registrar for the 4M Fund. The registrar shall record the original allocations of Shares in the Share Register. Such registrar shall perform the duties usually performed by registrars of certificates and shares of stock in a corporation, except as such duties may be modified by the Trustees.

7.3 Owner of Record. No Person becoming entitled to any Shares in consequence of the merger, reorganization, consolidation, bankruptcy or insolvency of any Participant or otherwise, by operation of Law, shall be recorded as the Participant to which such Shares are allocated and shall only be entitled to receive for such Shares the amount credited to the account of the Participant whose beneficial interest in the 4M Fund is represented by such Shares. Until the Person becoming entitled to receive such amount shall apply for the payment thereof and present any proof of such entitlement as the Trustees may in their sole discretion deem appropriate, the Participant of record to which such Shares are allocated shall be deemed to be the Participant to which such Shares are allocated for all purposes hereof, and neither the Trustees nor the registrar nor any officer or agent of the 4M Fund shall be affected by any notice of such merger, reorganization, consolidation, bankruptcy, insolvency or other event.

7.4 No Transfers of Shares. The beneficial interests measured by the Shares shall not be transferrable, in whole or in part, other than to the 4M Fund itself for purposes of effectuating a withdrawal of funds.

7.5 Limitation of Fiduciary Responsibility. The Trustees shall not, nor shall the Participants or any officer, registrar or other agent of the 4M Fund, be bound to see to the execution of any trust, express, implied or constructive, or of any charge, pledge or equity to which any of the Shares or any interest therein are subject, or to ascertain or inquire whether any withdrawal of funds by any Participant or its representatives is authorized by such trust, charge, pledge or equity, or to recognize any Person as having any interest therein except the Participant recorded as the Participant to which such Shares are allocated. The receipt of the Participant in whose name any Share is recorded or of the duly authorized agent of such Participant shall be a sufficient discharge for all moneys payable or deliverable in respect of such Shares and from all liability to see to the proper application thereof.

7.6 Notices. Any and all notices to which Participants hereunder may be entitled and any and all communications shall be deemed duly served or given if mailed, postage pre-paid, addressed to Participants of record at their last known post office addresses as recorded on the Share Register provided for in Section 7.1 hereof.

ARTICLE VIII

Participants

8.1 Voting. Each Participant shall be entitled to one vote as a matter of right with respect to the following matters: (i) amendment of this Declaration of Trust or termination of the 4M Fund as provided in Section 4.3 and Section 13.1 hereof; and (ii) reorganization of the 4M Fund as provided in Section 13.2 hereof. It shall not be necessary for any minimum number of Shares to be allocated to a Participant for the Participant to be entitled to vote. Participants shall not be entitled to cumulative voting with respect to any matter.

8.2 Right to Initiate a Vote of the Participants. The Participants shall, by an instrument or concurrent instruments in writing delivered to the Board of Trustees signed by at least ten percent (10%) of the Participants, have the right to initiate a vote of the Participants as to any matter described in clause (i) or clause (ii) of Section 8.1 hereof. Within twenty (20) days of receipt of such instrument or instruments, the Board of Trustees shall cause a ballot to be sent to each Participant, setting forth the matter to be voted on and the manner in which such ballots should be executed and delivered.

8.3 Inspection of Records. The records of the 4M Fund shall be open to inspection at all reasonable times pursuant to Minnesota Statutes, Chapter 13.

8.4 Meetings of Participants.

(a) Meetings of the Participants may be called at any time by a majority of the Trustees and shall be called by any Trustee upon written request of not less than ten percent (10%) of the Participants, such request specifying the purpose or purposes for which such meeting is to be called. Any such meeting shall be held within the State of Minnesota at such place, on such day and at such time as the Trustees shall designate.

(b) A majority of the Participants entitled to vote at such meeting present in person (including, if permitted by applicable Law, participation by conference telephone or similar communications equipment by means of which all Persons participating in the meeting can hear each other) or by proxy shall constitute a quorum at any meeting of Participants.

8.5 Notice of Meetings and Votes. Notice of all meetings of the Participants, stating the time, place and purposes of the meeting, and notice of any vote without a meeting, stating the purpose and method thereof shall be given by the Trustees by mail to each Participant at its registered address, mailed at least ten (10) days and not more than thirty (30) days before the meeting or the day by which votes must be cast. Only the business stated in the notice of a meeting shall be considered at such meeting. Any adjourned meeting may be held as adjourned without further notice. Any notice required by any "open meeting", "sunshine" or similar law, whether now or hereafter in effect, shall also be given.

8.6 Record Date for Meetings and Votes. For the purposes of determining the Participants that are entitled to vote or act at any meeting or any adjournment thereof, or who are entitled to participate in any vote, or for the purpose of any other action, the Trustees may from time to time fix a date not more than thirty (30) days prior to the date of any meeting or vote of Participants or other action as a record date for the determination of Participants entitled to vote at such meeting or any adjournment thereof or to cast a ballot in such vote or to be treated as Participants of record for purposes of such other action. Any Participant which was a Participant at the time so fixed shall be entitled to vote at such meeting or any adjournment thereof, or to cast a ballot in such vote, even though it then had no Shares allocated to it or has since that date redeemed its Shares. No Participant becoming such after that date shall be so entitled to vote at such meeting or any adjournment thereof or to cast a ballot in such vote or to be treated as a Participant of record for purposes of such other action.

8.7 Proxies. At any meeting of Participants, if permitted by applicable Law, any Participant entitled to vote thereat may vote by proxy, provided that no proxy shall be voted at any meeting unless it shall have been placed on file with the Secretary of the 4M Fund, or with such other officer or agent of the 4M Fund as the Secretary of the 4M Fund may direct, for verification prior to the time at which such vote shall be taken. Pursuant to a resolution of a

20

majority of the Trustees, proxies may be solicited in the name of one or more of the officers of the 4M Fund. All proxies shall be revocable at the option of the Participant.

8.8 Number of Votes. Only Participants of record shall be entitled to vote and each Participant shall be entitled to one vote without regard to the number of Shares allocated to it, if any. A proxy purporting to be executed by or on behalf of a Participant shall be deemed valid unless challenged at or prior to its exercise, and the burden of proving invalidity shall rest on the challenger.

8.10 Reports. The Trustees shall cause to be prepared at least annually (i) a report of operations containing a statement of assets and liabilities and statements of operations and of changes in net assets of the 4M Fund prepared in conformity with generally accepted accounting principals and (ii) an opinion of an independent certified public accountant on such financial statements based on an examination of the books and records of the 4M Fund made in accordance with generally accepted auditing standards. A signed copy of such report and opinion shall be filed with the Trustees within ninety (90) days after the close of the period covered thereby. Copies of such reports shall be mailed to all Participants of record within a reasonable period preceding the annual meeting or vote of the Participants. The Trustees shall, in addition, furnish to the Participants, at least quarterly, an interim report containing an unaudited balance sheet of the Fund as at the end of such quarterly period and statements of operations and changes in net assets for the period from the beginning of the then current fiscal year to the end of such quarterly period.

ARTICLE IX

Trustees and Officers

9.1 Number and Qualification.

(a) Subject to the power of the Participants to amend this Declaration of Trust, the Board of Directors of the League of Minnesota Cities shall act as the initial governing body of the 4M Fund and shall be the Board of Trustees. The by-laws and constitution of the League of Minnesota Cities shall govern the operation and make-up of the Trustees and Officers of the 4M Fund.

(b) The Trustees, in their capacity as Trustees, shall not be required to devote their entire time to the business and affairs of the 4M Fund.

(c) The Executive Director of the League of Minnesota Cities may be an ex officio non-voting member of the Board of Trustees.

9.2 Meetings.

(a) Meetings of the Trustees shall be held from time to time upon the call of the Chairman, the Vice Chairman, the Secretary or any two trustees. Regular meetings of the Trustees may be held without call or notice at a time and place fixed by the By-Laws or by resolution of the Trustees. Notice of any other meeting shall be mailed or otherwise given not less than 48 hours before the meeting but may be waived in writing by any Trustee either before or after such meeting. Any notice required by any "open meeting", "sunshine" or similar Law, whether now or hereafter in effect, shall also be given. The attendance of a Trustee at a meeting shall constitute a waiver of notice of such meeting except where a Trustee attends a meeting for the express purpose of objecting to the transaction of any business on the ground that the meeting has not

been lawfully called or convened. The Trustees may act with or, if permitted by applicable Law, without a meeting. A quorum for all meetings of the Trustees shall be a majority of the Trustees. Subject to Section 2.14 hereof and unless specifically provided otherwise in this Declaration of Trust, any action of the Trustees may be taken at a meeting by vote of a majority of the Trustees present (a quorum being present) or, if permitted by applicable Law, without a meeting, by written consents of a majority of the Trustees. Any agreement or other instrument or writing executed by one or more of the Trustees or by any authorized Person shall be valid and binding upon the Trustees and upon the 4M Fund when authorized or ratified by action of the Trustees as provided in this Declaration of Trust.

(b) Any committee of the Trustees may act with or without a meeting. A quorum for all meetings of any such committee shall be a majority of the members thereof. Notice of such meeting, including such notice as may be required by an "open meeting", "sunshine" or similar Law, shall be given as provided in Section 9.2(a). Unless otherwise specifically provided in this Declaration of Trust, any action of any such committee may be taken at a meeting by vote of a majority of the members present (a quorum being present) or, without a meeting, by written consent of a majority of the members.

(c) With respect to actions of the Trustees and any committee thereof, Trustees who are affiliated within the meaning of Section 2.14 hereof or otherwise interested in any action to be taken may be counted for quorum purposes under this Section 9.2 and shall be entitled to vote.

(d) All or any one or more Trustees may, if permitted by applicable Law, participate in a meeting of the Trustees or any committee thereof by utilizing conference telephone or similar communications equipment by means of which all persons participating in the meeting, including members of the public, can hear each other and participate in a meeting pursuant to such communications shall constitute presence in person at such meeting. The minutes of any meeting of Trustees held by utilizing such communications equipment shall be prepared in the same manner as those of a meeting of Trustees held in person.

9.3 Officers. The Officers of the 4M Fund shall be the same as the officers of the Board of Directors of the League of Minnesota Cities. The executive director of the League of Minnesota Cities shall act as secretary of the 4M Fund. The Trustees may elect or appoint, such other officers or agents, who shall have such powers, duties and responsibilities as the Trustees may deem to be advisable and appropriate.

9.4 Committees. The Trustees may elect from time to time from their own number committees consisting of one or more persons, the number composing such committees and the powers conferred upon the same to be determined by vote of the Trustees.

9.5 Reports. The Trustees shall cause to be prepared at least annually (i) a report of operations containing a statement of assets and liabilities and statements of operations and of changes in net assets of the 4M Fund prepared in conformity with generally accepted accounting principles and (ii) an opinion of an independent certified public accountant on such financial statements based on an examination of the books and records of the 4M Fund made in accordance with generally accepted auditing standards. A signed copy of such report and opinion shall be filed with the Trustees within ninety (90) days after the close of the period covered thereby. Copies of such reports shall be mailed to all Participants of record within a reasonable period preceding the annual election of Trustees. The Trustees shall, in addition, furnish to the Participants, at least quarterly, an interim report containing an unaudited balance sheet of the 4M Fund as at the end of such quarterly period and statements of operations and changes in net assets for the period from

the beginning of the then current fiscal year to the end of such quarterly period.

ARTICLE X

Determination of Net Asset Value and Net Income;
Distributions to Participants

10.1 Net Asset Value. The net asset value of each allocated Share of the 4M Fund shall be determined once on each business day at such time as the Trustees by resolution may determine. The method of determining net asset value shall be established by the Trustees and shall be set forth in the Information Statement as the same may be amended from time to time. The duty to make the daily calculations may be delegated by the Trustees to the Adviser, the Administrator, the Custodian or such other Person as the Trustees by resolution may designate.

10.2 Constant Net Asset Value; Reduction of Allocated Shares.

(a) The Trustees shall have full and complete power to determine the net income (including unrealized gains and losses on the portfolio assets) of the 4M Fund once on each business day as provided in Section 10.1 hereof and, upon each such determination such net income shall be credited proportionately to the accounts of the Participants in such a manner, and with the result, that the net asset value per Share of the 4M Fund shall remain at a constant dollar value. The accounting method used for the determination of the net income of the 4M Fund and the crediting thereof proportionately to the respective accounts of the Participants shall be determined by the Trustees and shall be set forth in the Information Statement as the same may be amended from time to time. The duty to make the daily calculations may be delegated by the Trustees to the Adviser, the Administrator, the Custodian or such other Person as the Trustees by resolution may designate. Fluctuations in value will be reflected in the number of Shares allocated to each Participant. If there is a net loss, the Trustees shall first offset such amount against income accrued to each Participant. To the extent that such a net loss exceeds such accrued income, the Trustees shall reduce the aggregate number of the 4M Fund's allocated Shares in an amount equal to the amount required in order to permit the net asset value per Share of the 4M Fund to be maintained at a constant dollar value by having each Participant contribute to the 4M Fund its pro rata portion of such number of Shares. Each Participant will be deemed to have agreed to such reduction in such circumstances by its investment in the 4M Fund and its adoption of this Declaration of Trust. The purpose of the foregoing procedure is to permit the net asset value per Share of the 4M Fund to be maintained at a constant dollar value per Share.

(b) The Trustees may discontinue or amend the practice of attempting to maintain the net asset value per Share at a constant dollar amount at any time and such modification shall be evidenced by appropriate changes in the Information Statement as the same may be amended from time to time.

10.3 Supplementary Distributions to Participants. In addition to withdrawals made at the request of individual Participants pursuant to Section 6.5 hereof, the Trustees may from time to time also declare and make to the Participants, in proportion to their respective allocation of Shares, out of the earnings, profits or assets in the hands of the Trustees, such supplementary distributions and the determination of earnings, profits, and other funds and assets available for supplemental distributions and other purposes shall lie wholly in the discretion of the Trustees and may be made at such time and in such manner as the Trustees may in their sole discretion from time to time determine. Any or all such supplementary distributions may be made among the Participants of record at the time of declaring a distribution or among the Participants of record at such other date as the Trustees shall determine.

10.4 Retained Reserves. The Trustees may retain from the gross income of the 4M Fund such amount as they may deem necessary to pay the debts and expenses of the 4M Fund and to meet other obligations of the 4M Fund, and the Trustees shall also have the power to establish such reasonable reserves as they believe may be required.

ARTICLE XI

Custodian

11.1 Duties. The Trustees shall employ a bank or trust company organized under the Laws of the United States of America or the State of Minnesota having an office in the State of Minnesota and having a capital and surplus aggregating at least twenty-five million dollars (\$25,000,000) as Custodian with authority as its agent, but subject to such restrictions, limitations and other requirements, if any, as may be contained in the By-Laws of the 4M Fund to perform the duties set forth in the Custodian Agreement to be entered into between the 4M Fund and the Custodian, or as may be imposed by Law.

11.2 Appointment. The Trustees shall have the power to select and appoint the Custodian for the 4M Fund. The Custodian Agreement shall provide that it may be terminated at any time without cause and without the payment of any penalty by the 4M Fund on sixty (60) days' written notice to the Custodian.

11.3 Custodian Agreement. In addition to containing such other provisions as the Trustees may deem appropriate, the Custodian Agreement shall provide that all investments constituting 4M Fund Property shall be held in safekeeping in the manner required by Law, including, without limitation, Minnesota Statutes, Section 475.66, Subdivision 2.

11.4 Agents of Custodian. The Trustees may also authorize the Custodian to employ one or more agents from time to time to perform such of the acts and services of the Custodian and upon such terms and conditions, as may be agreed upon between the Custodian and such agent and approved by the Trustees; provided, however, that, in every case, such agent shall be a bank or trust company organized under the Laws of the United States of America or one of the States thereof having capital and surplus aggregating at least twenty-five million dollars (\$25,000,000).

11.5 Successors. In the event that, at any time, the Custodian shall resign or shall be terminated pursuant to the provisions of the Custodian Agreement, the Trustees shall appoint a successor thereto.

11.6 Custodian as Depository for Participants. Each Participant hereby designates the Custodian as a depository for funds of the Participant.

ARTICLE XII

Recording of Declaration of Trust

12.1 Recording. This Declaration of Trust and any amendment hereto shall be filed,

recorded or lodged as a document of public record in such place or places and with such official or officials as may be required by Law or as the Trustees may deem desirable. Each amendment so filed, recorded or lodged shall be accompanied by a certificate signed and acknowledged by a Trustee stating that such action was duly taken in the manner provided for herein; and unless such amendment or such certificate sets forth some earlier or later time for the effectiveness of such amendment, such amendment shall be effective upon its filing. An amended Declaration of Trust, containing or restating the original Declaration and all amendments theretofore made, may be executed any time or from time to time by a majority of the Trustees and shall, upon filing, recording or lodging in the manner contemplated hereby, be conclusive evidence of all amendments contained therein and may thereafter be referred to in lieu of the original Declaration of Trust and the various amendments thereto. Notwithstanding the foregoing provisions of this Section 12.1, no filing or recordation pursuant to the terms of this Section 12.1 shall be a condition precedent to the effectiveness of this Declaration of Trust or any amendment hereto.

ARTICLE XIII

Amendment or Termination of 4M Fund; Duration of Fund

13.1 Amendment or Termination.

(a) The provisions of this Declaration of Trust may be amended or altered (except as to the limitations on personal liability of the Participants and Trustees and the prohibition of assessments upon Participants), or the 4M Fund may be terminated, at any meeting of the Participants or pursuant to any vote of the Participants called for that purpose, by the affirmative vote of a majority of the Participants entitled to vote, or if permitted applicable Law, by an instrument or instruments in writing, without a meeting, signed by a majority of the Trustees and a majority of the Participants; provided, however, that the Trustees may, from time to time by a two-thirds vote of the Trustees, and after fifteen (15) days' prior written notice to the Participants, amend or alter the provisions of this Declaration of Trust, without the vote or assent of the Participants, amend or alter the provisions of this Declaration of Trust, without the vote or assent of the Participants, to the extent deemed by the Trustees in good faith to be necessary to conform this Declaration to the requirements of applicable Laws or regulations or any interpretation thereof by a court or other governmental agency or competent jurisdiction, but the Trustees shall not be liable for failing to do so. Notwithstanding the foregoing, (i) no amendment may be made pursuant to this Section 13.1 which would change any rights with respect to any allocated Shares of the 4M Fund by reducing the amount payable thereon upon liquidation of the 4M Fund or which would diminish or eliminate any voting rights of the Participants, except with the vote or written consent of two-thirds of the Participants entitled to vote thereon; and (ii) no amendment may be made which would cause any of the investment restrictions contained in Section 4.2 hereof to be less restrictive without the affirmative vote of a majority of the Participants entitled to vote thereon.

(b) Upon the termination of the 4M Fund pursuant to this Section 13.1:

(i) The 4M Fund shall carry on no business except for the purpose of winding up its affairs;

(ii) The Trustees shall proceed to wind up the affairs of the 4M Fund and all of the powers of the Trustees under this Declaration of Trust shall continue until the affairs of the 4M Fund shall have been wound up, including, without limitation, the power to fulfill or discharge the contracts of the 4M Fund, collect its assets, sell, convey, assign, exchange, transfer or otherwise dispose of all or any part of the remaining 4M Fund Property to one or more persons

at public or private sale for consideration which may consist in whole or in part of cash, securities or the property of any kind, discharge or pay its liabilities, and do all other acts appropriate to liquidate its affairs; provided, however, that any position of all or substantially all of the 4M Fund Property shall require approval of the principal terms of the transaction and the nature and amount of the consideration by affirmative vote of not less than a majority of the Participants entitled to vote thereon; and

(iii) After paying or adequately providing for the payment of all liabilities, and upon receipt of such releases, indemnities and refunding agreements, as they deem necessary for their protection, the Trustees may distribute the remaining 4M Fund Property, in cash or in kind or partly in each, among the Participants according to their respective proportionate allocation of Shares.

(c) Upon termination of the 4MFund and distribution to the Participants as herein provided, a majority of the Trustees shall execute and lodge among the records of the 4M Fund an instrument in writing setting forth the fact of such termination, and the Trustees shall thereupon be discharged from all further liabilities and duties hereunder, and the right, title and interest of all Participants shall cease and be cancelled and discharged.

(d) A certification in recordable form signed by a majority of the Trustees setting forth an amendment and reciting that it was duly adopted by the Participants or by the Trustees as aforesaid or a copy of the Declaration, as amended, in recordable form, and executed by a majority of the Trustees, shall be conclusive evidence of such amendment.

13.2 Power to Effect Reorganization. If permitted by applicable Law, the Trustees, by vote or written approval of a majority of the Trustees, may select, or direct the organization of, a corporation, association, trust or other Person with which the 4M Fund may merge, or which shall take over the 4M Fund Property and carry on the affairs of the 4M Fund, and after receiving an affirmative vote of not less than a majority of the Participants entitled to vote at any meeting of the Participants, the notice for which includes a statement of such proposed action, the Trustees may effect such merger or may sell, convey and transfer the 4M Fund Property to any such corporation, association, trust or other Person in exchange for cash or shares or securities thereof, or beneficial interest therein with the assumption by such transferee of the liabilities of the 4M Fund; and thereupon the Trustees shall terminate the 4M Fund and deliver such cash, shares, securities or beneficial interest ratably among the participants of this 4M Fund.

13.3 Duration. The 4M Fund shall continue in existence in perpetuity, subject in all respects to the provisions of the Article XIII. ✓

ARTICLE XIV

Miscellaneous

14.1 Governing Law. This Declaration of Trust is executed by the Initial Participants and delivered in the State of Minnesota and with reference to the Laws thereof, and the rights of all parties and the validity, construction and effect of every provision hereof shall be subject to and construed according to the Laws of said State of Minnesota.

14.2 Counterparts. This Declaration of Trust may be executed in several counterparts, each of which when so executed shall be deemed to be an original, and such counterparts, together, shall constitute but one and the same instrument, which shall be sufficiently evidenced by any such original counterpart.

14.3 Reliance by Third Parties. Any certificate executed by an individual who, according to the records of the 4M Fund, or of any official or public body or office in which this Declaration of Trust may be recorded, appears to be a Trustee hereunder or the Secretary or the Treasurer of the 4M Fund, certifying to: (i) the number or identity of Trustees or Participants; (ii) the due authorization of the execution of any instrument or writing; (iii) the form of any vote passed at a meeting of Trustees or Participants or taken pursuant to a vote of Participants; (iv) the fact that the number of Trustees or Participants present at any meeting or executing any written instrument satisfies the requirements of this Declaration of Trust; (v) the form of any By-Law adopted by or the identity of any officers elected by the Trustees; or (vi) the existence of any fact or facts which in any manner relate to the affairs of the 4M Fund, shall be conclusive evidence as to the matters so certified in favor of any Person dealing with the Trustees or any of them or the 4M Fund and the successors of such Person.

14.4 Provisions in Conflict with Law. The provisions of this Declaration of Trust are severable, and if the Trustees shall determine, with the advice of counsel, that any one of more of such provisions (the "Conflicting Provisions") are in conflict with applicable federal or Minnesota Laws, the Conflicting Provisions shall be deemed never to have constituted a part of this Declaration of Trust; provided, however, that such determination by the Trustees shall not affect or impair any of the remaining provisions of this Declaration of Trust or render invalid or improper any action taken or omitted (including, but not limited to, the election of Trustees) prior to such determination.

14.5 Gender; Section Headings.

(a) Words of the masculine gender shall mean and include correlative words of the feminine and neuter genders and words importing the singular number shall mean and include the plural number and vice versa.

(b) Any headings preceding the texts of the several Articles and Sections of this Declaration of Trust and any table of contents or marginal notes appended to copies hereof, shall be solely for convenience of references and shall neither constitute a part of this Declaration of Trust nor affect its meaning, construction or effect.

14.6 Adoption by Municipalities Electing to Become Additional Participants; Resignation of Participants.

(a) Any Municipality meeting the requirements of Section 1.2 hereof, may become an additional Participant of this 4M Fund by (i) taking any appropriate official action to adopt this Declaration of Trust, (ii) furnishing the Trustees with satisfactory evidence that such official action has been taken, and (iii) if requested by the Trustees, providing the Trustees with an opinion of counsel to the effect that such party desiring to become a Participant of the 4M Fund is a Municipality as defined herein. A copy of this Declaration of Trust may be adopted by executing a written instrument of adoption in such form as may be prescribed by the Trustees. Delivering an acknowledged copy of such instrument shall constitute satisfactory evidence of the adoption contemplated by this Section 14.6.

(b) Any Participant may resign and withdraw from the 4M Fund by sending a written notice to such effect to the Chairman of the 4M Fund and the Administrator and by requesting the withdrawal of all funds then credited to its account within the 4M Fund. The written notice shall be in the form of a certified resolution of the Municipality Board or Council of the Participant, stating the Municipality Board or Council's intention to resign from the 4M Fund.

Such resignation and withdrawal shall become effective upon the receipt thereof by the Chairman of the 4M Fund and the Administrator. No resignation and withdrawal by a Participant shall operate to annul this Declaration of Trust or terminate the existence of the 4M Fund.

IN WITNESS WHEREOF, the undersigned Municipalities of the State of Minnesota, acting in the capacity of Initial Participants of the Minnesota Municipal Money Market Fund and pursuant to the authority granted by the Joint Powers Act, have executed this Declaration of Trust as of the 23rd day of March, 19 87, as of which date this Declaration of Trust shall take, and come into, full force and effect.

By Conrad A. Hlatky
Its Executive Director

and _____
Its _____

By James F. Miller
Its City Manager

and James C. Donlin
Its Mayor

By _____
Its _____

and _____
Its _____

STATE OF MINNESOTA
FILED

APR 23 1987

Jean Anderson Howe
Secretary of State

Project Name	Brown's Creek Park Restoration	Date	07/7/2023
To / Contact info	BCWD Board of Managers		
Cc / Contact info	Karen Kill, District Administrator		
From / Contact info	Mike Majeski & Dan Mossing		
Regarding	Final Design & Implementation Scope of Services		

Background

In January 2023, the Brown's Creek Watershed District secured funding through a MPCA 319 grant and approved EOR to develop a 30% project design for the proposed Brown's Creek Park Restoration Project. As part of the 30% design, EOR held a design charrette with MNDNR to discuss a preferred approach to address the degraded stream conditions within the project reach. It was agreed the design should prioritize reconnection of cutoff meanders, pattern adjustments to increase stream sinuosity, and grade control to reconnect the floodplain. Following the design charrette, EOR advanced the conceptual design and developed a 30% construction plan (attached) and cost estimate. The following scope of services provides a breakdown of tasks and hours to complete final design, permitting, and construction implementation of the Brown's Creek Park Restoration project.

Scope of Services

The following outlines the anticipated tasks, hours, and schedule to advance the project through final design, obtain all necessary permits, and complete construction of the project.

Task 1: EAW

The proposed design triggers a mandatory Environmental Assessment Worksheet under Minnesota Rules 4410.4300 subparts 26 and 27A. EOR will draft the EAW and assist BCWD staff with publishing and distributing requirements for the 30-day public comment period, compiling public comments, and assisting with preparing responses to comments received. The following is a list of items to be addressed by the EAW:

- EAW document
- Climate adaptation & resilience
- Land use cover types & soils
- Water resources
- Wetland resources
- Fish & wildlife
- "What's In My Neighborhood" desktop search for potential hazardous materials / contamination previously documented near the project site
- Historic properties
- Cumulative potential effects
- Collaborate with BCWD on public comments & responses received, preparing Finding of Facts

Task 2: Final Design & Construction Documents

EOR will complete a Phase 1A archeological field investigation (subcontracted to Mississippi Valley Archeology Center), develop final construction plans, construction costs, specifications, and other construction documents, and prepare a construction project manual. EOR will also coordinate with DNR Parks & Trails staff to develop an ADA access "spur" off the Brown's Creek State Trail based on input from DNR & BCWD staff.

- A Phase 1A archeological field survey will be completed by Mississippi Valley Archeology Center and the report will be sent to the State Historic Preservation Office
- Develop final grade contours, refine excavation / fill quantities, and final design of an ADA access "spur" to the creek
- Develop a final construction plan and engineer's opinion of probable cost
- Develop final construction documents including a stormwater pollution prevention plan, specifications, and project manual

Task 3: Permitting & Related Services

EOR will complete a no-rise certificate and obtain all necessary permits to implement the project.

- A no-rise document will be completed and sent to permitting agencies for review
- Completion of permit applications including the MNDNR Public Waters Work Permit, United States Army Corps of Engineers permit, and all local & watershed permits required for the project
- Review MNDNR Natural Heritage Information System data to determine the presence of any rare species in the project area and provide guidance to contractor to minimize disturbance to rare species
- Submit Level 1 wetland review & Joint Application to WCA (wetland permitting review & project approach were discussed with Washington Conservation District and DNR staff in December 2022)

Task 4: Construction Services

Construction services will include online bidding and bid tabulations, submittals review, contractor recommendation, pre-construction meeting, construction supervision, as-built survey and record drawings, prepare pay applications, and attend meetings to complete the project. Two years of post-construction site inspections & vegetation monitoring will also be completed, including coordination with the contractor to address any maintenance items and invasive species.

- Utilize Quest CDN and tabulate bids
- Prepare bid summary and contractor recommendation memo
- Review construction submittals and hold a pre-construction meeting with the selected contractor
- Mark trees to harvest following pre-construction meeting
- EOR staff will provide construction oversight during the entire window of construction to ensure the project is implemented as designed
- An as-built survey will be completed and record drawings will be prepared to document project construction inputs
- Review contractor pay requests and prepare pay application memos
- Post-construction site inspections for two year (to be conducted spring & fall)
- Coordinate native tree and shrub plantings with contractor (post-construction)

Key Deliverables

Key deliverables for this scope of services include the following:

- o Environmental Assessment Worksheet and responses to comments
- o Draft construction plans and construction specifications for staff and legal counsel review
- o Final construction plans and construction specifications / bidding documents
- o Project documents including a Level 1 wetland report, Phase 1A cultural resources report, and no-rise certificate
- o Topographic data (electronic files)
- o Construction as-built and record drawings, construction photographs
- o Construction updates and presentation to the BCWD Board of Managers

Project Assumptions

The following is a list of assumptions for this scope of services:

- o BCWD to pay the MNDNR Public Waters Work Permit fee
- o Desktop review of "What's In My Neighborhood" will satisfy EAW Question #12 Contamination/Hazardous Materials/Wastes, and as such no Phase 1 Environmental Assessment will be required per the DNR EAW example provided following the design charrette meeting in April 2023
- o Construction of the project to occur over a 4-week period (weather dependent). EOR will provide construction oversight 4 days a week until substantial project completion but may reduce field visits depending on construction inputs scheduled during each week of construction

Engineering Task	Estimated Hours	Task Schedule	Fee & Expenses*
Task 1: EAW	95	August-September 2023	\$14,961
Task 2: Final Design & Construction Documents	179	October-November 2023	\$30,873
Task 3: Permitting & Related Services	66	November-December 2023	\$11,254
Task 4: Construction Services	202	Bidding & Contractor Selection (December-January 2024) Tree Harvest (January-March 2024) Construction (May-August 2024) Site Inspections & Veg. Maintenance (Fall 2024 & Spring/Fall 2025) Native Tree & Shrub Plantings (Spring 2025)	\$33,211
Total	542		\$90,299

*includes mileage / equipment expenses, MVAC sub-contract for \$3,000

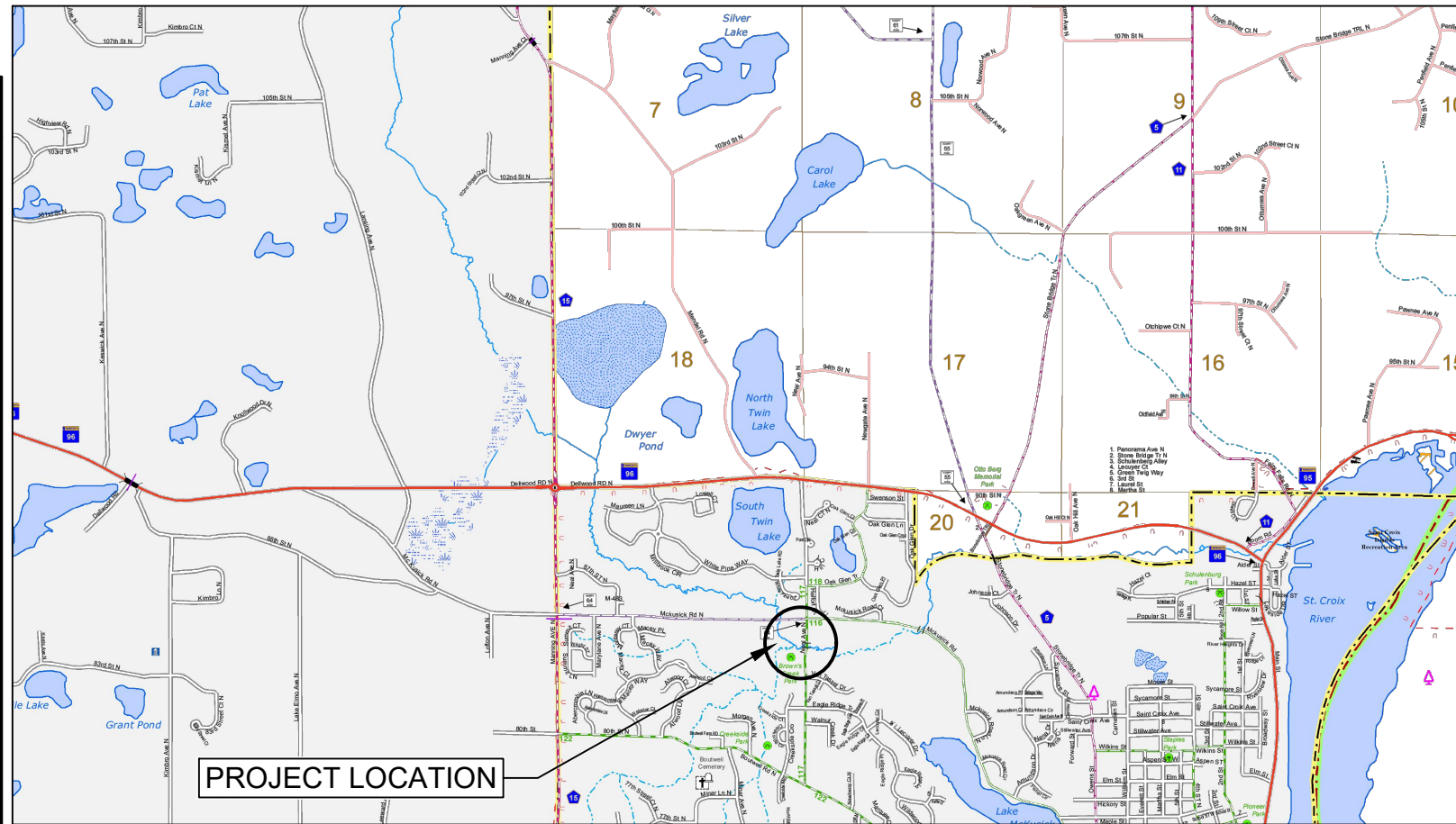
Requested Action

Approve Task 1 to complete an Environmental Assessment Worksheet not to exceed \$14,961 from account 947-0022 Brown's Creek Restoration.

**BROWN'S CREEK WATERSHED DISTRICT
BROWN'S CREEK PARK
STREAM RESTORATION**
WASHINGTON COUNTY, STILLWATER, MN
EXISTING CONDITIONS PLAN SET

Sheet List Table

Sheet Number	Sheet Title
01	TITLE SHEET
02	PROJECT OVERVIEW
03	TREE HARVEST PLAN 1
04	TREE HARVEST PLAN 2
05	TREE HARVEST PLAN 3
06	EXISTING STREAM PROFILE
07	EXISTING CONDITIONS PLAN & PROFILE - 1
08	EXISTING CONDITIONS PLAN & PROFILE - 2
09	EXISTING CONDITIONS PLAN & PROFILE - 3
10	EXISTING CONDITIONS PLAN & PROFILE - 4
11	EXISTING CROSS SECTIONS - 1
12	EXISTING CROSS SECTIONS - 2
13	EXISTING CROSS SECTIONS - 3
14	REFERENCE CROSS SECTIONS
15	PROPOSED PLAN & PROFILE - 1
16	PROPOSED PLAN & PROFILE - 2
17	PROPOSED PLAN & PROFILE - 3
18	PROPOSED PLAN & PROFILE - 4
19	PROPOSED PLAN & PROFILE - 5



PROJECT LOCATION, REFERENCE MAP

GENERAL NOTES

EXISTING UTILITIES

THE LOCATION OF UNDERGROUND FACILITIES AND/OR STRUCTURES AS SHOWN ON THE PLANS ARE BASED ON AVAILABLE RECORDS AT THE TIME THE PLANS WERE PREPARED AND ARE NOT GUARANTEED TO BE COMPLETE OR CORRECT.

THE SUBSURFACE UTILITY INFORMATION SHOWN IS UTILITY QUALITY LEVEL D, AS DETERMINED USING THE GUIDELINES OF "C/ASCE 38-02 STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITIES 72 HOURS PRIOR TO CONSTRUCTION TO DETERMINE THE EXACT LOCATION OF ALL FACILITIES AND TO PROVIDE ADEQUATE PROTECTION OF SAID UTILITIES DURING THE COURSE OF WORK.

CONSTRUCTION NOTE

CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO MAINTAIN OPERATION OF EXISTING UTILITIES THROUGHOUT THE DURATION OF THE PROJECT. IN THE EVENT THAT AN INTERRUPTION OF SERVICE IS UNAVOIDABLE IN ORDER TO COMPLETE THE WORK, CONTRACTOR SHALL PROVIDE ADEQUATE NOTIFICATION TO ALL AFFECTED ENTITIES A MINIMUM OF 3 WORKING DAYS IN ADVANCE OF ANY INTERRUPTION.

GOVERNING SPECIFICATIONS

THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING FIELD MANUAL FOR TEMPORARY CONTROL ZONE LAYOUTS.

GOPHER STATE ONE-CALL

IT IS THE LAW THAT ANYONE EXCAVATING AT ANY SITE MUST NOTIFY GOPHER STATE ONE CALL (GSOC) SO THAT UNDERGROUND ELECTRIC, NATURAL GAS, TELEPHONE OR OTHER UTILITY LINES CAN BE MARKED ON OR NEAR YOUR PROPERTY BEFORE ANY DIGGING BEGINS. A 48-HOUR NOTICE, NOT INCLUDING WEEKENDS, IS REQUIRED. CALLS CAN BE MADE TO GSOC AT 1-800-252-1166 OR (651) 454-0002, MONDAY THROUGH FRIDAY (EXCEPT HOLIDAYS) FROM 7 A.M. TO 5 P.M.



NOT FOR CONSTRUCTION

DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
	2	
	3	
	4	
	5	
	6	

DESIGNED BY: EOR
DRAWN BY: DEM
CHECKED BY: MJM
EOR JOB #0041-0418

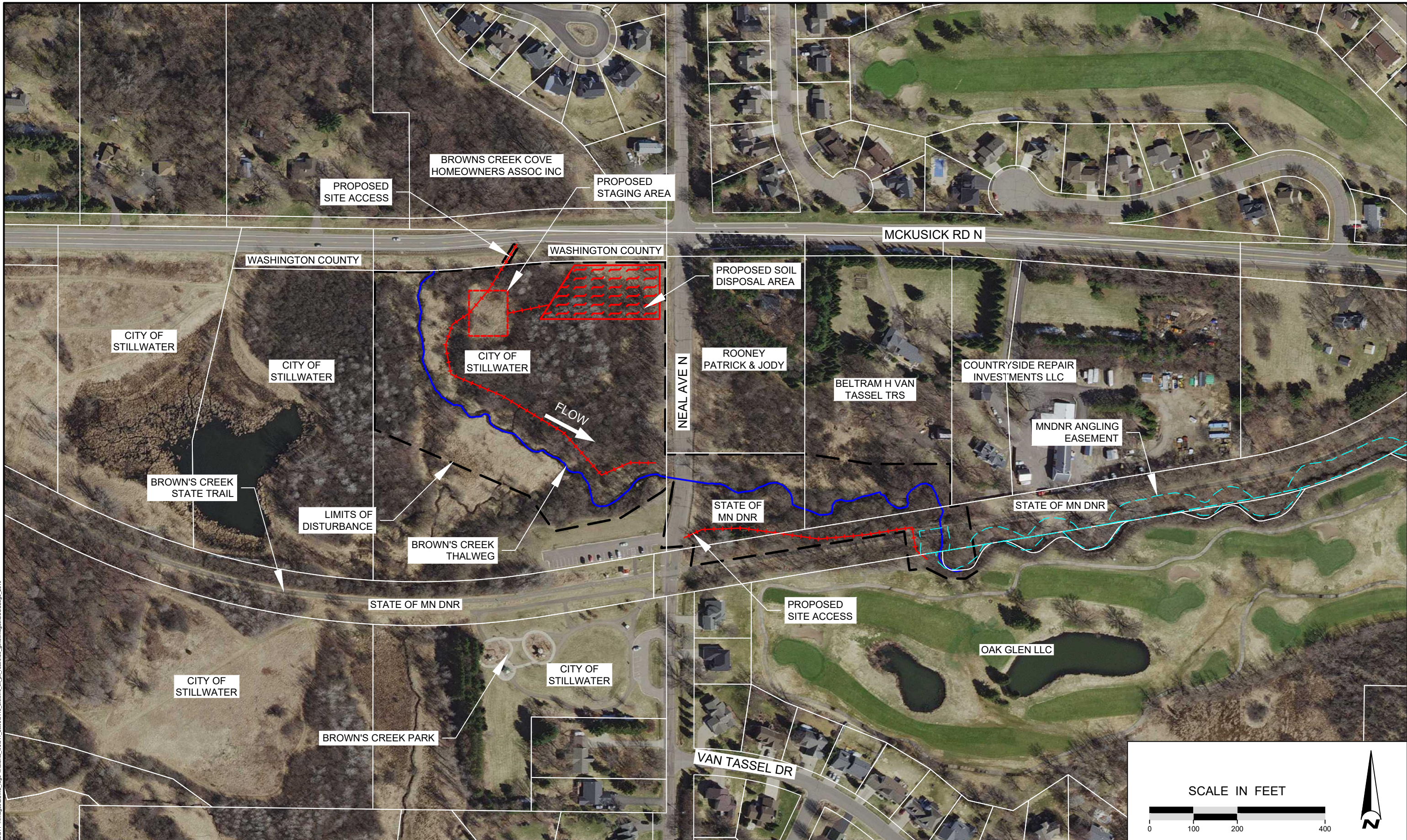


**BROWN'S CREEK PARK
STREAM RESTORATION**
WASHINGTON COUNTY, STILLWATER, MN

BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

TITLE SHEET

SHEET 01 OF 19



File Date: 06/30/2023
 Client: Browns Creek Watershed District
 Project: Browns Creek Stream Restoration
 Drawn by: DEM
 Checked by: MJM
 EOR Job #: 0041-0418
 Client Project #: XXX-XXXX
 Location: Browns Creek Watershed District, Washington County, MN

EOR water ecology community
 EMMONS & OLIVIER RESOURCES, INC.
 1919 UNIV. AVE. W. #300 ST. PAUL, MN 55104
 TEL: 651-436-1000 FAX: 651-436-1001
 WWW.EOR.COM

NOT FOR CONSTRUCTION

DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
	2	
	3	
	4	
	5	
	6	

DESIGNED BY: EOR
 DRAWN BY: DEM
 CHECKED BY: MJM
 EOR JOB #0041-0418


BROWN'S CREEK WATERSHED DISTRICT

CLIENT PROJECT #XXX-XXXX

BROWN'S CREEK PARK STREAM RESTORATION
 WASHINGTON COUNTY, STILLWATER, MN
 BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

PROJECT OVERVIEW
 SHEET 02 OF 19

LEGEND

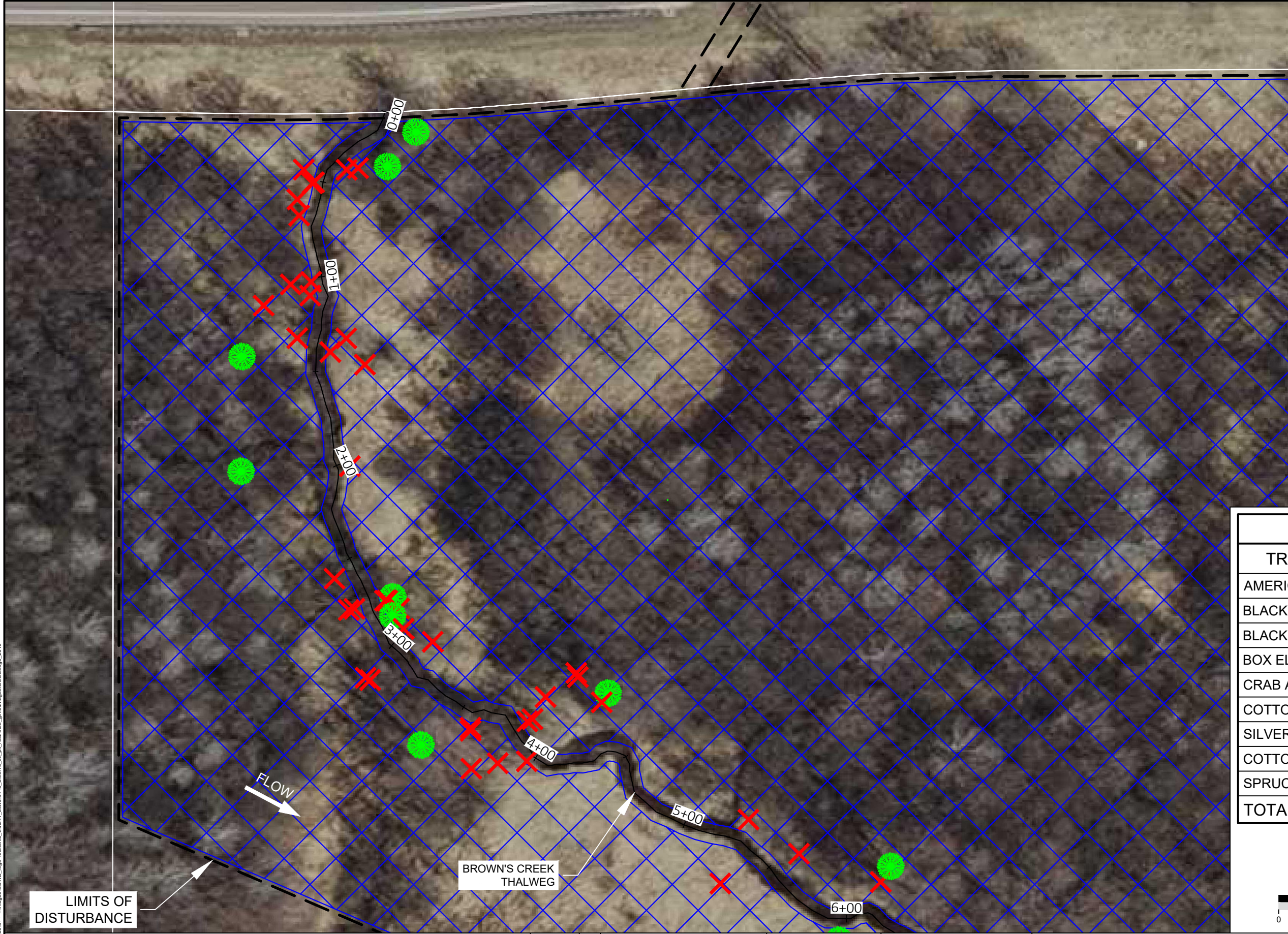
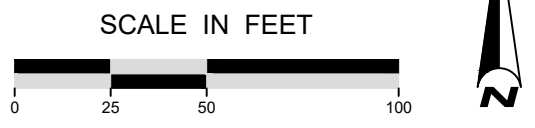
 TREE TO BE REMOVED

 PRESERVE TREE

 INVASIVE SHRUB REMOVAL AREA

NEAL AVEN

TREES TO BE HARVESTED	
TREE TYPE	# TO BE REMOVED
AMERICAN ELM	2
BLACK LOCUST	1
BLACK WILLOW	2
BOX ELDER	184
CRAB APPLE	3
COTTONWOOD	1
SILVER MAPLE	17
COTTONWOOD	1
SPRUCE	1
TOTAL	212



NOT FOR CONSTRUCTION

EOR water ecology community
 EMMONS & OLIVIER RESOURCES, INC.
 1919 UNIV. AVE. W. #300 ST. PAUL, MN 55108
 TEL: 612-761-1234 FAX: 612-761-1234
 www.eor.com

DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
	2	
	3	
	4	
	5	
	6	

DESIGNED BY: EOR
 DRAWN BY: DEM
 CHECKED BY: MJM
 EOR JOB #0041-0418






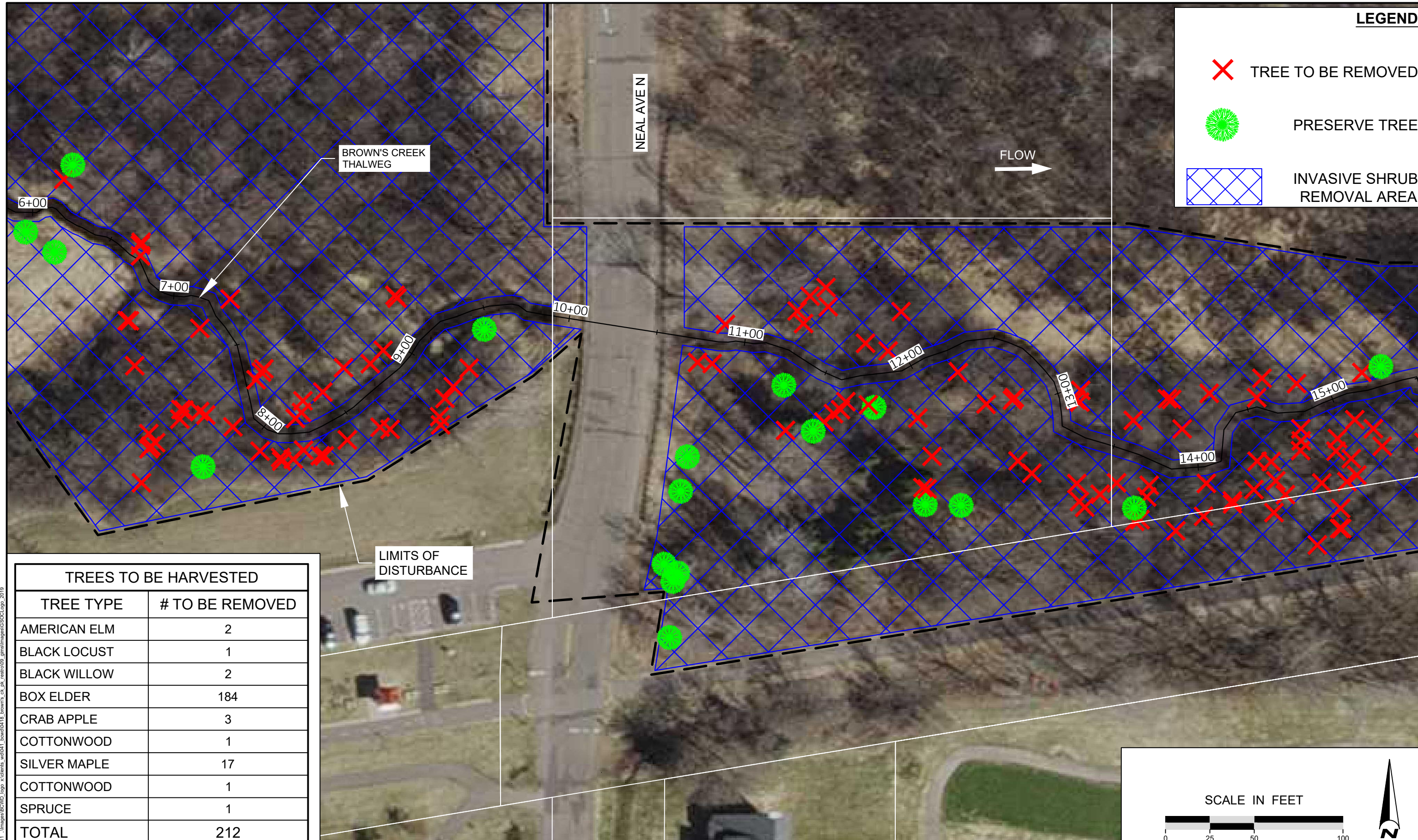
BROWN'S CREEK PARK STREAM RESTORATION
 WASHINGTON COUNTY, STILLWATER, MN
 BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

TREE HARVEST PLAN 1
 SHEET 03 OF 19

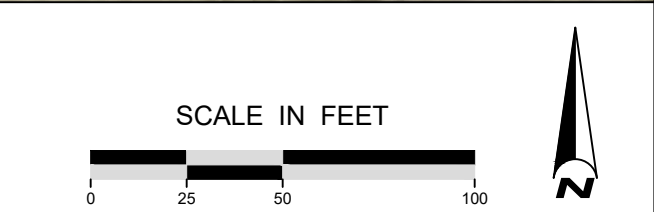
File Date: 06/30/2023
 Client: BCWD
 Project: Brown's Creek Park Restoration
 Drawing: 30% DESIGN PLAN SET
 Sheet: TREE HARVEST PLAN 1
 Page: 86

LEGEND

-  TREE TO BE REMOVED
-  PRESERVE TREE
-  INVASIVE SHRUB REMOVAL AREA



TREES TO BE HARVESTED	
TREE TYPE	# TO BE REMOVED
AMERICAN ELM	2
BLACK LOCUST	1
BLACK WILLOW	2
BOX ELDER	184
CRAB APPLE	3
COTTONWOOD	1
SILVER MAPLE	17
COTTONWOOD	1
SPRUCE	1
TOTAL	212



File Date: 06/30/2023
 Project: BCWD0418_Brown's_Ck_Pk_Restore09_GNISMap0041_0418-CD.dwg
 Xrefs: 40041_0418-SURFACE
 40041_0418-XBASE
 40041_0418-PSD
 40041_0418-PALETTE
 Images: Images811...Images8CWD_top_xclients_wd041_box0418_brown's_ck_pk_rest09_gnisimagesGSC0418_2019

EOR water ecology community
 EMMONS & OLIVIER RESOURCES, INC.
 1919 UNIV. AVE. W. #300 ST. PAUL, MN 55108
 TEL: 651.441.1888 FAX: 651.441.1889
 www.eor.com
BCWD Board Packet #12-2023
 Page 87

NOT FOR CONSTRUCTION

DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
	2	
	3	
	4	
	5	
	6	



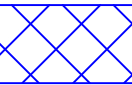
DESIGNED BY: EOR
 DRAWN BY: DEM
 CHECKED BY: MJM
 EOR JOB #0041-0418

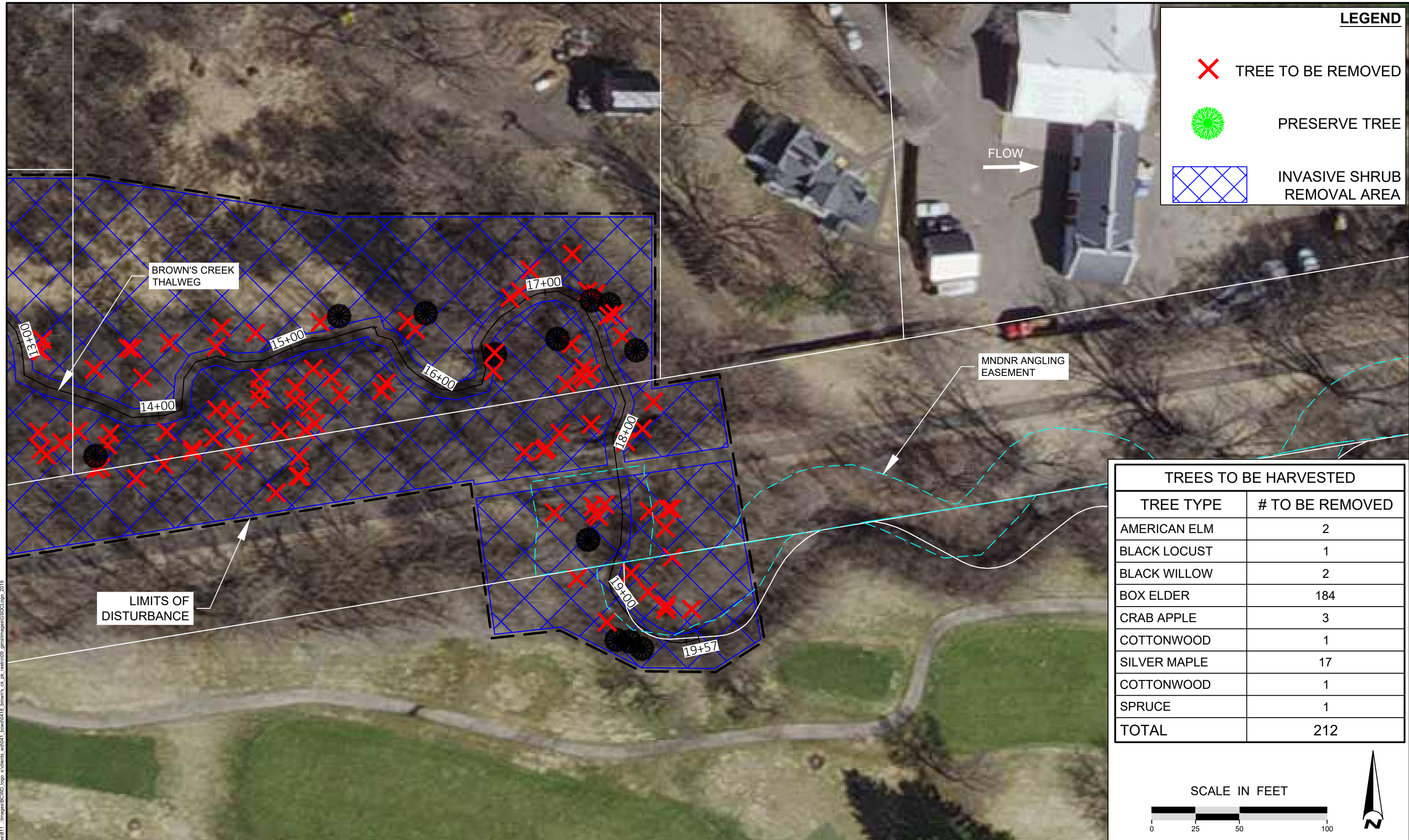


BROWN'S CREEK PARK STREAM RESTORATION
 WASHINGTON COUNTY, STILLWATER, MN
 BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

TREE HARVEST PLAN 2
 SHEET 04 OF 19

LEGEND

-  TREE TO BE REMOVED
-  PRESERVE TREE
-  INVASIVE SHRUB REMOVAL AREA



TREES TO BE HARVESTED	
TREE TYPE	# TO BE REMOVED
AMERICAN ELM	2
BLACK LOCUST	1
BLACK WILLOW	2
BOX ELDER	184
CRAB APPLE	3
COTTONWOOD	1
SILVER MAPLE	17
COTTONWOOD	1
SPRUCE	1
TOTAL	212

File Date: 06/30/2023
 Project: 0418-CD.dwg
 Xrefs: 40041_0418-SURFACE
 40041_0418-XBASE
 40041_0418-REBASE
 40041_0418-CD.dwg
 Images: 1811...images\BCWD_top_x\clients_wd041_brown's_creek\restoration\images\GSD\Logo_2019

EOR water ecology community
 EMMONS & OLIVIER RESOURCES, INC.
 1919 UNIV. AVE. W. #300 ST. PAUL, MN 55108
 TEL: 612-771-1234 FAX: 612-771-1235
 www.eor.com

NOT FOR CONSTRUCTION

DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
	2	
	3	
	4	
	5	
	6	

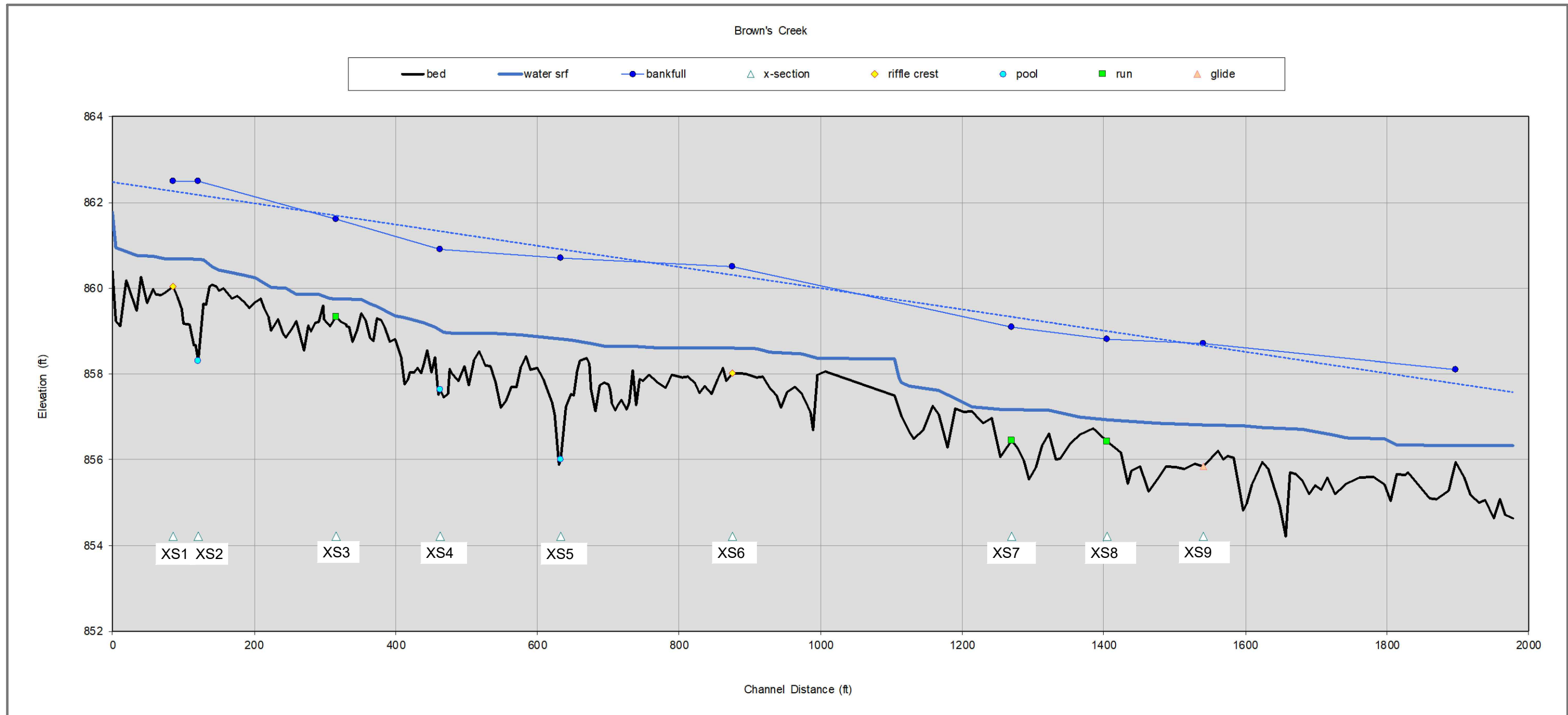
DESIGNED BY: EOR
 DRAWN BY: DEM
 CHECKED BY: MJM
 EOR JOB #0041-0418



BROWN'S CREEK WATERSHED DISTRICT

BROWN'S CREEK PARK STREAM RESTORATION
 WASHINGTON COUNTY, STILLWATER, MN
 BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

TREE HARVEST PLAN 3
 SHEET 05 OF 19



NOTE:
STREAM AND WATER PROFILE SURVEYED ON DECEMBER 2, 2022

File Date: 06/30/2023
 Project: 40041_0418-CD.dwg
 Xref: 40041_0418-SURFACE
 40041_0418-XBASE
 40041_0418-REBE
 40041_0418-CD.dwg
 Images: BCWD_top, xclients_wd041_browns_ck_pk_resto09_gmsimages\GSCCD.dwg, 2019

EOR water ecology community
 EMMONS & OLIVIER RESOURCES, INC.
 1919 UNIV. AVE. W. #300 ST. PAUL, MN 55108
 TEL: 612-755-7777 FAX: 612-755-7778
 www.eor.com

NOT FOR CONSTRUCTION

DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
	2	
	3	
	4	
	5	
	6	

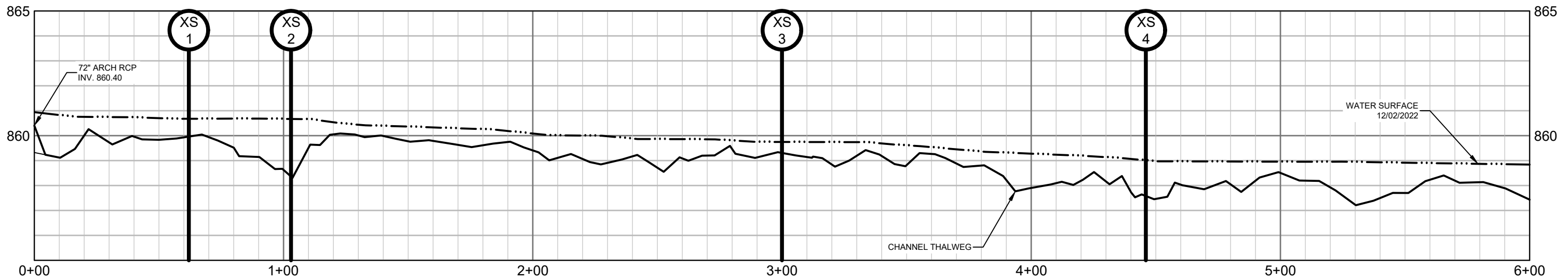
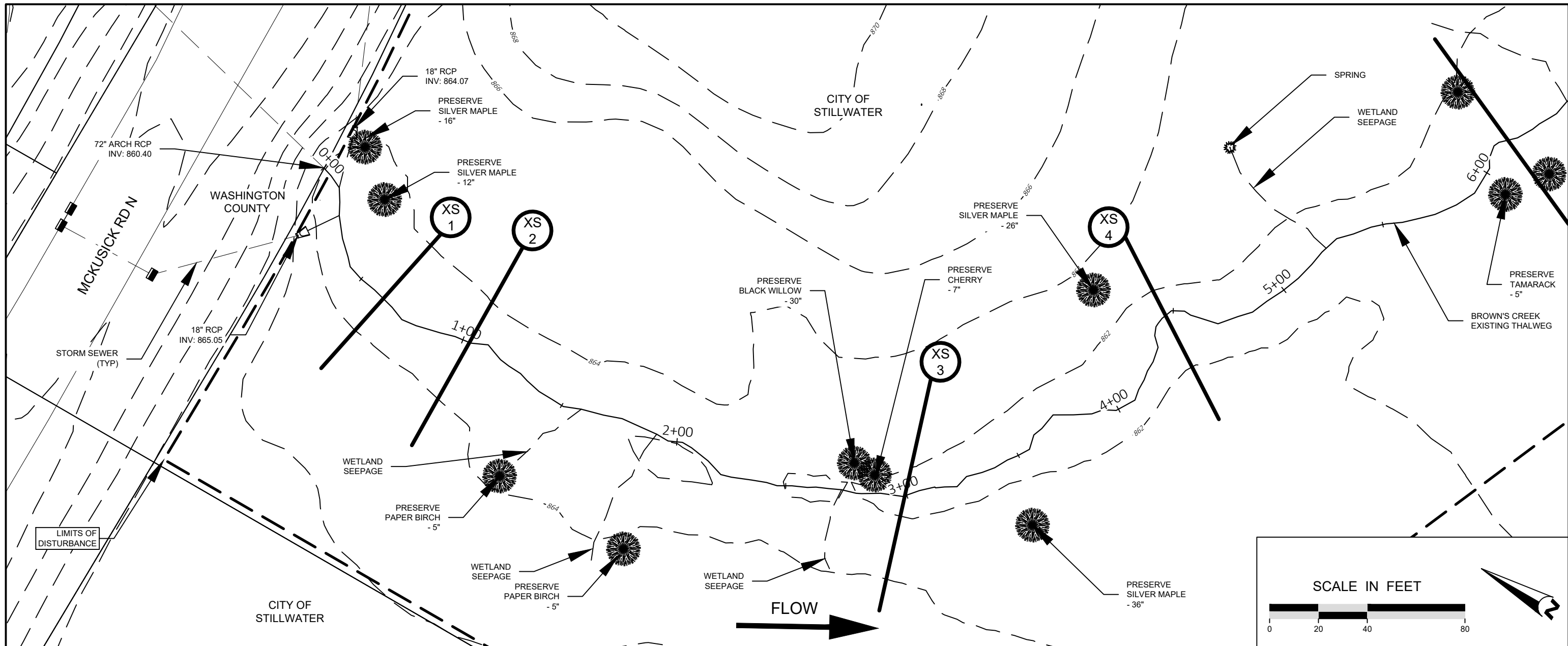
DESIGNED BY: EOR
 DRAWN BY: DEM
 CHECKED BY: MJM
 EOR JOB #0041-0418



BROWN'S CREEK WATERSHED DISTRICT
 CLIENT PROJECT #XXX-XXXX

BROWN'S CREEK PARK STREAM RESTORATION
 WASHINGTON COUNTY, STILLWATER, MN
 BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

EXISTING STREAM PROFILE
 SHEET 06 OF 19



File: 86520223
 Path: C:\Users\wd0411\OneDrive\Documents\wd0411\BCWD\0418_Brown's_Ck_Pk_Restor\09_GIS\Map\0411_0418-CD.dwg
 Xref: 40041_0418-SURFACE
 40041_0418-XBASE
 40041_0418-RBASE
 40041_0418-TOPO
 40041_0418-DATE
 Images: \images\BCWD_logo_images\811_images\811_images\BCWD_logo_images\wd0411_brown's_ck_pk_restor\09_gis\Map\0411_0418-CD.dwg

NOT FOR CONSTRUCTION

DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
	2	
	3	
	4	
	5	
	6	

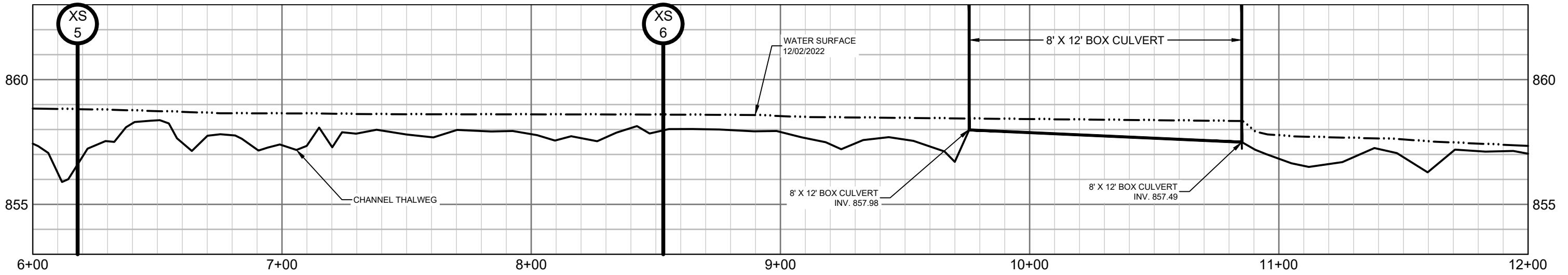
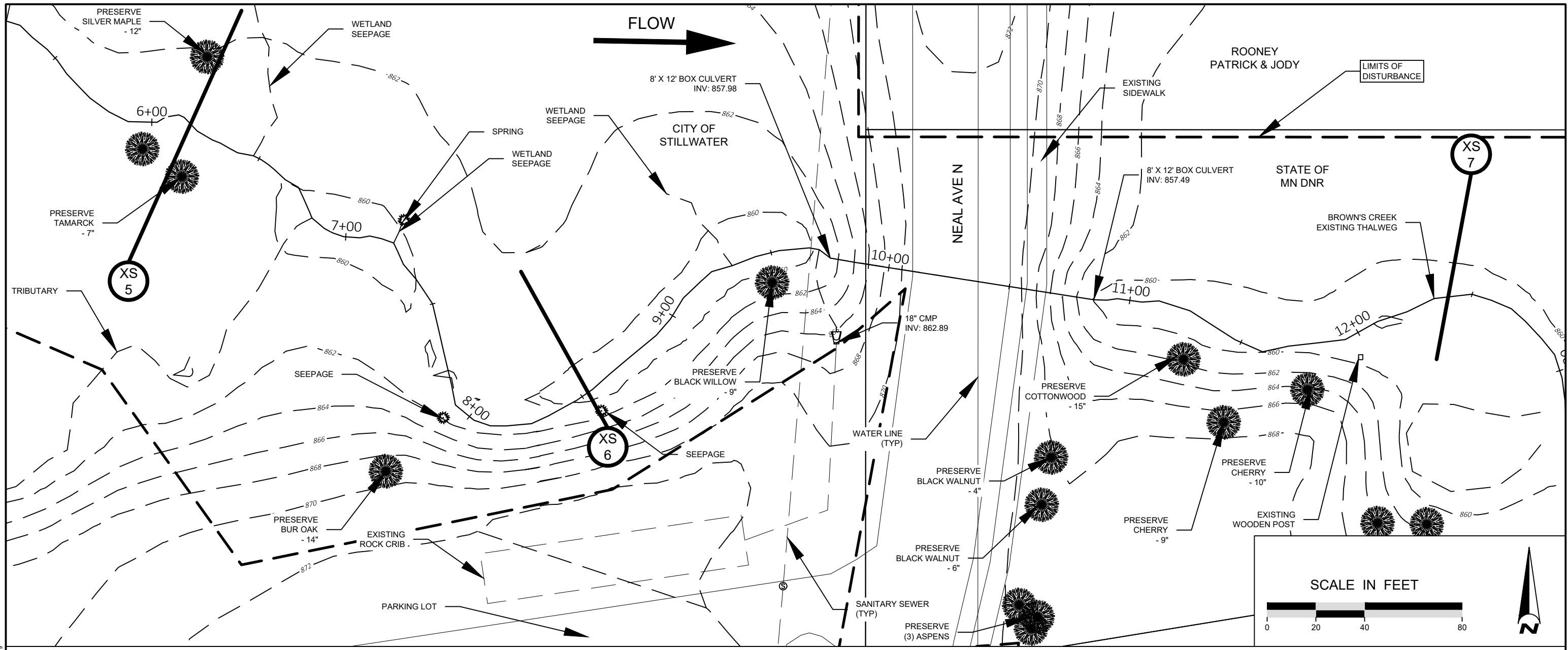
DESIGNED BY: EOR
 DRAWN BY: DEM
 CHECKED BY: MJM
 EOR JOB #0041-0418

BROWN'S CREEK WATERSHED DISTRICT

CLIENT PROJECT #XXX-XXXX

BROWN'S CREEK PARK STREAM RESTORATION
 WASHINGTON COUNTY, STILLWATER, MN
 BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

EXISTING CONDITIONS PLAN & PROFILE - 1
 SHEET 07 OF 19



File Date: 06/30/2023
 Project: 40041-0418-SURFACE
 Xrefs: 40041-0418-SURFACE
 40041-0418-REBASE
 40041-0418-REBASE
 40041-0418-REBASE

EOR water ecology community
 EMMONS & OLIVIER RESOURCES, INC.
 1919 UNIV. AVE. W. #300 ST. PAUL, MN 55112
 TEL: 651-419-8111 FAX: 651-419-8111
 www.eor.com
 2023

NOT FOR CONSTRUCTION

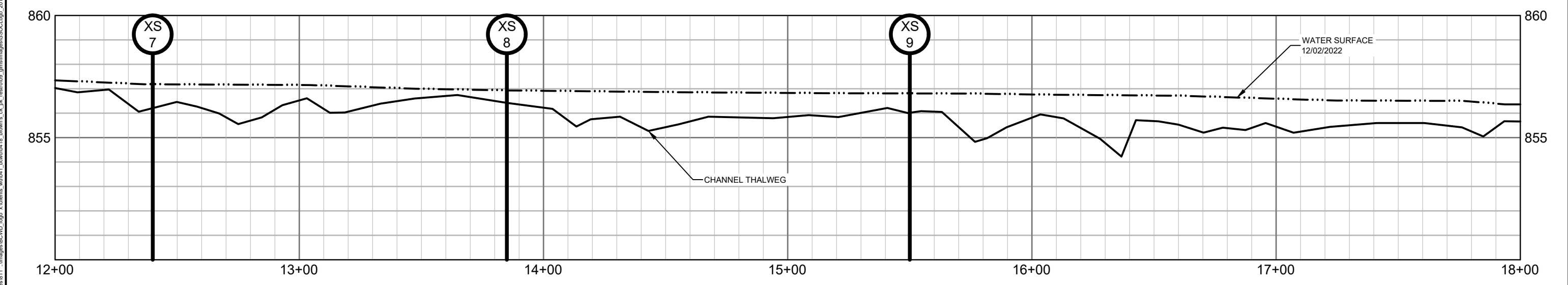
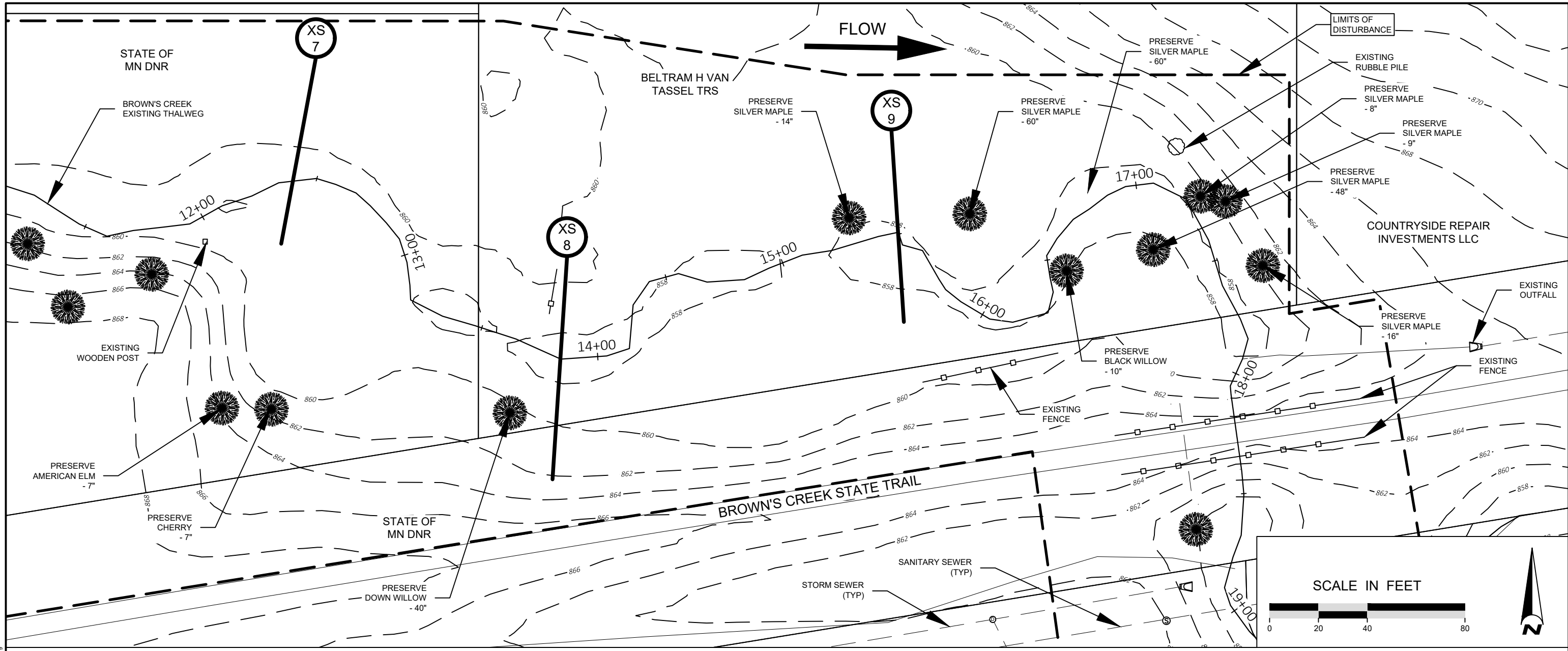
DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
	2	
	3	
	4	
	5	
	6	

DESIGNED BY: EOR
 DRAWN BY: DEM
 CHECKED BY: MJM
 EOR JOB #0041-0418



BROWN'S CREEK PARK STREAM RESTORATION
 WASHINGTON COUNTY, STILLWATER, MN
 BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

EXISTING CONDITIONS PLAN & PROFILE - 2
 SHEET 08 OF 19



NOT FOR CONSTRUCTION



DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
	2	
	3	
	4	
	5	
	6	

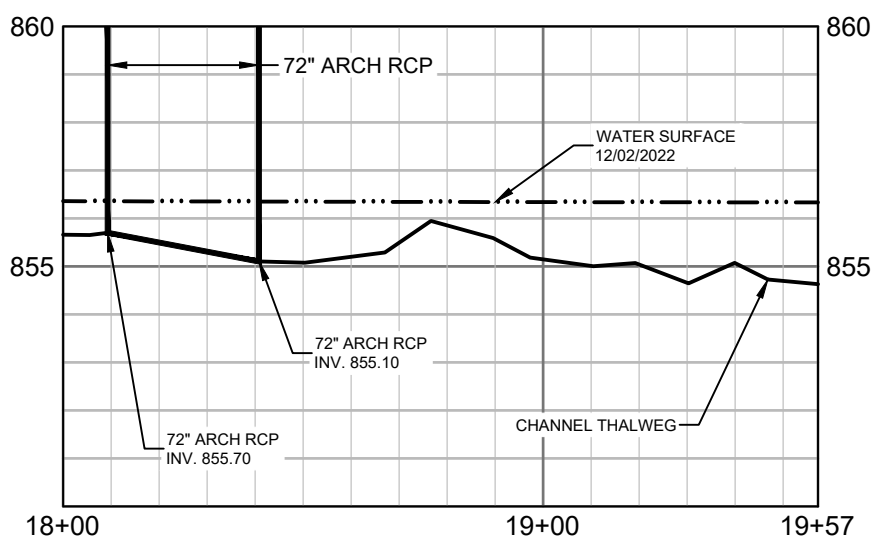
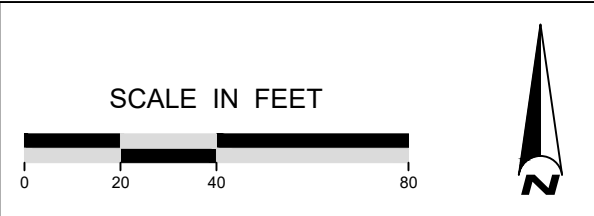
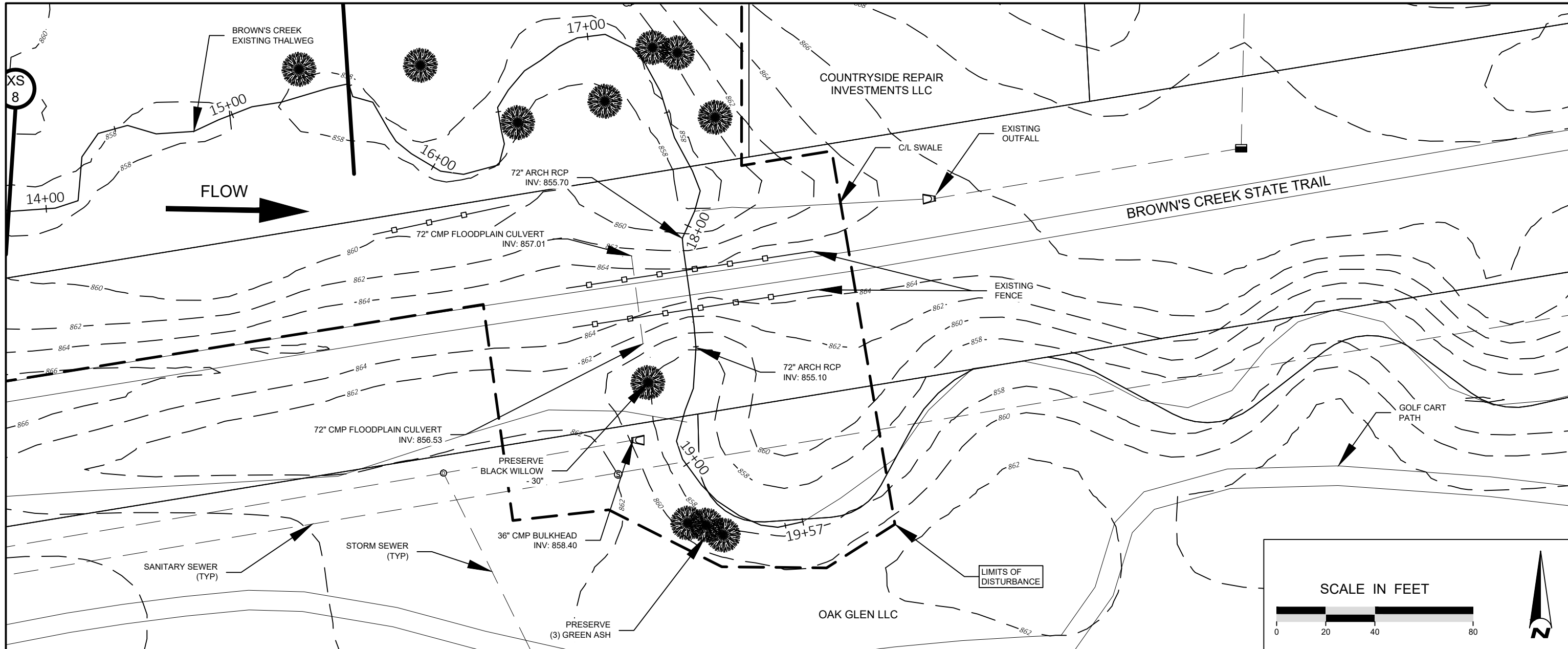
DESIGNED BY: EOR
 DRAWN BY: DEM
 CHECKED BY: MJM
 EOR JOB #0041-0418



**BROWN'S CREEK PARK
 STREAM RESTORATION**
 WASHINGTON COUNTY, STILLWATER, MN
 BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

EXISTING CONDITIONS
 PLAN & PROFILE - 3
 SHEET 09 OF 19

File Date: 06/30/2023
 Client: W0041_Brown's_Ck_Pk_Restor09_GMS(M)0041_0418-CD.dwg
 Xref: 40041_0418-SURFACE
 40041_0418-RBASE
 40041_0418-PC
 40041_0418-DWG



NOT FOR CONSTRUCTION

DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
	2	
	3	
	4	
	5	
	6	

DESIGNED BY: EOR
 DRAWN BY: DEM
 CHECKED BY: MJM
 EOR JOB #0041-0418

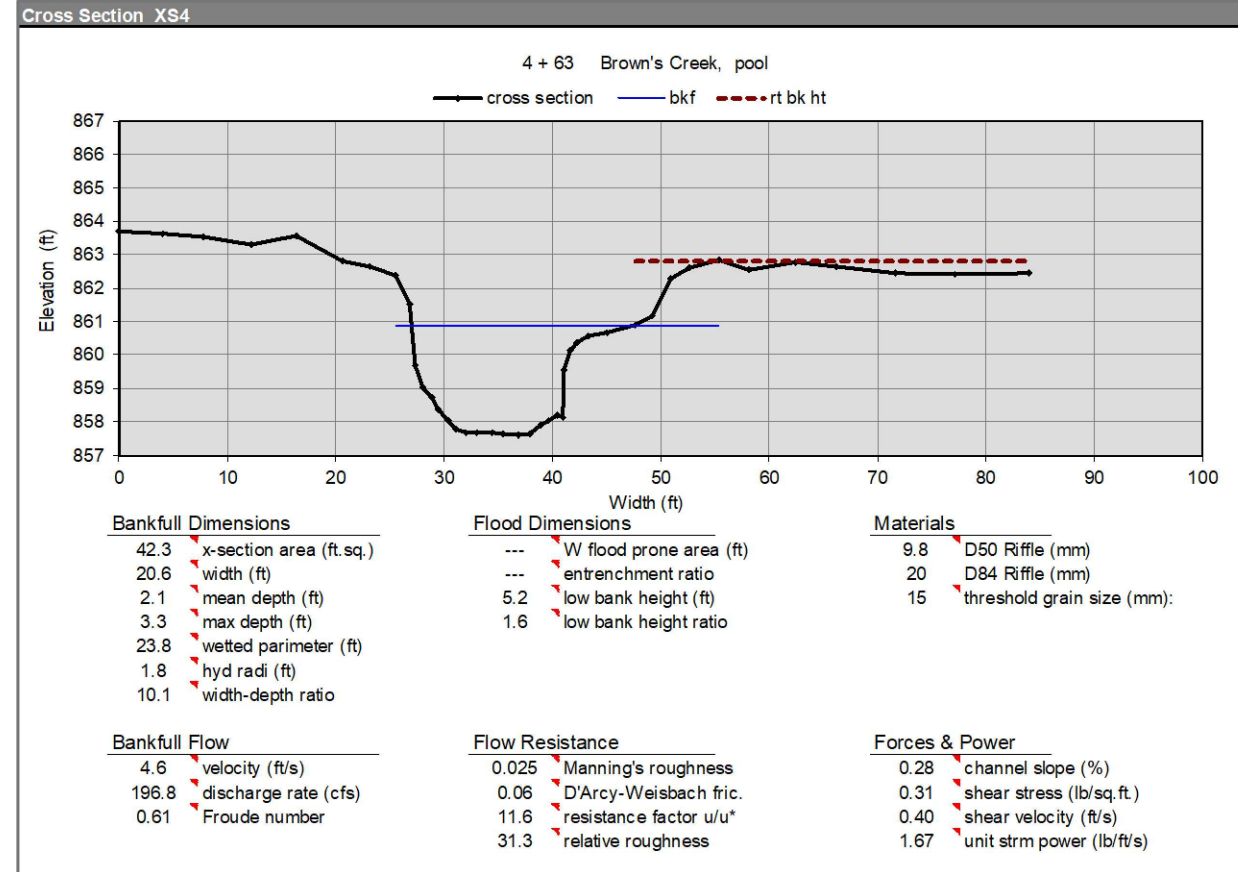
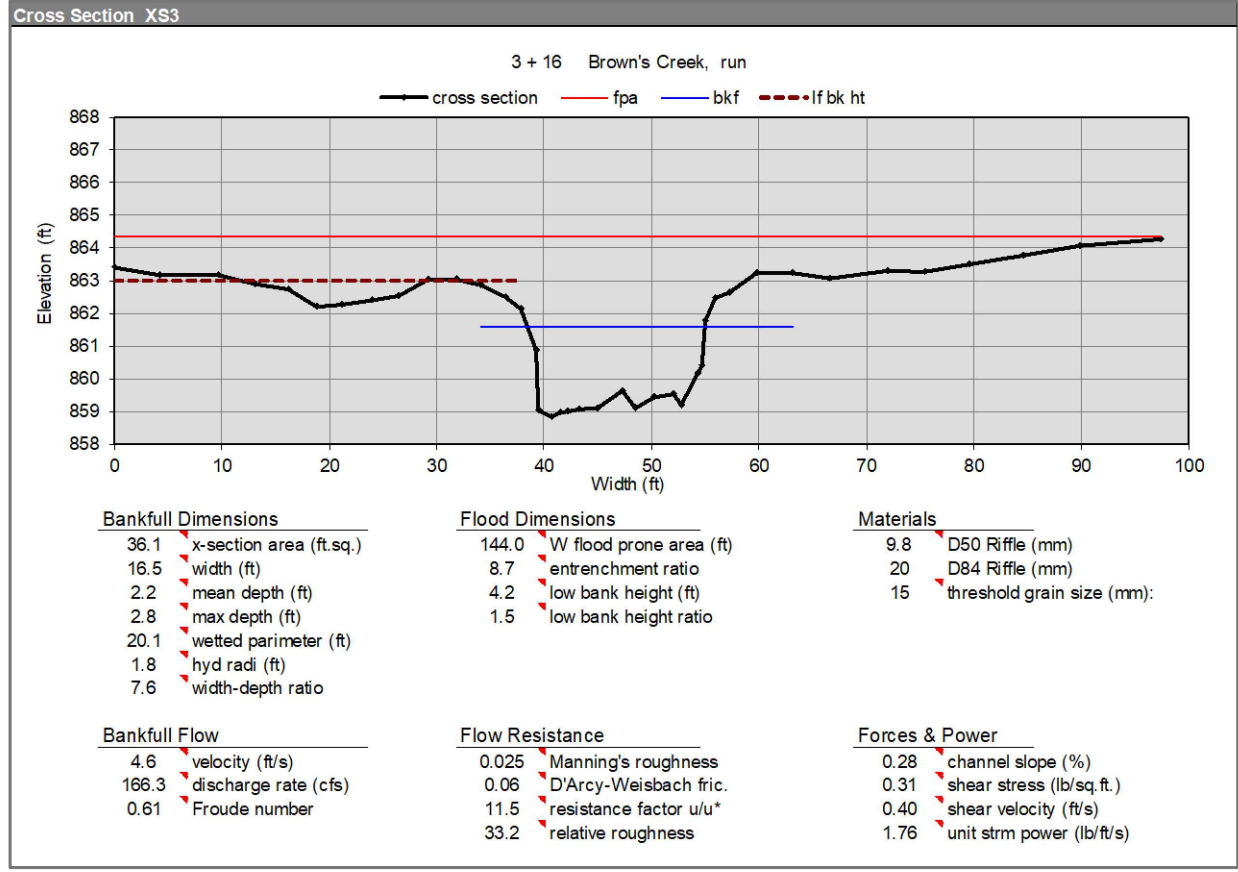
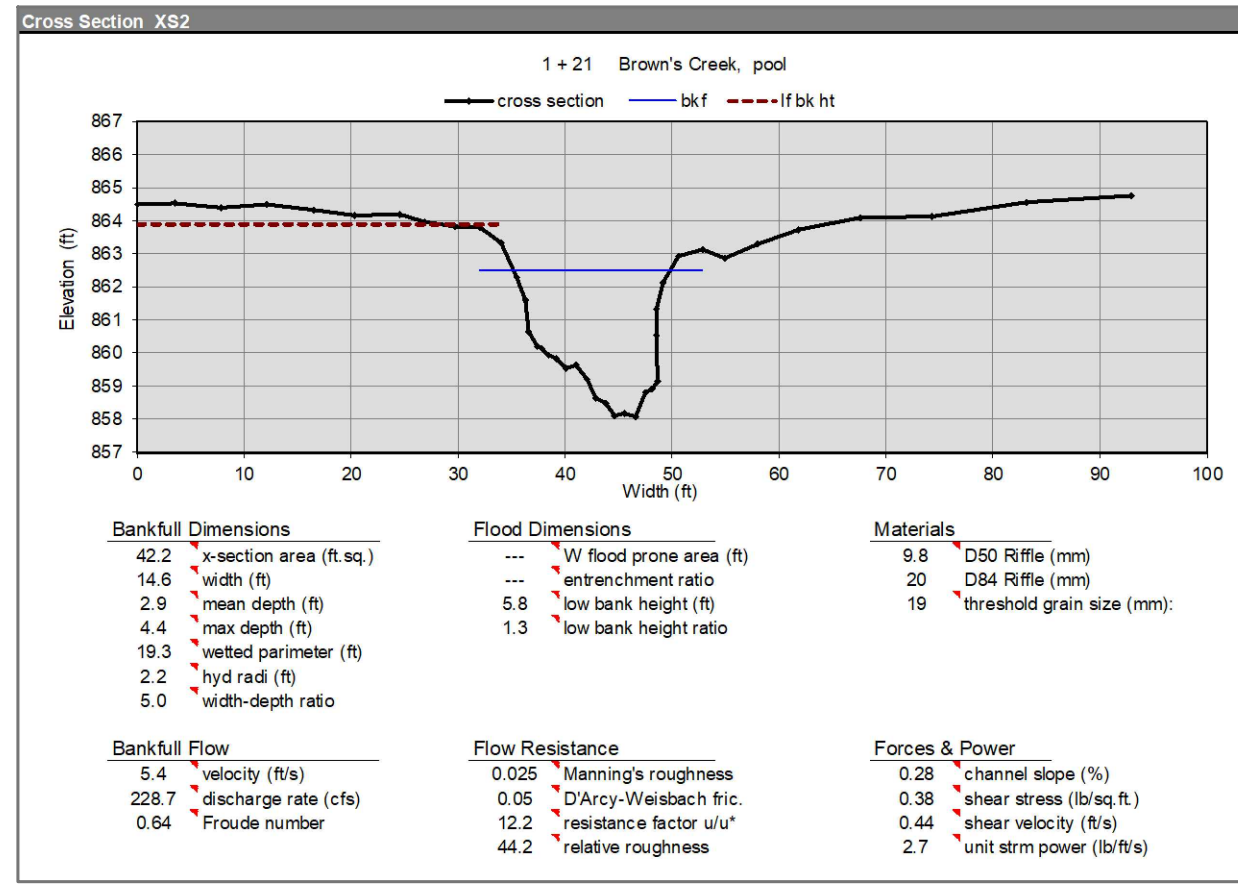
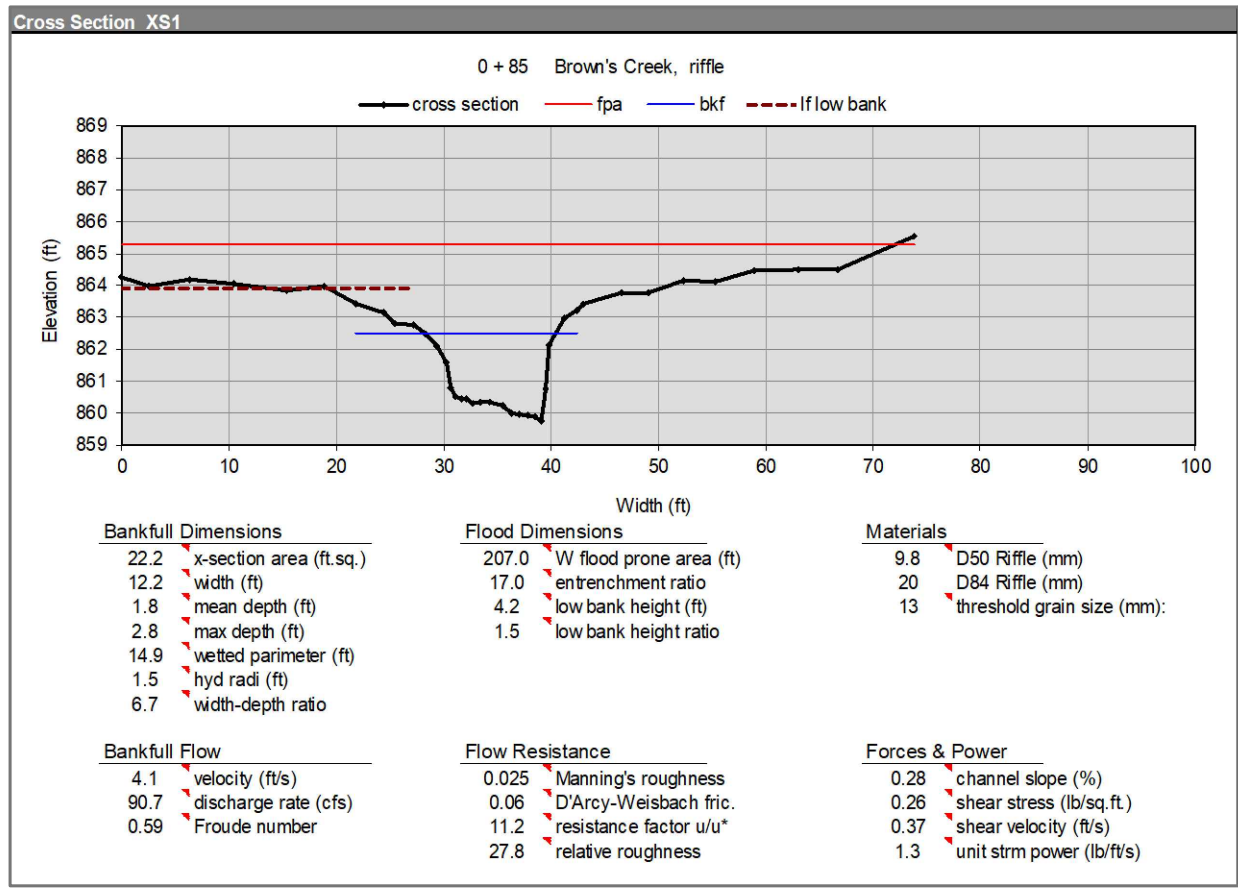


**BROWN'S CREEK PARK
 STREAM RESTORATION**
 WASHINGTON COUNTY, STILLWATER, MN
 BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

EXISTING CONDITIONS
 PLAN & PROFILE - 4
 SHEET 10 OF 19

File Date: 06/30/2023
 Project: X:\Clients\W0041_BCWD\0418_Brown's_Ck_Pk_Restor09_GNIS\Map\0041_0418-CD.dwg
 Xref: 40041_0418-SURFACE
 40041_0418-XBASE
 40041_0418-RELEASE
 40041_0418-SCALE: images: images\BCWD_top_xclients_w0041_box\0418_brown's_ck_pk_restor09_gnis\images\GSC\Logo_2018

EOR water ecology community
 EMMONS & OLIVIER RESOURCES, INC.
 1919 UNIV. AVE. W. #300 ST. PAUL, MN 55104
 TEL: 651-451-1234 FAX: 651-451-1234
BCWD Board Packet 7-12-2023
 Page 93



NOTE:
ALL CROSS SECTIONS ARE ORIENTED DOWNSTREAM W/ RIVER LEFT ON THE LEFT AND RIVER RIGHT ON THE RIGHT.

File: 06/30/2023
 Xref: 40041_0418-SURFACE
 40041_0418-RBASE
 40041_0418-DBASE
 40041_0418-DBASE
 Images: \images\BCWD_top_xclients_wd041_bow0418_brown's_creekrest09_gm\images\GSC\Logo_2019

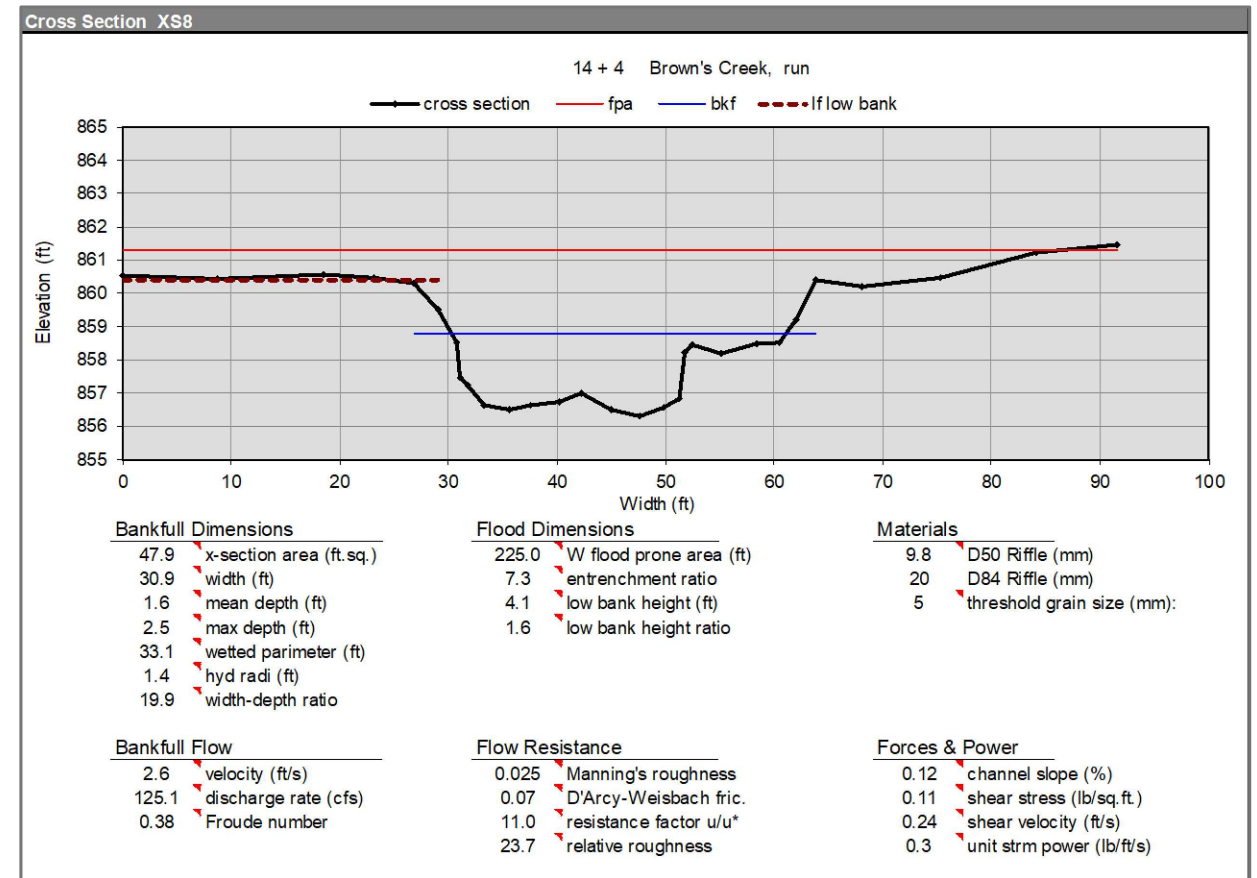
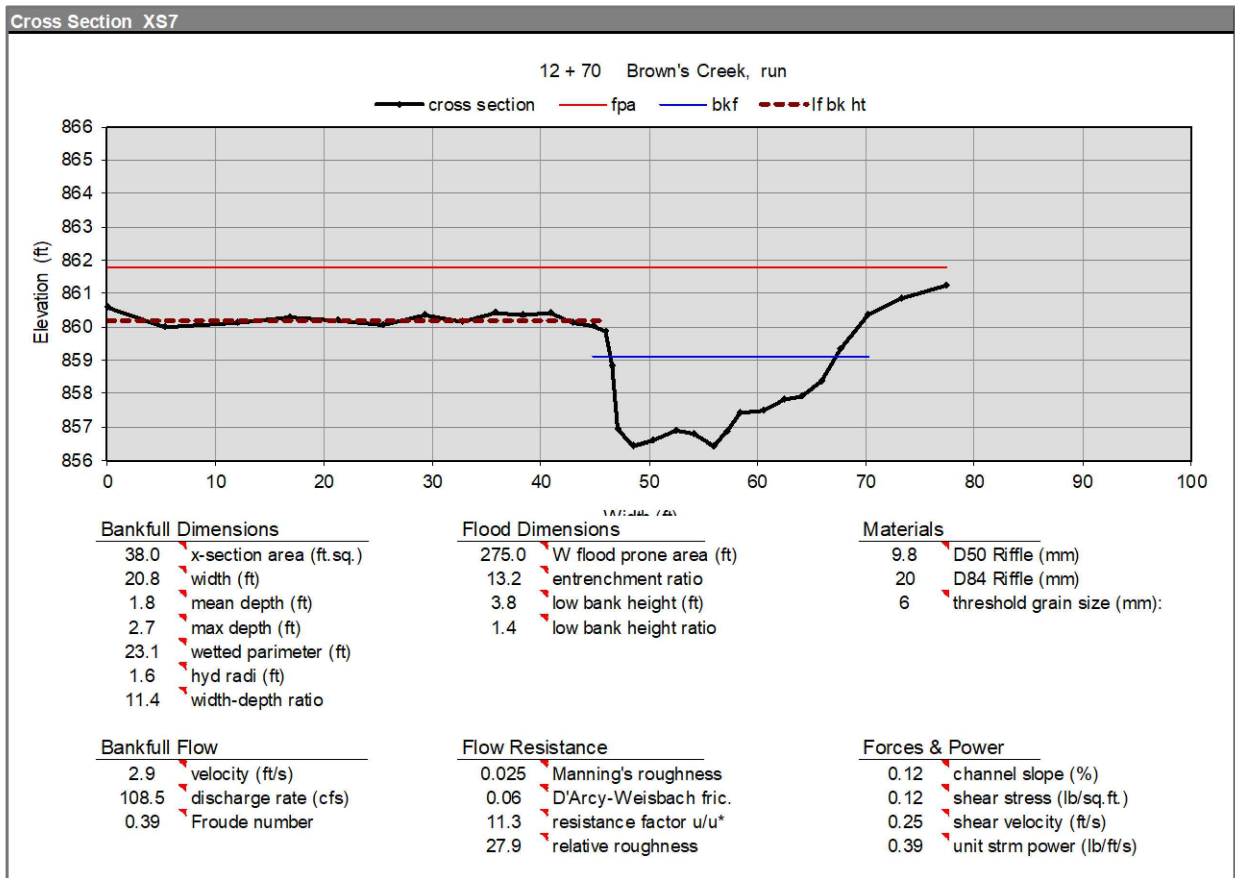
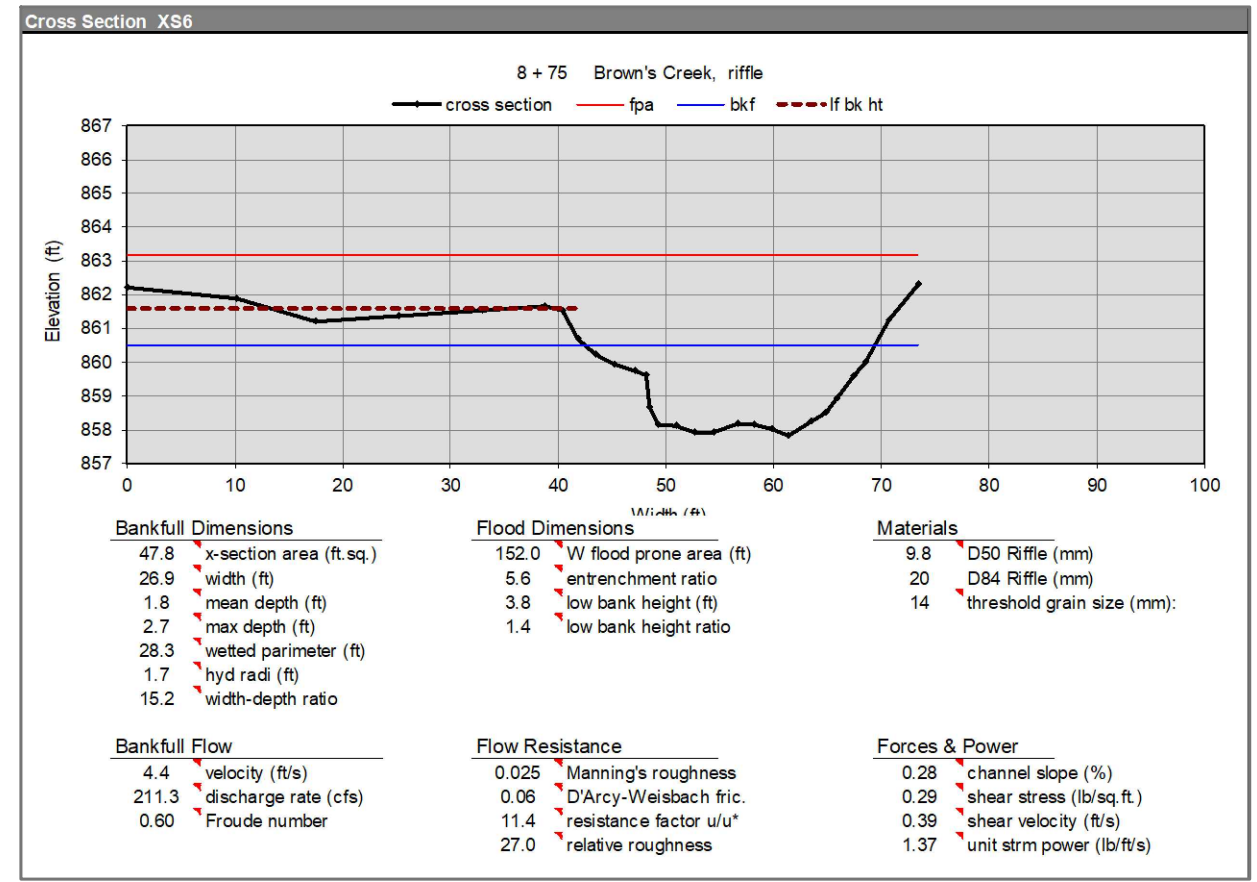
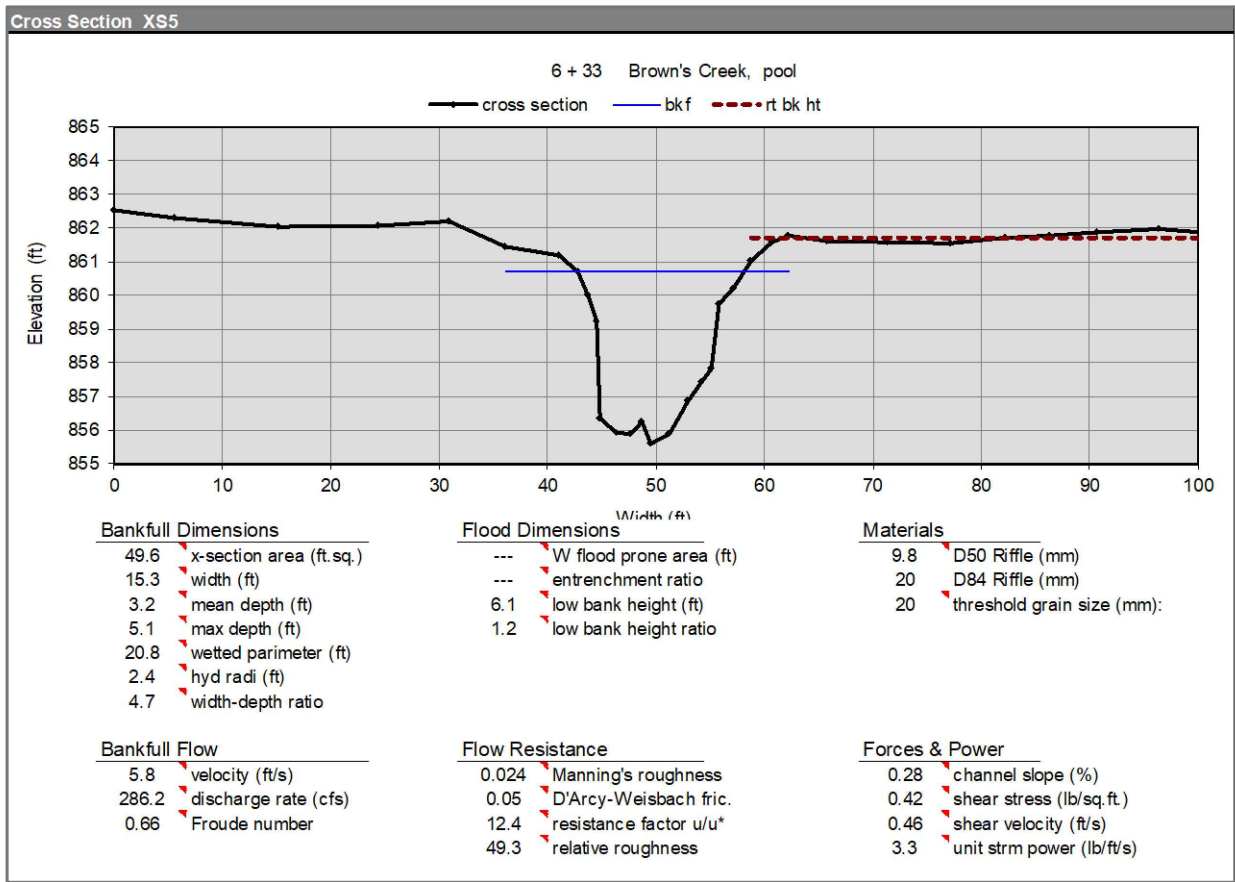
DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
	2	
	3	
	4	
	5	
	6	

DESIGNED BY: EOR
 DRAWN BY: DEM
 CHECKED BY: MJM
 EOR JOB #0041-0418



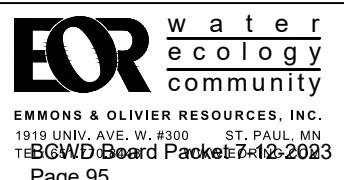
**BROWN'S CREEK PARK
 STREAM RESTORATION**
 WASHINGTON COUNTY, STILLWATER, MN
 BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

EXISTING CROSS SECTIONS - 1
 SHEET 11 OF 19



NOTE:
ALL CROSS SECTIONS ARE ORIENTED DOWNSTREAM W/ RIVER LEFT ON THE LEFT AND RIVER RIGHT ON THE RIGHT.

File Date: 06/30/2023
 Project: 40041_0418-SURFACE
 Xref: 40041_0418-SURFACE
 40041_0418-RBASE
 40041_0418-REBASE
 40041_0418-REBASE



NOT FOR CONSTRUCTION

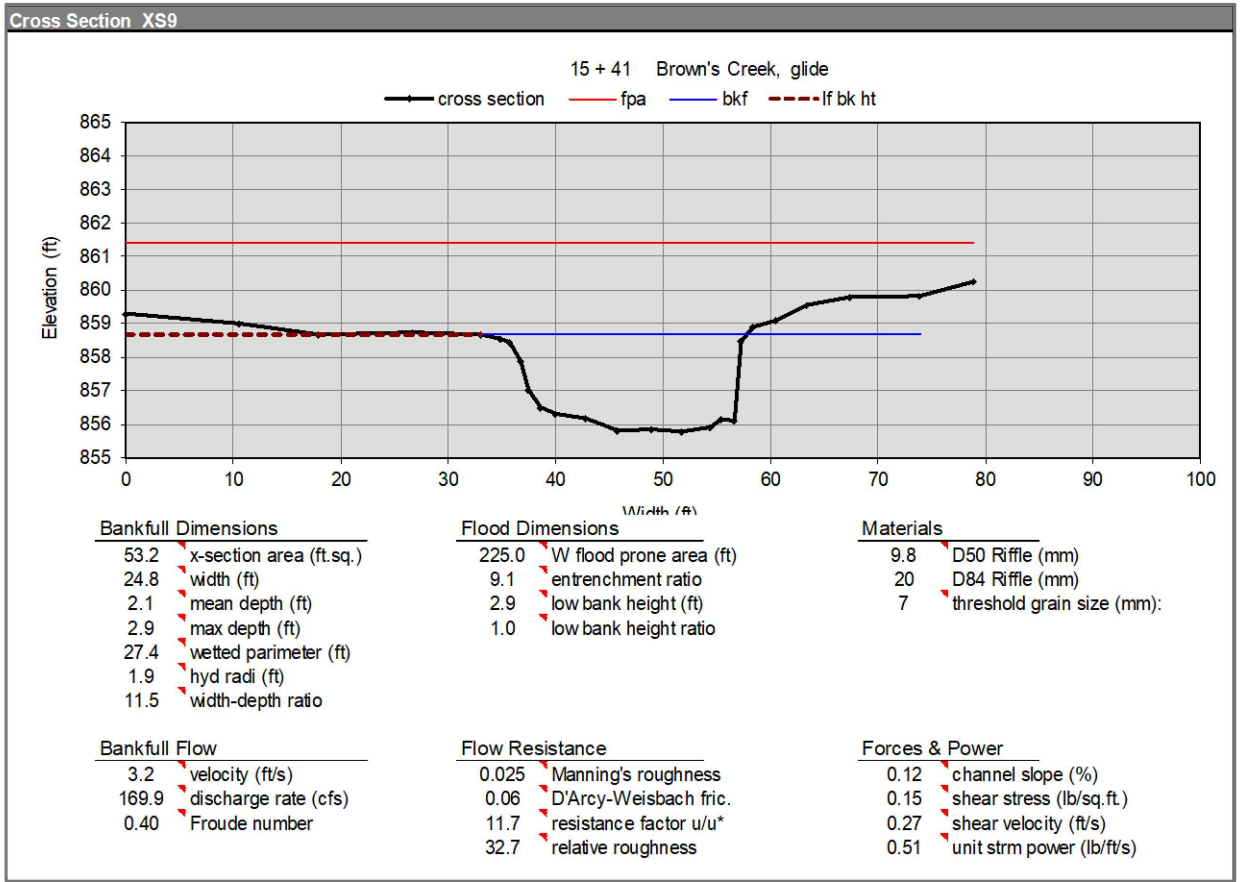
DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
	2	
	3	
	4	
	5	
	6	

DESIGNED BY: EOR
DRAWN BY: DEM
CHECKED BY: MJM
EOR JOB #0041-0418



**BROWN'S CREEK PARK
STREAM RESTORATION**
WASHINGTON COUNTY, STILLWATER, MN
BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

EXISTING CROSS SECTIONS - 2
SHEET 12 OF 19



NOTE:
 ALL CROSS SECTIONS ARE
 ORIENTED DOWNSTREAM W/
 RIVER LEFT ON THE LEFT AND
 RIVER RIGHT ON THE RIGHT.

File Date: 06/30/2023
 Project: 40041_0418-SURFACE
 Xref: 40041_0418-SURFACE
 40041_0418-REBASE
 40041_0418-REBASE
 40041_0418-REBASE

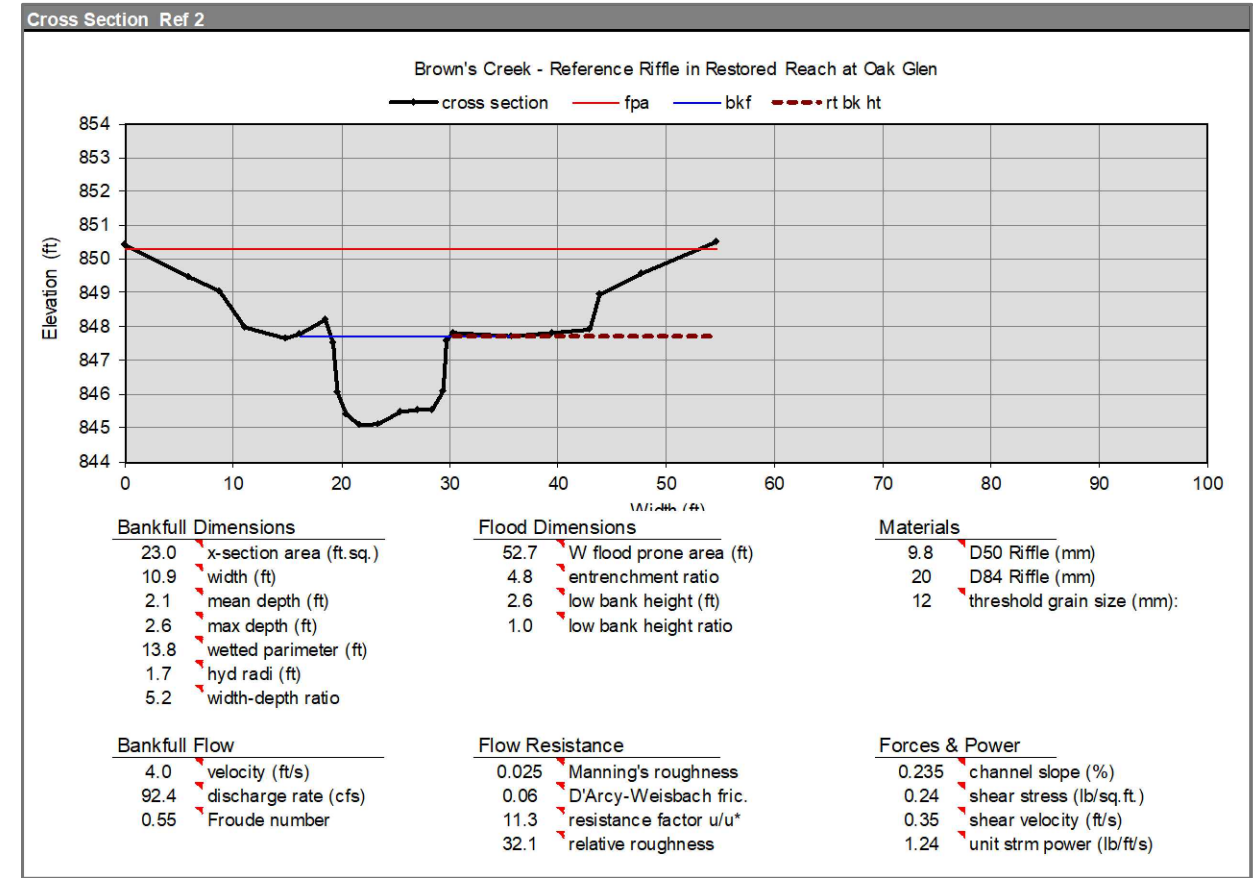
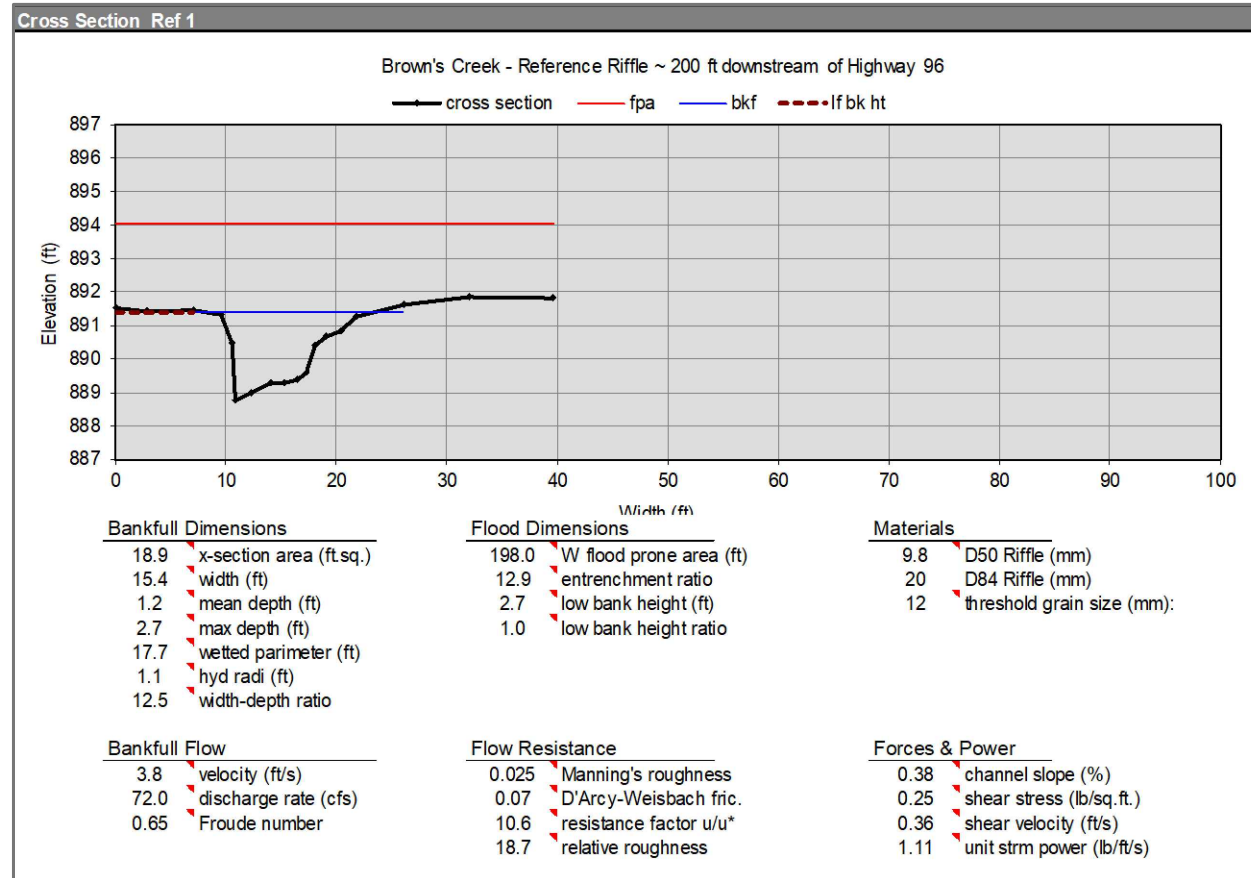
NOT FOR CONSTRUCTION

DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
	2	
	3	
	4	
	5	
	6	

DESIGNED BY: EOR
 DRAWN BY: DEM
 CHECKED BY: MJM
 EOR JOB #0041-0418



**BROWN'S CREEK PARK
 STREAM RESTORATION**
 WASHINGTON COUNTY, STILLWATER, MN
 BROWN'S CREEK WATERSHED DISTRICT
 OAKDALE, MN 55128



NOTE:

ALL CROSS SECTIONS ARE ORIENTED DOWNSTREAM W/ RIVER LEFT ON THE LEFT AND RIVER RIGHT ON THE RIGHT.

File Date: 06/30/2023
 Project: 0041-0418-RESTORATION
 Xref: 40041_0418-SURFACE
 40041_0418-XBASE
 40041_0418-REBASE
 40041_0418-CD.dwg
 Images: \images\BCWD_top_x\clients_wd041_box\0418_brown's_creek_restored_reach\0418_brown's_creek_restored_reach\SSC\0418-CD.dwg

NOT FOR CONSTRUCTION

DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
	2	
	3	
	4	
	5	
	6	

DESIGNED BY: EOR
 DRAWN BY: DEM
 CHECKED BY: MJM

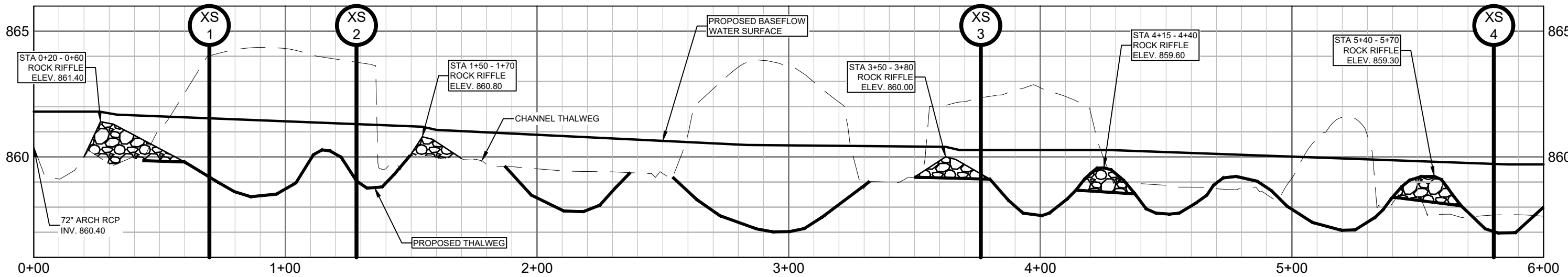
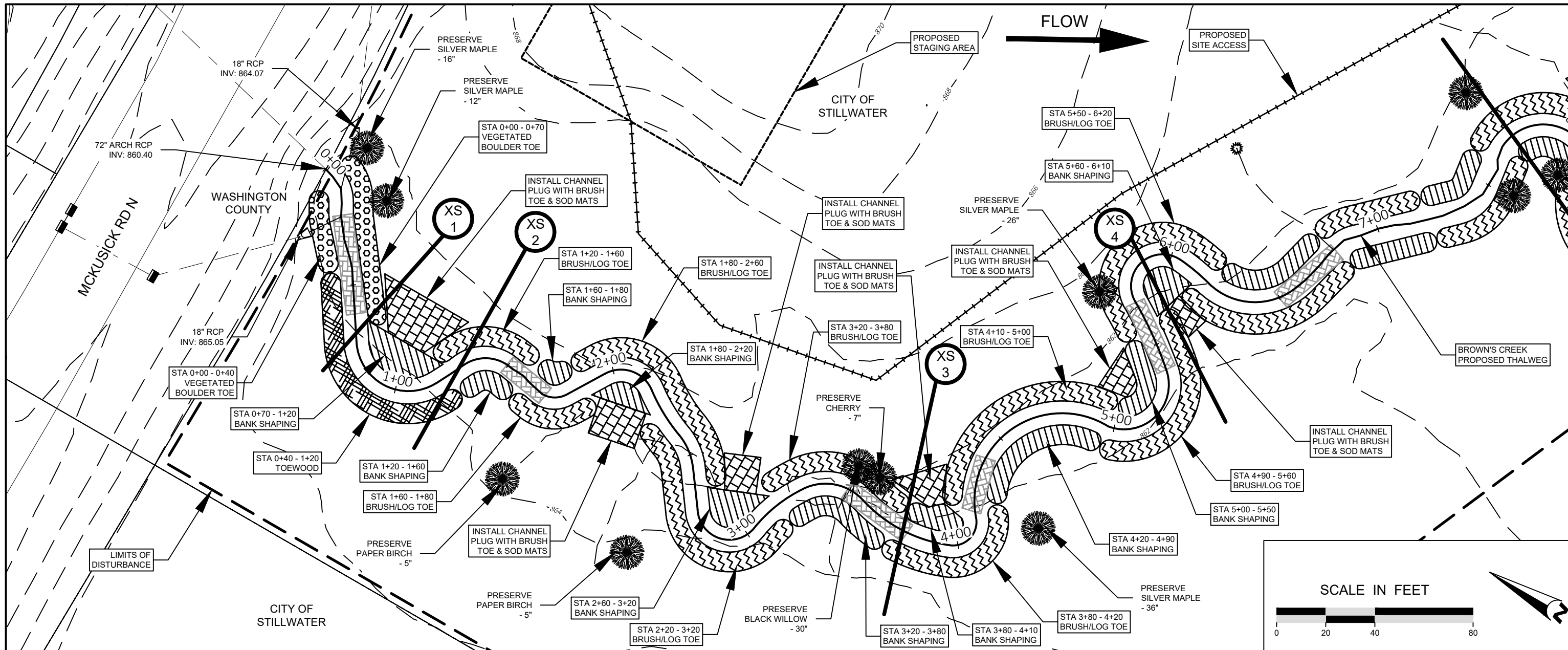


EOR JOB #0041-0418

BROWN'S CREEK PARK STREAM RESTORATION
 WASHINGTON COUNTY, STILLWATER, MN

BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

REFERENCE CROSS SECTIONS



File: 06/30/2023
 Path: X:\Clients\W0041_Brown's_Ck_Pk_Restor09_GNIS\Map0041_0418-CD.dwg
 Xref: 40041_0418-SURFACE
 40041_0418-XBASE
 40041_0418-REBASE
 40041_0418-CD.dwg
 Images: \images\BCWD_logo_images\w0041_brown's_ck_pk_restor09_gnis\images\GSCLogo_2018

NOT FOR CONSTRUCTION

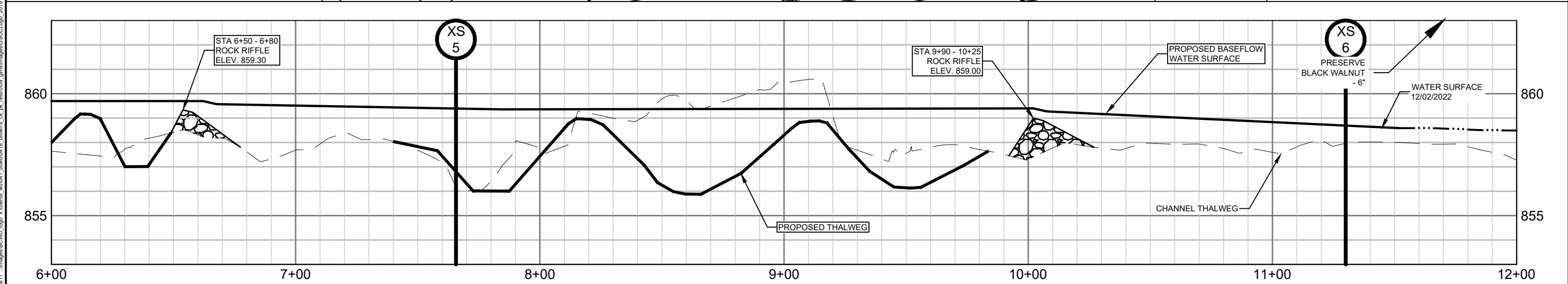
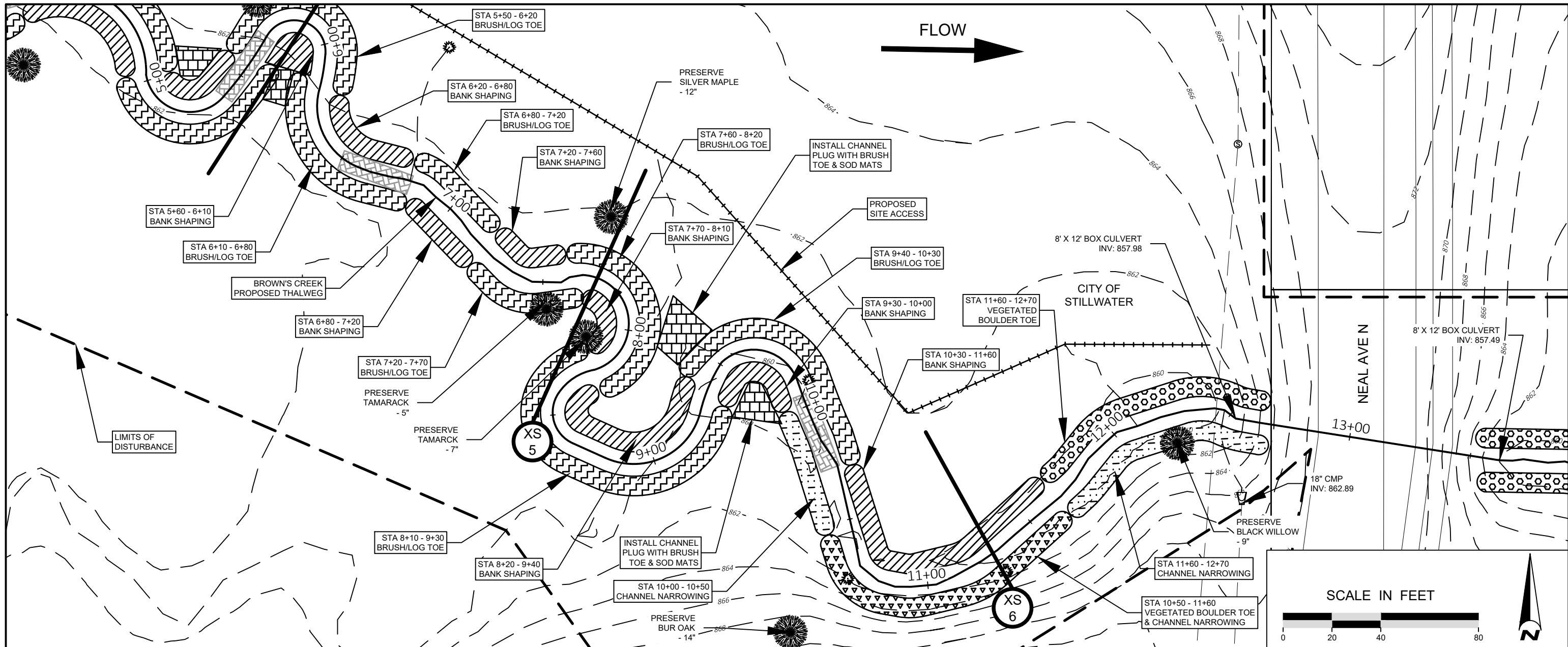
DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
	2	
	3	
	4	
	5	
	6	

DESIGNED BY: EOR
 DRAWN BY: DEM
 CHECKED BY: MJM
 EOR JOB #0041-0418



**BROWN'S CREEK PARK
 STREAM RESTORATION**
 WASHINGTON COUNTY, STILLWATER, MN
 BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

PROPOSED PLAN &
 PROFILE - 1
 SHEET 15 OF 19



NOT FOR CONSTRUCTION

DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
	2	
	3	
	4	
	5	
	6	

DESIGNED BY: EOR
 DRAWN BY: DEM
 CHECKED BY: MJM
 EOR JOB #0041-0418

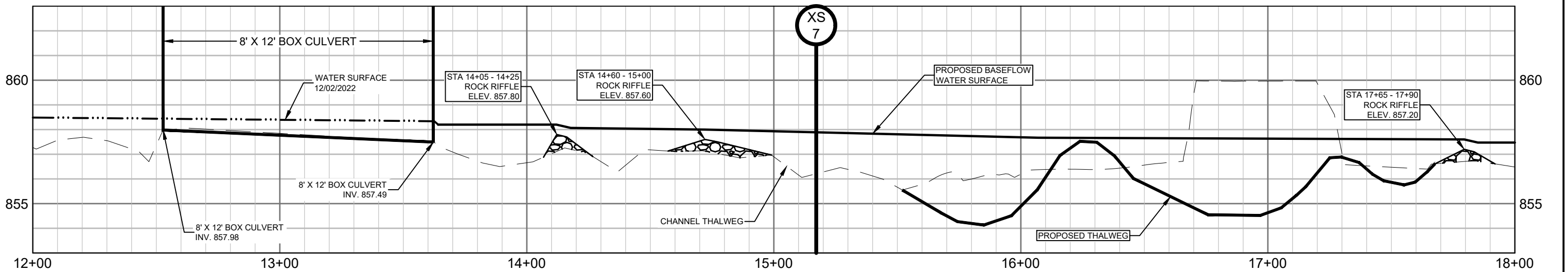
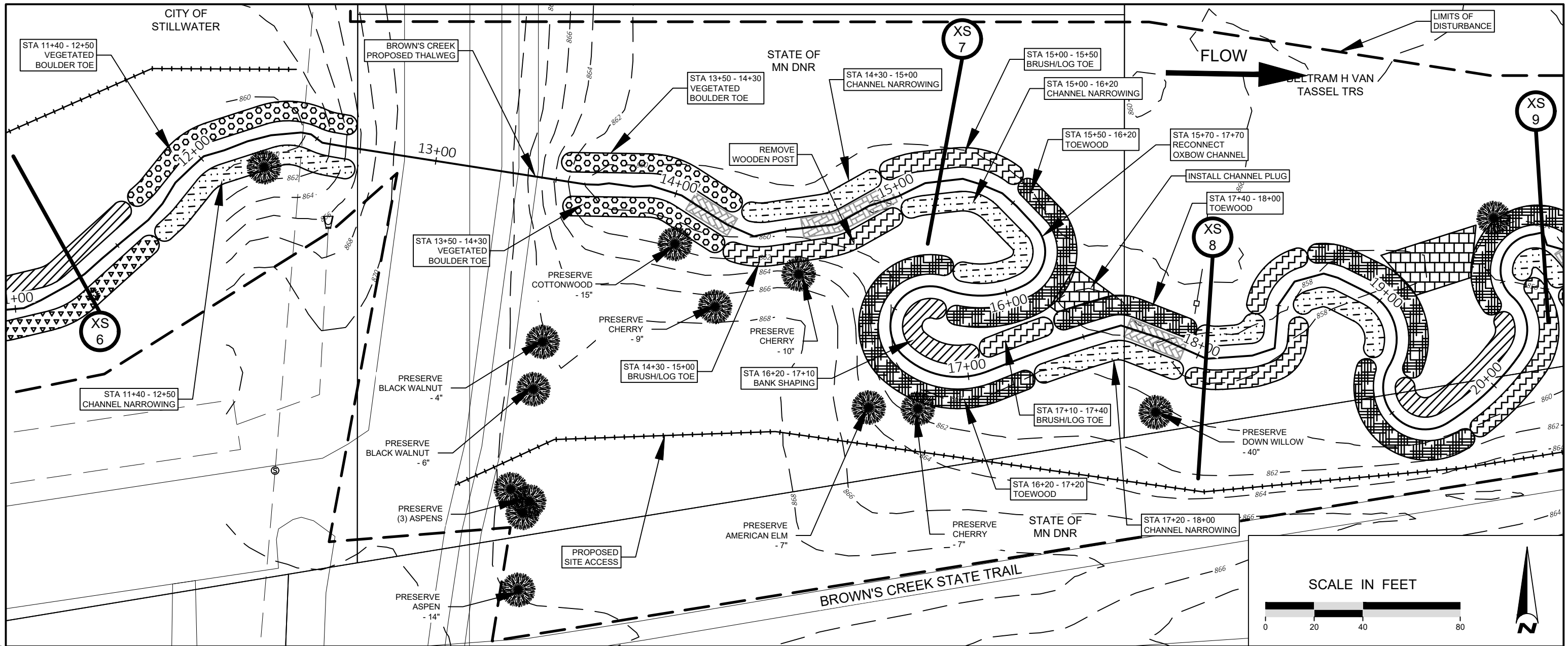


BROWN'S CREEK PARK STREAM RESTORATION
 WASHINGTON COUNTY, STILLWATER, MN
 BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

PROPOSED PLAN & PROFILE - 2
 SHEET 16 OF 19

File Date: 06/30/2023
 Project: X:\Clients\W0041_Brown's_Ck_Pk_Rest09_GNIS\Map\0041_0418-CD.dwg
 Xref: 40041_0418-SURFACE
 40041_0418-RBASE
 40041_0418-12-2023

EOR water ecology community
 EMMONS & OLIVIER RESOURCES, INC.
 1919 UNIV. AVE. W. #300 ST. PAUL, MN 55104
 TEL: 612-763-1234 FAX: 612-763-1235
 www.eor.com



NOT FOR CONSTRUCTION

EOR water ecology community
 EMMONS & OLIVIER RESOURCES, INC.
 1919 UNIV. AVE. W. #300 ST. PAUL, MN 55108
 TEL: 651-436-1234 FAX: 651-436-1234
 www.eor.com

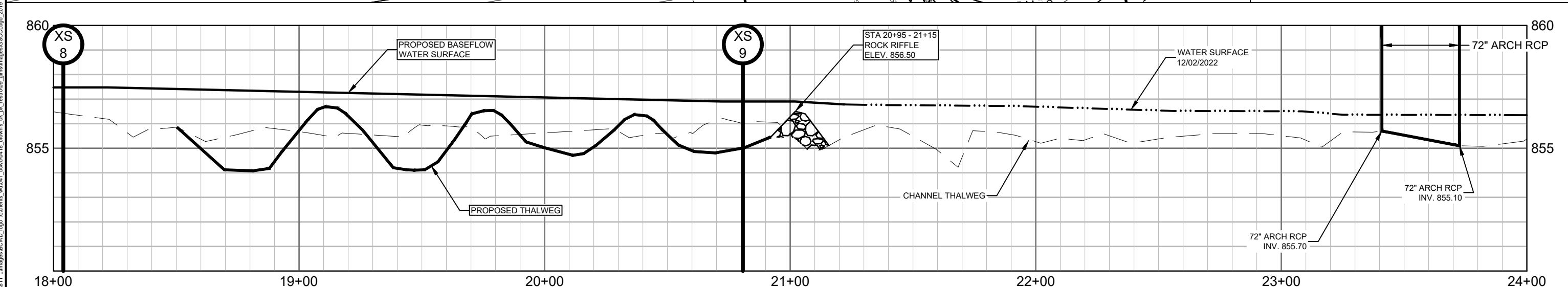
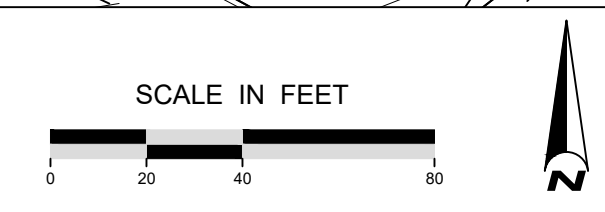
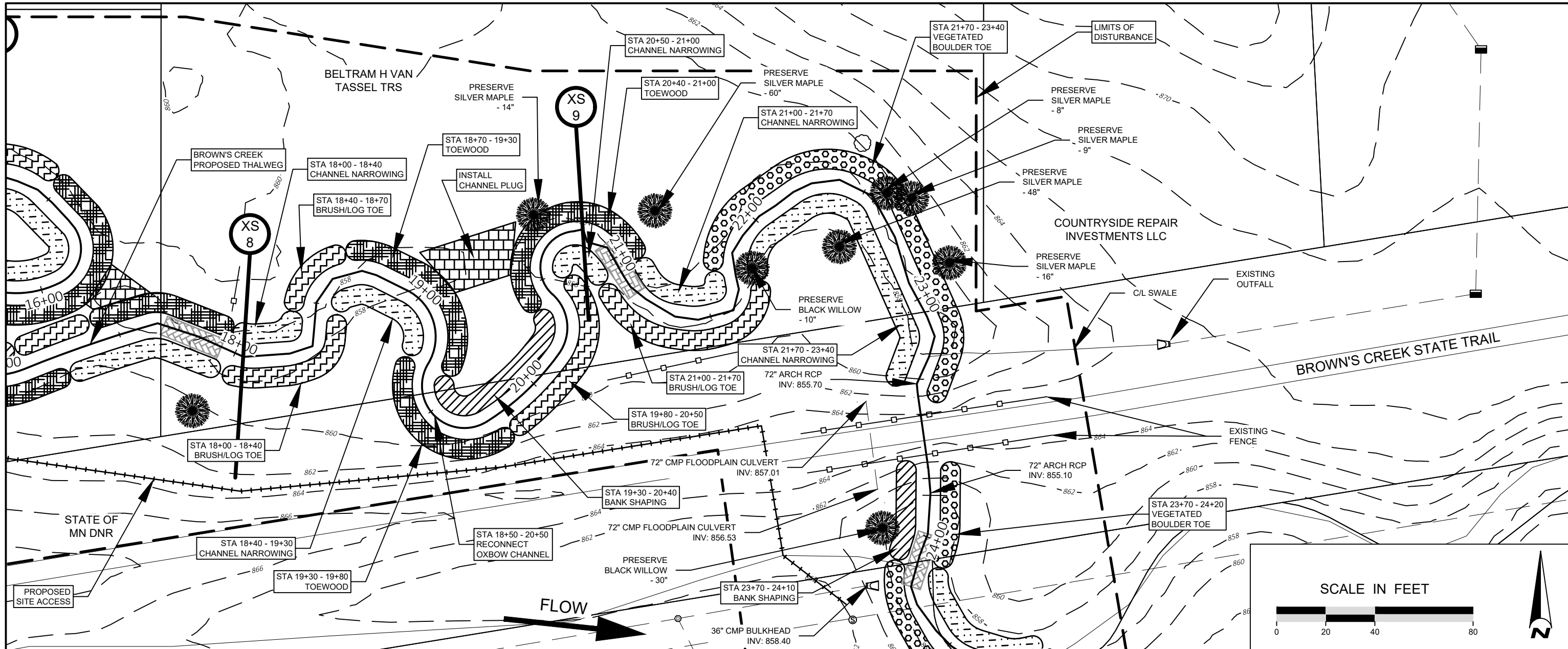
DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
	2	
	3	
	4	
	5	
	6	

DESIGNED BY: EOR
 DRAWN BY: DEM
 CHECKED BY: MJM
 EOR JOB #0041-0418
 CLIENT PROJECT #XXX-XXXX

**BROWN'S CREEK PARK
 STREAM RESTORATION**
 WASHINGTON COUNTY, STILLWATER, MN
 BROWN'S CREEK WATERSHED DISTRICT
 OAKDALE, MN 55128

PROPOSED PLAN &
 PROFILE - 3
 SHEET 17 OF 19

File Date: 06/30/2023
 Project: X:\Clients\W0041_Brown's_Ck_Pk_Rest09_GNIS\Map\0041_0418-CD.dwg
 Xref: 40041_0418-SURFACE
 40041_0418-REBASE
 40041_0418-PLAN
 40041_0418-SECTION
 Images: \images\BCWD_top_images\811_images\811_images\BCWD_top_images\0041_brown's_ck_pk_rest09_gnis\Map\0041_0418-CD.dwg



NOT FOR CONSTRUCTION

EOR water ecology community
EMMONS & OLIVIER RESOURCES, INC.
1919 UNIV. AVE. W. #300 ST. PAUL, MN 55104
Tel: 651-436-1111 Fax: 651-436-1112
www.eor.com

DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
	2	
	3	
	4	
	5	
	6	

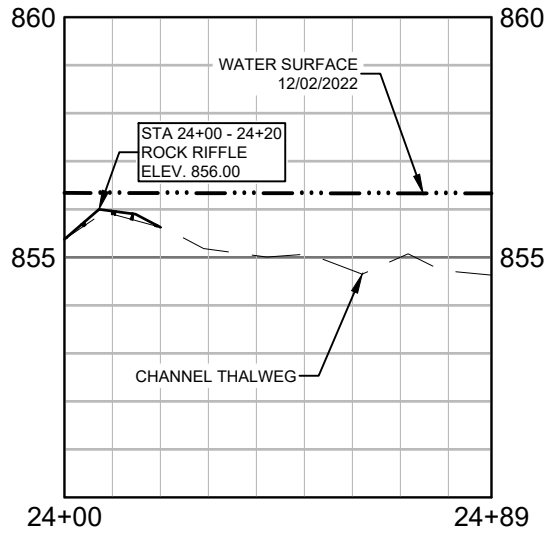
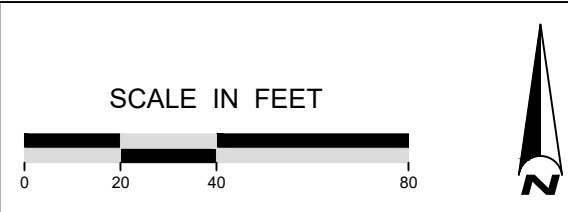
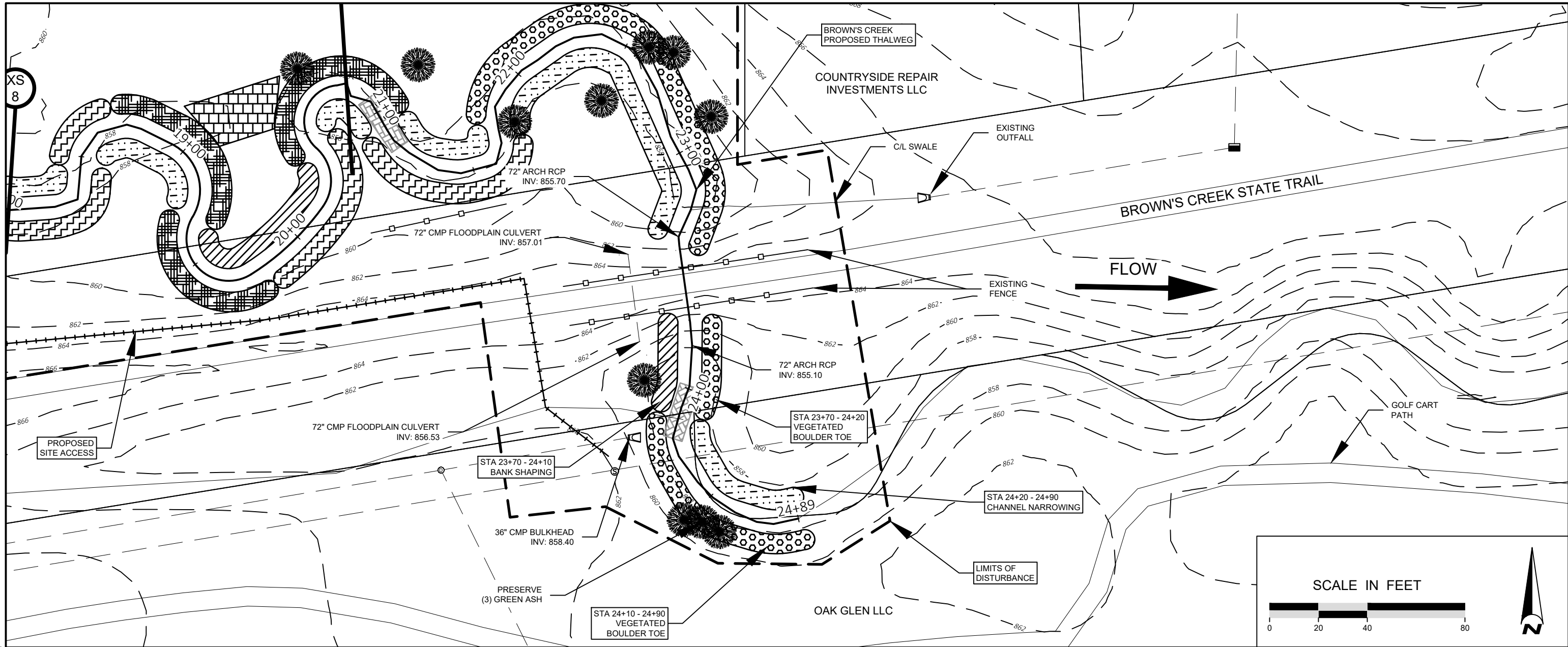
DESIGNED BY: EOR
DRAWN BY: DEM
CHECKED BY: MJM
EOR JOB #0041-0418

BROWN'S CREEK WATERSHED DISTRICT
CLIENT PROJECT #XXX-XXXX

BROWN'S CREEK PARK STREAM RESTORATION
WASHINGTON COUNTY, STILLWATER, MN
BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

PROPOSED PLAN & PROFILE - 4
SHEET 18 OF 19

File Date: 06/30/2023
 Client: W0041_0418-SURFACE
 Xref: 40041_0418-XBASE
 40041_0418-XBASE
 40041_0418-XBASE
 40041_0418-XBASE



NOT FOR CONSTRUCTION

DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
	2	
	3	
	4	
	5	
	6	

DESIGNED BY: EOR
 DRAWN BY: DEM
 CHECKED BY: MJM
 EOR JOB #0041-0418



**BROWN'S CREEK PARK
 STREAM RESTORATION**
 WASHINGTON COUNTY, STILLWATER, MN
 BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

PROPOSED PLAN & PROFILE - 5
 SHEET 19 OF 19

File Date: 06/30/2023
 Client: X:\Clients\W0041_BCWD\0418_Brown's_Ck_Pk_Restor\09_GNIS\Map\0041_0418-CD.dwg
 Xref: 40041_0418-SURFACE
 40041_0418-XBASE
 40041_0418-REBASE
 40041_0418-TOPO
 40041_0418-DATE
 Image: \images\BCWD_topo_images\811_images\811_images\BCWD_topo_images\0418_brown's_ck_pk_restor\09_gnis\Map\0041_0418-CD.dwg

Project Name	Marketplace District Reuse Feasibility Study	Date	Apr. 05, 2023
To / Contact info	BCWD Board of Managers		
Cc / Contact info	Karen Kill, District Administrator		
From / Contact info	Brett H. Emmons, PE, Camilla Cornell, PE, Ryan Fleming, PE, Kerri Robinson, Bill Yu		
Regarding	District Stormwater Harvesting/Reuse Options at Marketplace Area (DRAFT)		

Background

In 2018 the BCWD identified a number of challenging issues and opportunities in the Highway 36 Corridor of BCWD, and within that corridor, the highly urbanized Marketplace Area. The need for regional treatment in order to provide runoff reduction and water quality treatment in the Long Lake drainage area was identified. These factors included:

1. BCWD rule revisions and impacts related to the MS4 permit requirement that limits the ability to use stormwater infiltration in Drinking Water Supply Management Areas (DWSMA's), which cover a substantial portion of the Long Lake Drainage Area, with a net result of more impacts at Long Lake.
2. BCWD discovered that there are expected additional flood risk-related issues on Long Lake, as well as locally in the road network, revealed with recent model simulations of design storm events using the more up-to-date NOAA Atlas 14 guidance.
3. Redevelopment and infill development activity that may lend itself to a streamlined process using regional treatment, if the BCWD could provide a regional solution and work with the developers at the early stages of the planning process, simplifying approvals and reducing redevelopment conflicts.
4. Reviewing the successful precedence of a regional stormwater reuse in the metropolitan community of Waconia that simplified stormwater approvals and created a win-win situation for the city and developers.

In response to these issues and opportunities, EOR made a presentation to the Board of Managers at the October 2018 Board Meeting to share ideas for regional treatment options on parcels that may redevelop and others that have yet to be developed. Four quadrants/sectors were identified for potential implementation of treatment and volume control options (Figure 1). These regional treatment ideas included exploring opportunities for stormwater reuse on a regional stormwater management (SWM) system. One example of that arose organically as part of the new interchange project. Initial regional ideas included the parcel on the northeast corner of Hwy 36 and Manning Avenue and future site of a medical campus and the future Hy-Vee site in the southeast corner of the

same intersection, and opportunities to increase storage and treatment in the ravine south of Hwy 36 that drains to Long Lake. The new interchange is utilizing reuse to meet its stormwater treatment requirements, and due to the regional approach, space available in the ROW, and need for fill to build up bridge approaches, it is actually far exceeding the minimal standard and benefiting Long Lake. The Regional or District opportunities are not being implemented at this time, but may still exist in the future.

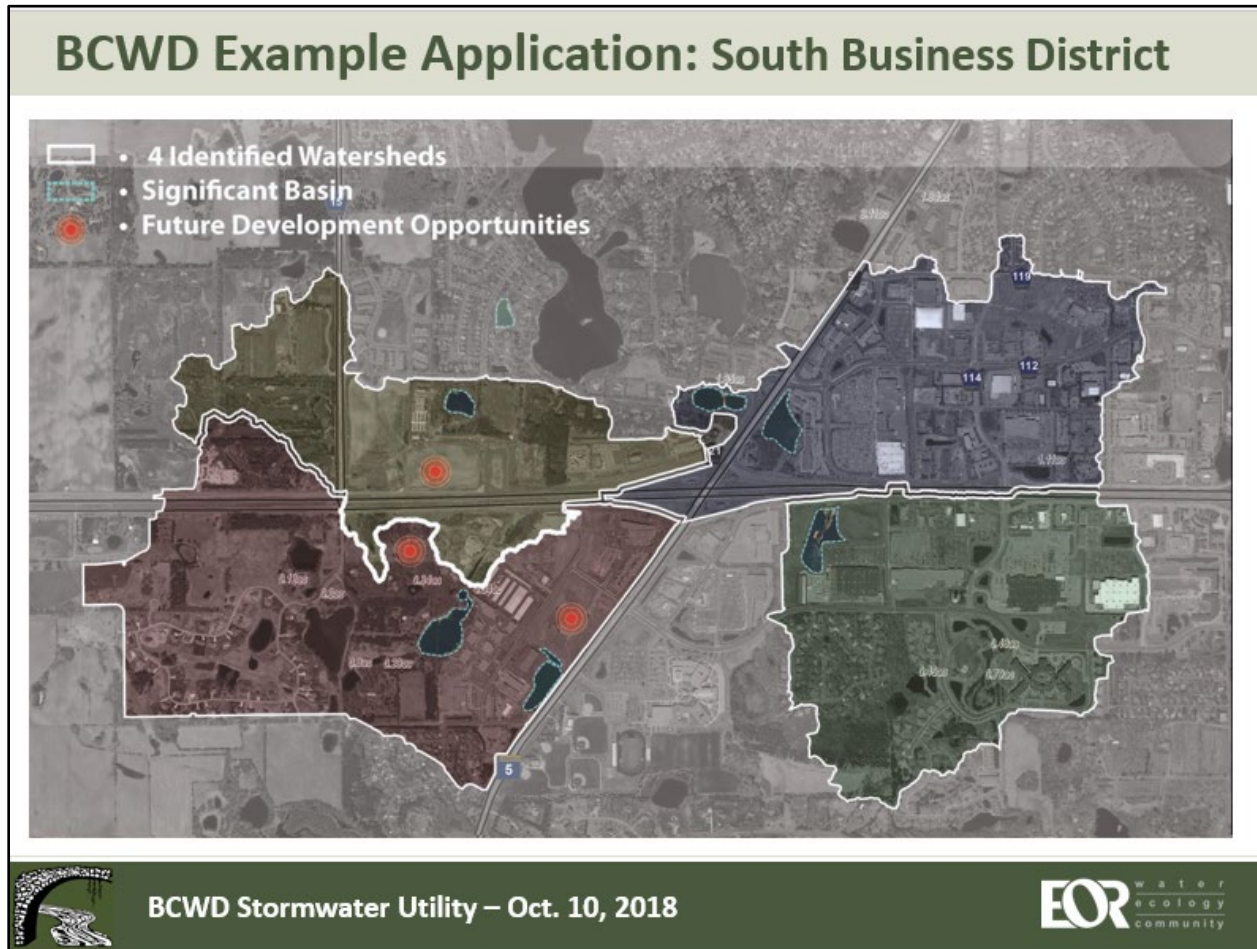


Figure 1: Areas of interest for stormwater treatment and control options

In addition, EOR has identified potential stormwater reuse retrofit opportunities on both sides of Highway 36 including the Marketplace drainage area (in the City of Stillwater) and the drainage area to Menard's Pond (in Oak Park Heights). The 2022 budget recommendation from District staff included a feasibility study to explore the viability of stormwater reuse in the Marketplace drainage area as a starting point and to test the approach in a challenging, highly developed setting. The description in the 2022 budget recommendations is as follows:

In an effort to reduce stormwater volumes and provide dissolved phosphorus treatment for Long Lake, it is proposed that the BCWD investigate the feasibility of stormwater reuse opportunities in the greater Marketplace Area of Stillwater. The study will look at opportunities to capture and re-use stormwater within the Marketplace development as well as the large pond along Stillwater Boulevard and Brewers Pond. Example opportunities include Lift Bridge Brewing, Abrahamson's, Rick's Automotive, Bethany Evangelical Convent, St. Croix Sensory, Arrow Building Center, several banks, and the townhomes near Brewer's Pond. The study will focus on areas where water is currently ponded and where there are local needs for irrigation.

According to the tasks identified in the scope of services, this feasibility study has estimated, through a high-level assessment, how much runoff reduction and water quality treatment would be provided by implementing reuse in this developed portion (Figure 2) of the watershed.

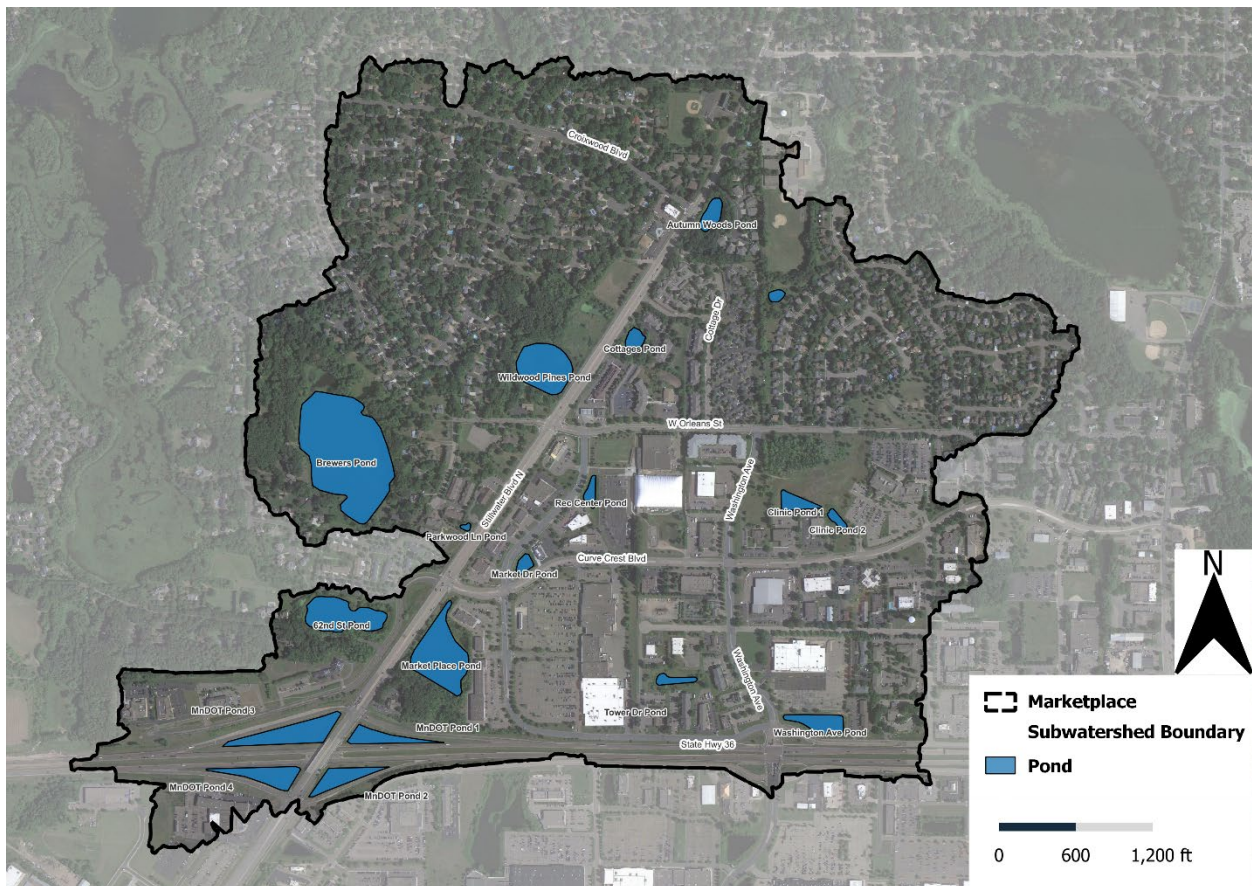


Figure 2. Subwatershed Boundary of Greater Marketplace Area, Stillwater

The focus of this feasibility study is to begin with one of the four areas, the Marketplace sector north of Hwy 36 and east of Hwy 5. All of these improvements across the four sectors have the potential to significantly improve the flooding and water quality situation on Long Lake, and downstream.

Marketplace Area Overview

The Marketplace Area, along with the drainage area of Brewers Pond and four interchange ponds, covers a total area of 648 acres and contains a mix of commercial and residential areas, allowing for numerous reuse opportunities (e.g., irrigation, car wash, hotel laundry, etc.). Meanwhile, a 1000-foot additional zone outside the Marketplace Area drainage boundary, which covers an additional 436 acres, is being considered for additional potential water reuse opportunities if end uses such as irrigation make sense and the water sources have matching capacity. Several locations within the area tend to flood frequently during rain events, as is illustrated in a few examples through model outputs (Figure 3 and Figure 4) and corroborated by anecdotes. It is of interest to examine whether more capacity can be found within the storm sewer network through the beneficial reuse of stormwater potentially resulting in a decrease in extent or duration of these nuisance flooding events. There are also flooding issues around 62nd St. pond that this project could also help.

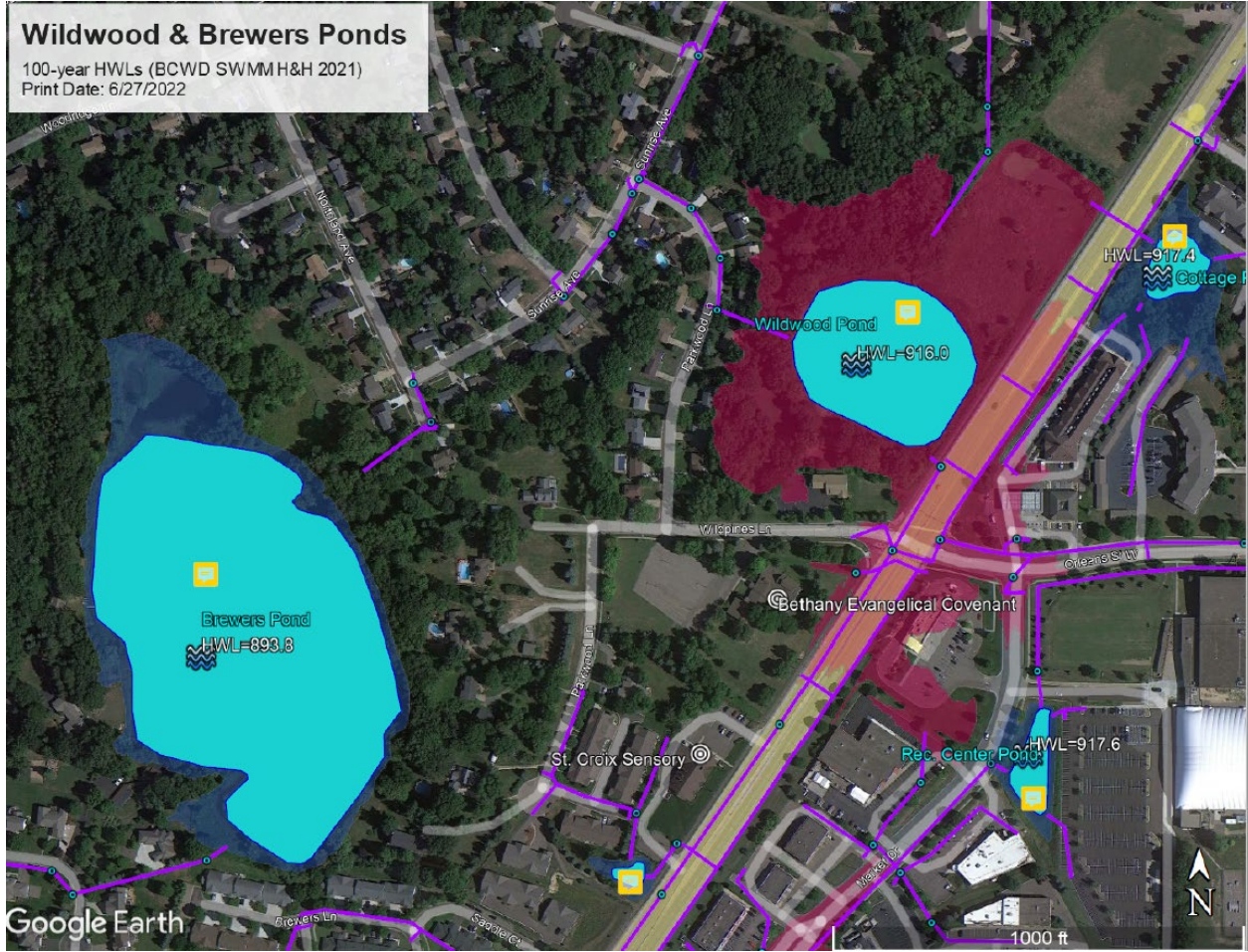


Figure 3: Locations of surface ponding around Wildwood and Brewers Ponds (100-year return period event)

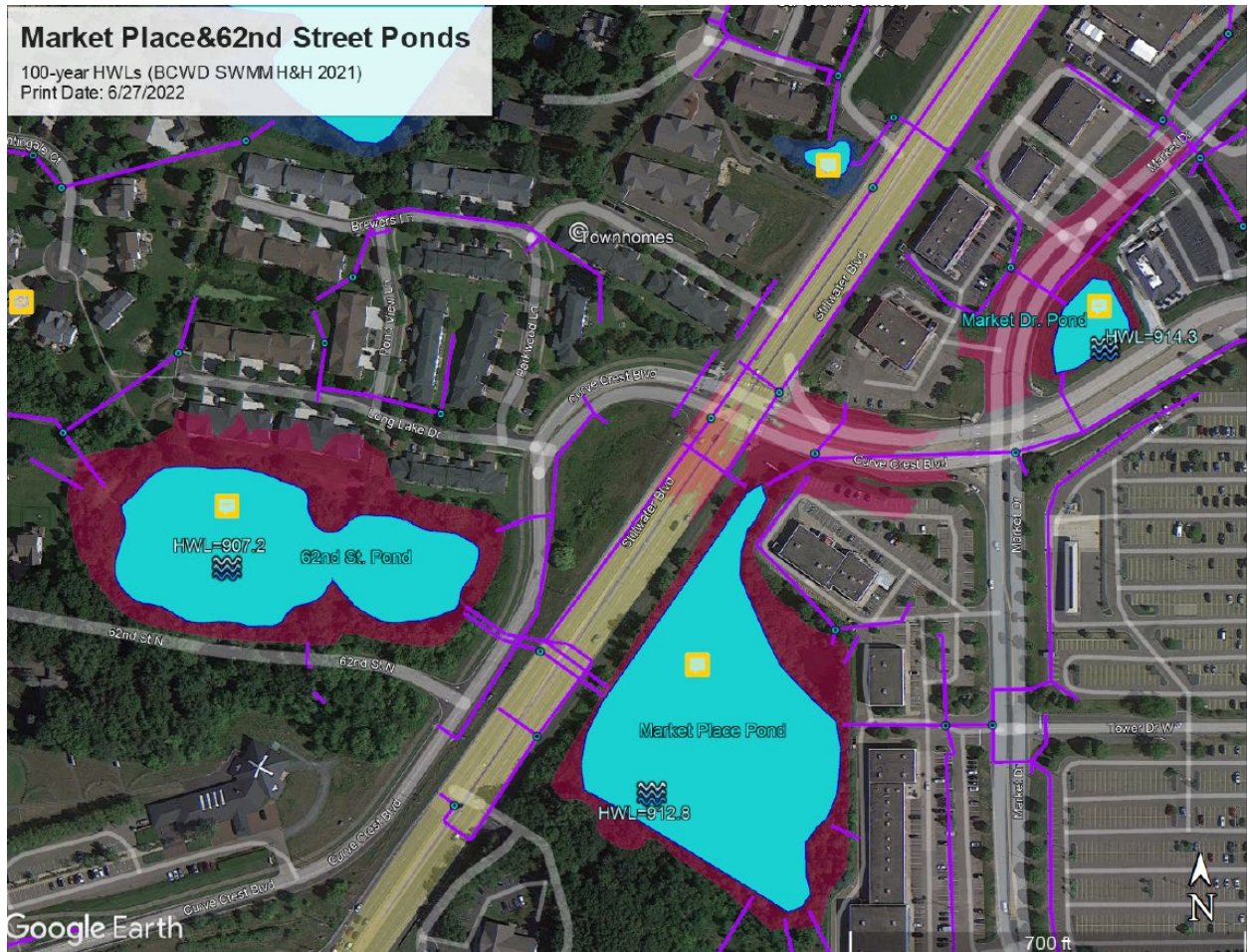


Figure 4: Locations of surface ponding around Marketplace and 62 Street Ponds (100-year return period event)

As shown in Figure 5, property ownership is distinguished as private and public by using parcel information from the City of Stillwater to better assemble the water reuse opportunities and quantity.

Date: 2023-03-31 17:35:17.558 Author: Bill Yu Layout: Parcel_ownership
 Document Path: C:\Users\BillYu\OneDrive - Emmons & Oliver Resources, Inc\Desktop\Projects\202208 - Marketplace Water Reuse\GIS\BCWD water reuse.ggz

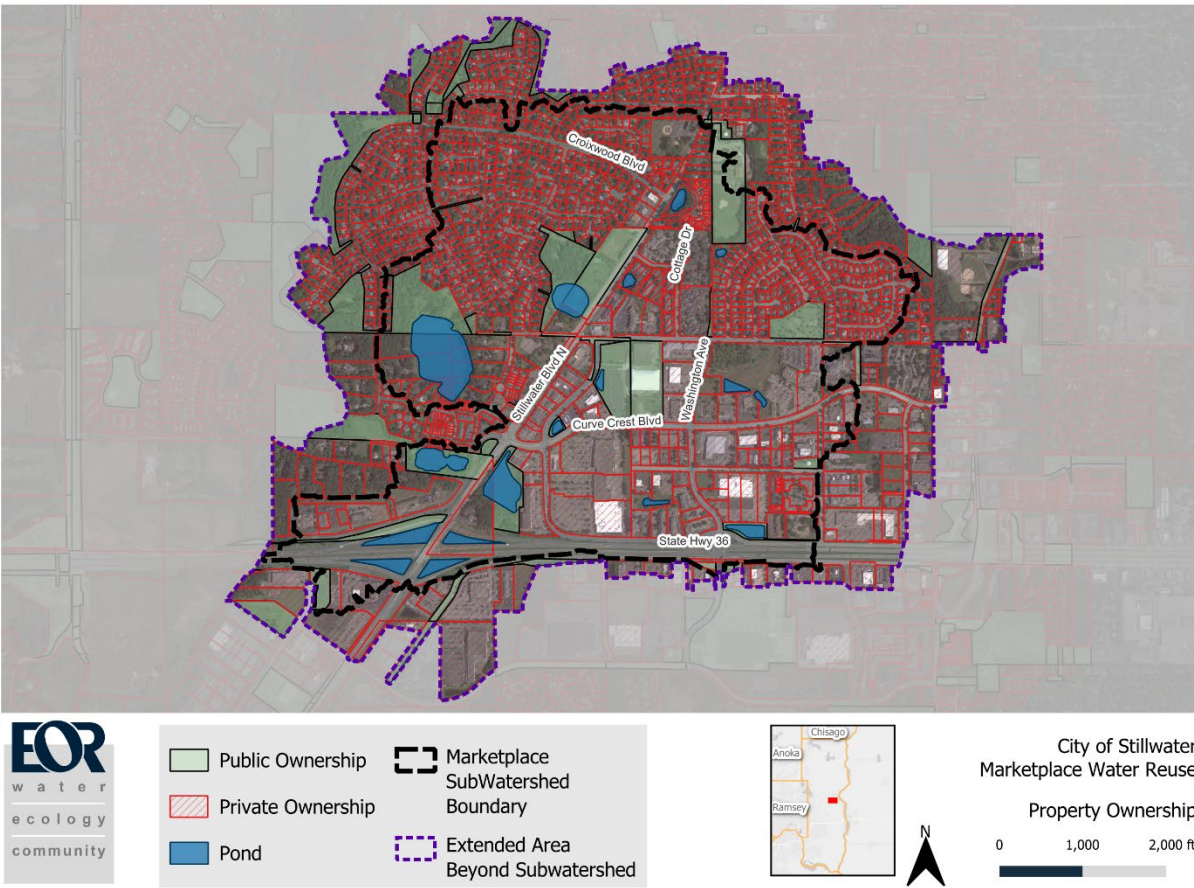


Figure 5. Marketplace Property Ownership

In 2015, a high-resolution (1-Meter) Land Cover Classification raster dataset was completed by University of Minnesota for the seven-county Twin Cities Metropolitan area, which we used in this project to estimate green space for irrigation in the Marketplace Area. A brief field investigation was conducted to review the accuracy of the open space layout depicted in the land cover raster and to investigate the irrigation opportunities for green space in the Marketplace area. Figure 6 shows the green space layout with various types of vegetation coverage (Grass/Shrub, Deciduous Tree Canopy, Coniferous Tree Canopy).

Date: 2023-03-31 11:34:44.458 Author: Bill Yu Layout: Greenspace
 Document Path: C:\Users\BYU\OneDrive - Emmons & Oliver Resources, Inc\Desktop\Projects\202208 - Marketplace Water Reuse\GIS\BCWD water reuse.ggz

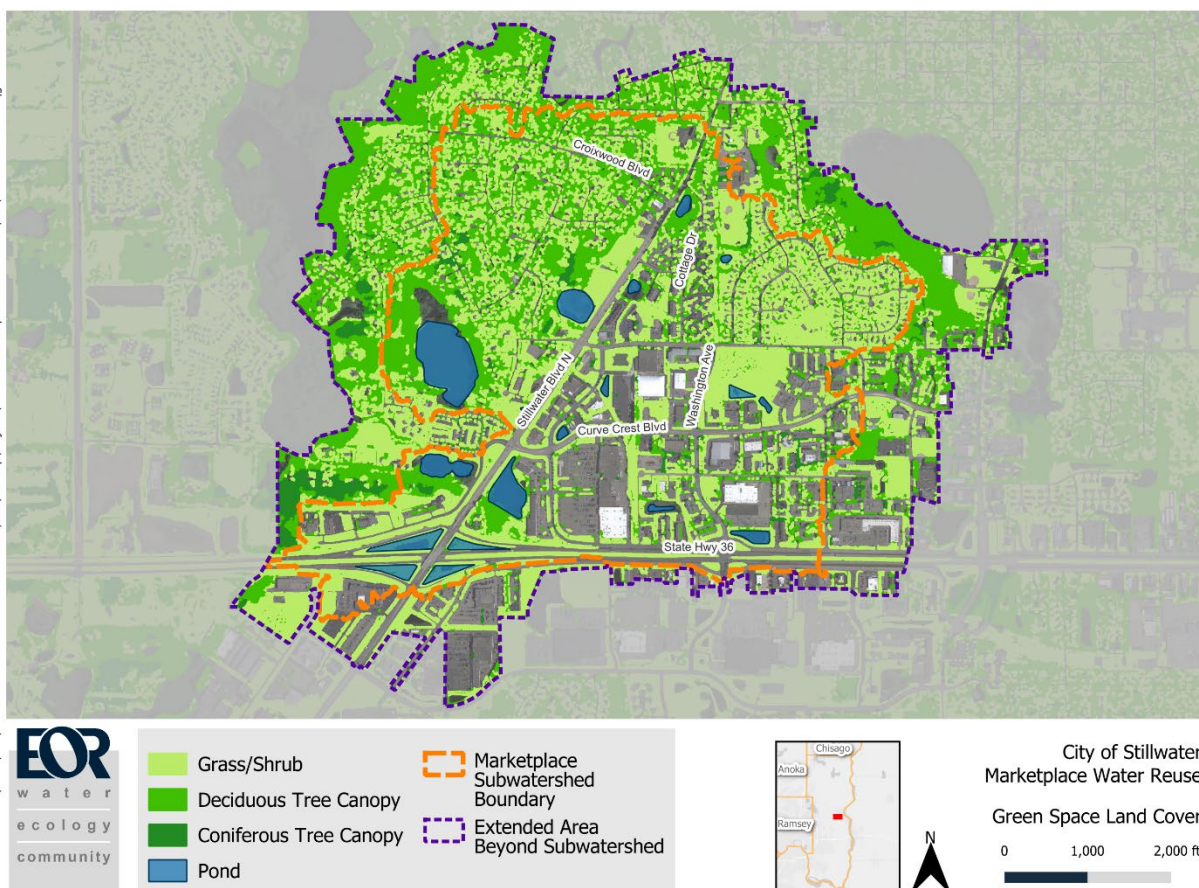


Figure 6. Green Space Land Cover in Marketplace Area

Runoff from the defined Marketplace Area in this study flows into the regional stormwater ponds and eventually goes into Long Lake to the west of the Marketplace area, as shown in Figure 7. According to EOR's recent flood risk assessment for Long Lake, the surrounding homes are at high risk of flooding due to increased precipitation intensity and frequency expected with climate change. The flow into Long Lake would be reduced and the flood damage would be mitigated by reducing runoff water volume from the upstream ponds.

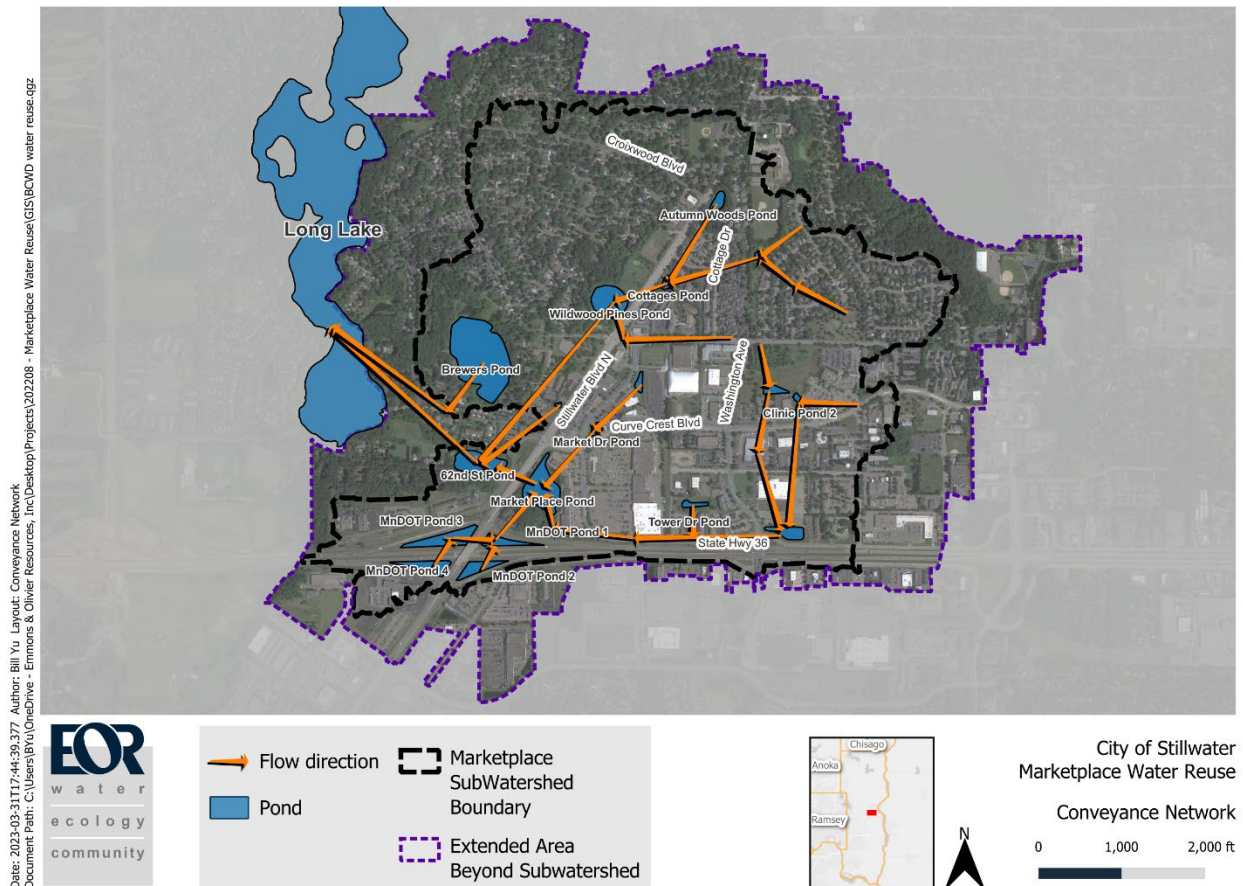


Figure 7. Pond and Pipe System Conveyance Network

Re-usable Water Resource

In 2020, EOR updated the BCWD's Hydrologic and Hydraulic (H&H) model, including catchment updates based on NOAA's Atlas 14 and updated LiDAR data released in 2014. As shown in Figure 2 a total of 18 ponding areas (including Brewers Pond) are considered as potential sources of water storage and reuse at this early stage, initial assessment. Each pond's available storage volume is assumed to be the volume between the normal water level and a maximum drawdown of 3 feet. The ponds' as-built drawings were reviewed to estimate the available storage volume, and DEM data was used to calculate the storage volume when no as-built drawings were available. When there is no information available for the pond and the DEM does not capture the topography below the normal water level, the side slope is assumed to be 3:1 with overall depth sufficient to allow a 3 foot drawdown to estimate the storage volume.

For purposes of reuse modeling, model configuration, and getting an overall understanding of the parameters and water balance, this analysis and reuse modeling uses aggregated storage and not individual basins. This provides an initial assessment of how the various reuse elements are balanced in the Marketplace sector: the water sources (runoff from development), the water storage (focusing on existing ponds, initially), and water end uses (green spaces for irrigation), It is beyond the scope of this initial assessment to optimize the layout, using certain districts and zones for irrigation. After this preliminary feasibility of determining if reuse can make a sizeable impact in the water budget of this urbanized sector, a next phase would include the task of looking at the details of how that could be happen, including logistical and cost issues to optimize the system.

Storage information is summarized in Table 1.

Table 1. Pond Available Storage Volume information

Pond	Storage (ft³)	Portion of Total Storage Volume (%)	Estimation Source	Storage Option
Brewers	1,605,050	47.9%	LiDAR	1, 2
62 nd St	389,710	11.6%	LiDAR	1, 2, 3
Market Place	372,740	11.1%	3:1 Side Slope Assumed	1, 2, 3
Wildwood Pines	369,000	11.0%	LiDAR	1, 2, 3
MnDOT 3	102,630	3.1%	As-Built Drawing	2
Clinic #2	89,180	2.7%	LiDAR	2
Washington Ave	84,130	2.5%	As-Built Drawing	2
Autumn Woods	75,110	2.2%	LiDAR	2
Clinic #1	56,160	1.7%	LiDAR	2
Tower Dr	52,630	1.6%	As-Built Drawing	
Rec Center	46,820	1.4%	LiDAR	
MnDOT 2	35,730	1.1%	As-Built Drawing	
Cottages	29,450	0.9%	3:1 Side Slope Assumed	
Benson or Highlands	22,560	0.7%	As-Built Drawing	
Parkwood In	9,980	0.3%	As-Built Drawing	
Market Dr	7,320	0.2%	3:1 Side Slope Assumed	

Given the costs of installing a pump station to lift water from a stormwater pond for reuse, using water from a pond with a large storage volume provides more cost-effective reuse opportunities.

Brewers Pond, 62nd St Pond, Market Place Pond, and Wildwood Pines Pond can each provide more than 10% of the total storage volume, for a total storage volume of 2,736,500 ft³ (81.7% of the total pond storage volume) These four ponds were considered as Storage Option 1. Four larger-sized pump stations will be required in this case.

MnDOT3 Pond, Clinic #1 Pond, Clinic #2 Pond, Washington Ave Pond, and Autumn Woods Pond all have 1.7% to 3.1% of the storage volume available in each pond, bringing the total storage volume of 3,143,700 ft³ (93.3% of total pond storage volume). These five ponds were added to the ponds in Storage Option 1 to create Storage Option 2. Clinic #1 Pond and Clinic #2 Pond could share a single pump station due to their close spatial proximity. As a result, four additional medium-sized pump stations will be required.

Brewer's Pond is a peaceful and picturesque nature feature in the heart of Stillwater, which is a popular spot for fishing, walking and hiking, wildlife viewing, boating and padding, and picnicking. The water levels in the Brewer's Pond could affect the recreational activities provided for the residents who live nearby. Therefore, in the third storage option, Brewer's Pond is removed resulting in a reduced total storage volume of 1,538,700 ft³ (46% of the total pond storage volume).

Stormwater Reuse Model and Irrigation Demand

EOR used a stormwater reuse model (Emmons & Olivier Resources Inc. 2013. Stormwater Harvesting: Accounting of Benefits and Feasibility. MWMO Watershed Bulletin 2013 - 3. 78 pp.) to assess the feasibility of stormwater capture and reuse for irrigation at the Marketplace Area. A harvest and reuse system analysis is based on a water balance, comparing the harvested water supply (surface runoff), the storage (ponding), along with the demand (irrigation) through time in order to determine how much stormwater volume can be diverted prior to ending up in Long Lake. The model used also accounts for rainfall timing such that irrigation is not applied directly after a rain on saturated soils. These three factors, water supply, water demand and storage, as they fluctuate through time based on actual rain records, are the key aspects determining the performance and effectiveness of any harvesting and reuse system. EOR collected data from multiple sources including the BCWD, City of Stillwater and State resources to characterize the three factors within the Stormwater Reuse Model.

- Water Supply/Source (Runoff)
 - Size of contributing watershed
 - Soils mapping and geotechnical investigation
 - Land use characteristics of watersheds

- Existing storm sewer infrastructure locations
- Precipitation records
- Water Demand
 - Existing public/private open space irrigation
 - Potential green streets locations
 - Irrigation depth estimate
 - Precipitation records (constraining when irrigation is applied)
 - Potential commercial/industrial non-potable use
- Storage Options
 - Topography
 - Existing stormwater ponds – nearby and on-site

In this feasibility study, several scenarios are modelled. The water demand is the primary factor determining the feasibility in each scenario and is characterized in Table 2, below. Each scenario is detailed in the following sections, with maps and graphics to illustrate the potential irrigation areas, and containing summary tables of the key parameters and system performance.

Table 2. Summary of Water Reuse Model Scenario - End Uses of Water

Scenario	Criteria
1	Existing and Potential (Green Street) Public Green Space Irrigation
2	Public, Green Street, and Prioritized Private Green Space Irrigation
3	Public and All Private Green Space & Green Street Irrigation
4	All Public and Private Green Space within the Extended Area & Green Street Irrigation
5	Scenario 3 Irrigation + Commercial Water Use
6	Prioritized Public and Private Green Space, Green Street Irrigation + Commercial Water Use

Scenario 1

In Scenario 1, irrigation of green space in public areas and within the road rights-of-way is assumed since these areas comprise the largest amount (75%) of green space the city owns and manages. As shown in Figure 8, the public parcels have 49 acres of green space and the roadside areas have 42 acres of irrigable green space.

In order to support a greener and more sustainable city, EOR proposes enhancing the green space within the right-of-way (ROW) to enable the areas to intercept more runoff and accept irrigation into features such as street trees, permeable pavements, rain gardens (bioretention), and swales. Incorporation of these types of features into the ROW is termed “Green streets” and provides a variety of benefits in terms of water management, economic, environmental, and social perspectives. Green streets protect water quality by filtering and treating runoff before it reaches surface water resources, reduce peak stormwater flows and reduce the total stormwater volume by retaining

additional water in soils and through vegetation uptake and evapotranspiration. Other benefits include replenishing groundwater supplies, absorbing carbon, improving air quality, reducing urban heat island effects, improving neighborhood aesthetics, and connecting parks and open space to the built environment. Figure 9 shows a minor arterial green street, recently designed by EOR, with built in storage within roadside tree trenches for irrigation after storm events. Figure 10 shows a typical green street design layout for commercial streets from the EPA's Green Street Conceptual Design Guide.

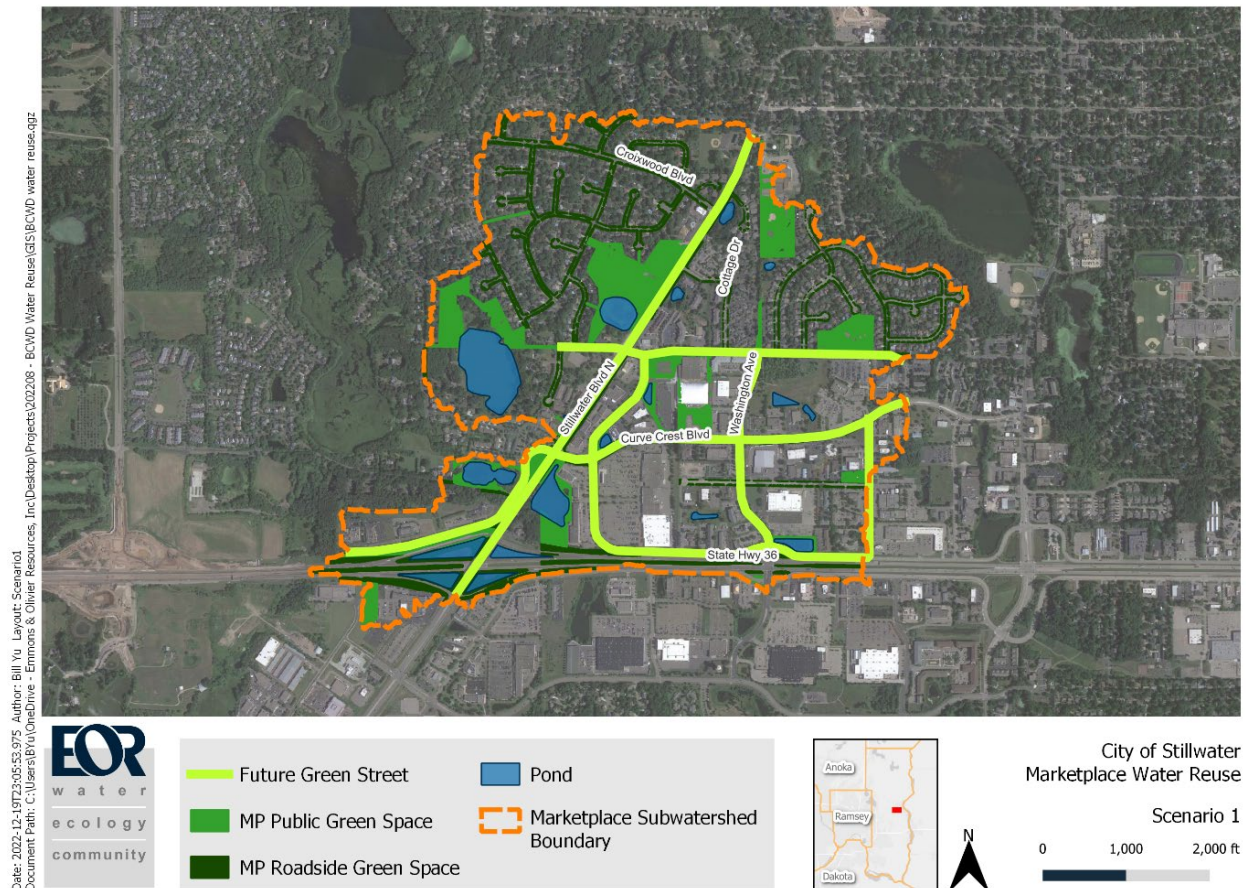


Figure 8. Green Space Cover for Irrigation – Scenario 1

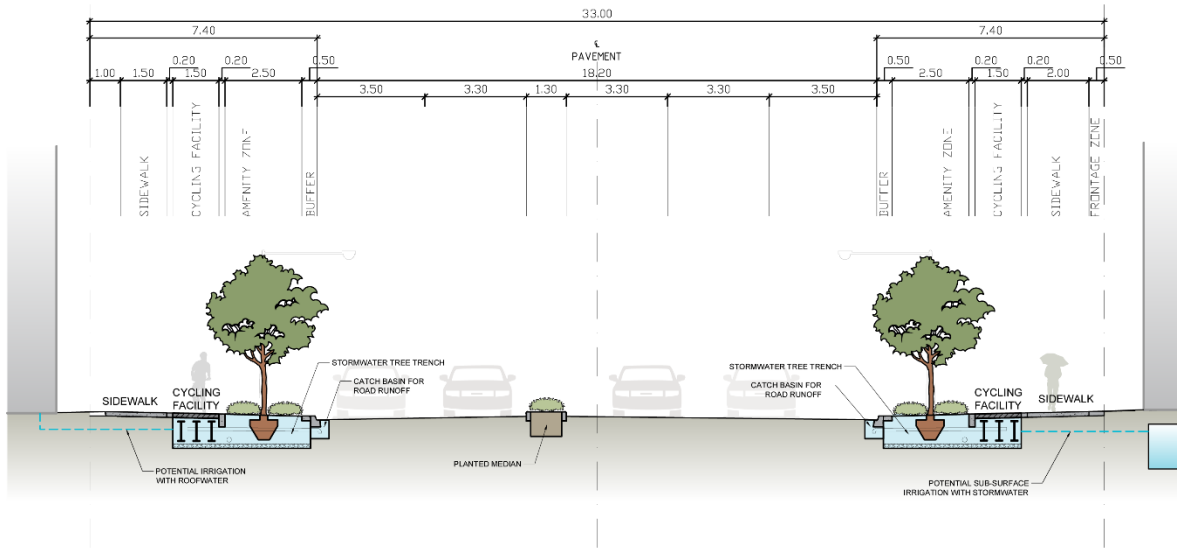


Figure 9. Minor Arterial Green Street Design with Tree Trenches

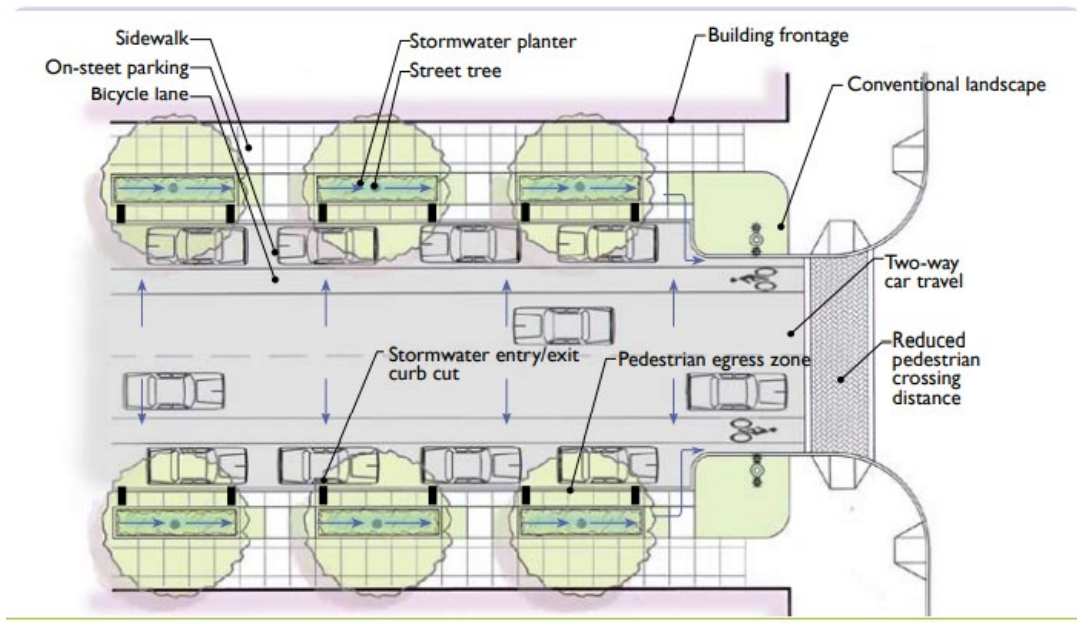


Figure 10. Green Street Conceptual Design for Commercial Streets (EPA, 2009)

Typically green streets and tree trenches are only treating the immediate drainage area that flows to it passively. This reuse application of green streets is going a step further to ensure the capacity of the system is maximized with the ability to bring in additional water stored from the last runoff event and use it up. The total length of proposed green street inside the Marketplace Area is 5.3 miles (27,900 ft), as illustrated in Figure 8. If tree trenches are proposed on both sides of the green street at 50-foot intervals, approximately 1000 trees will be planted within the green street redevelopment. According to Comprehensive Environmental Inc.'s Tree Canopy Stormwater Implementation & Outreach Program (2017), one medium size (12") tree intercepts 1,432 gallons of water per year, which is equivalent to irrigating 70 ft² green space at a rate of 0.8 inch per week. The water interception by 1000 trees is equivalent to irrigating 1.6 acres of green space. In this scenario, tree trenches have the potential to provide approximately 125,000 ft³ of underground storage volume assuming width and depth of 4 ft and 3.5 ft, respectively. This additional storage capacity in tree trenches was included in the storage of the scenarios including green streets to account for the additional capacity in a reuse configuration.

The Irrigation rate of turf was compared to common values used by irrigation contractors in the upper Midwest area. A local example of this is the Stillwater Country Club, where they use well water to irrigate about 75 acres of turf from May to October at a reported water conservation irrigation rate of 0.5 inches per week. To support a stormwater volume reduction objective rather than a source water conservation objective, the irrigation rate used commonly in the irrigation industry of 1.5 inches per week was used. In a stormwater volume reduction objective situation, occasional periods without water available for irrigation should not be seen as negative since the ability to irrigate is opportunistic rather than required. If needed, other sources of irrigation water, such as city water supply normally used, can be included as a backup or supplement..

Date: 2023-04-18T11:59:51.575 Author: Bill Yu Layout: Greenstreet_Layout
 Document Path: C:\Users\BillYu\OneDrive - Emmons & Oliver Resources, Inc\Desktop\Projects\202208 - Marketplace Water Reuse\GIS\BCWD water reuse.ggz

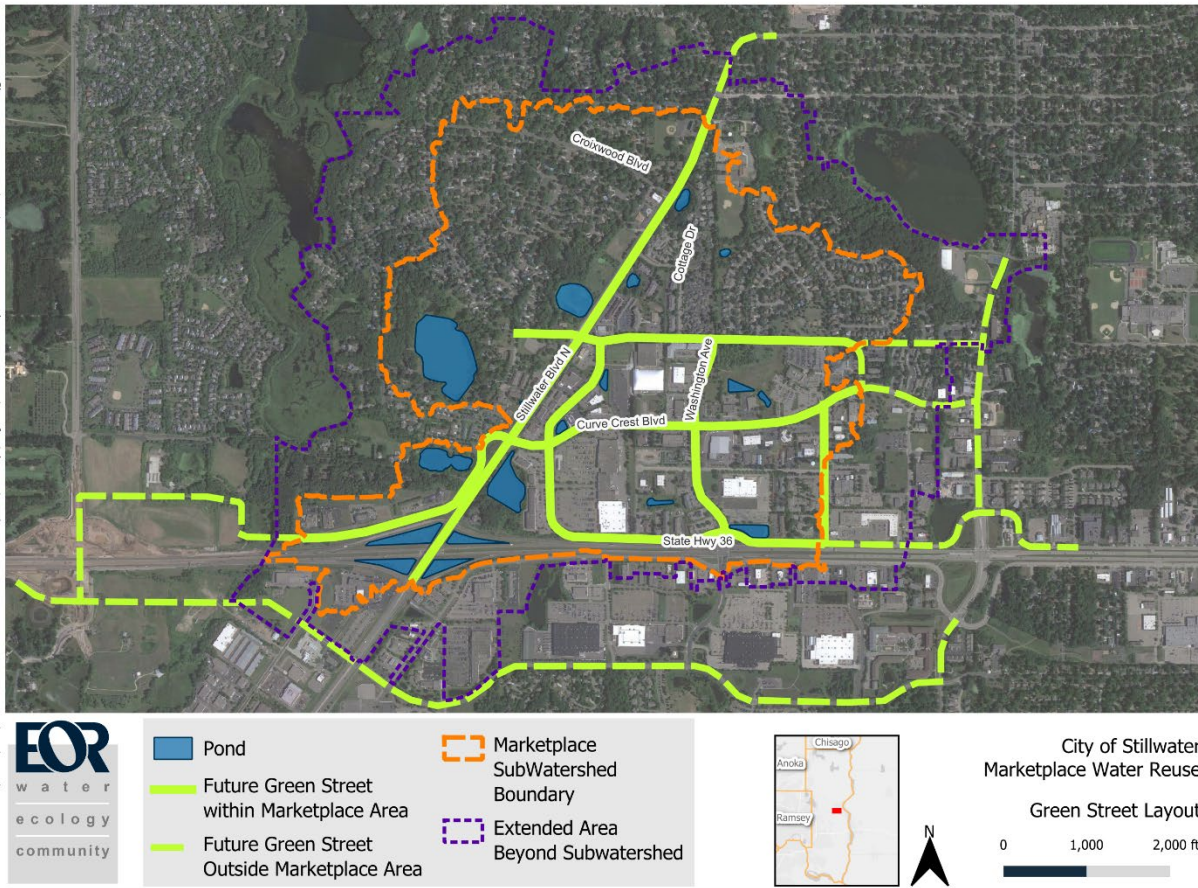


Figure 11. Future Green Street Development Conceptual Layout Plan

Scenario 2

According to information provided by the City, some private business owners in the marketplace area are currently using the public water supply for irrigation on their property. In Scenario 2, these commercial parcels are considered as prioritized private parcels, and their green space area is added to the irrigable area already assumed in Scenario 1. We assume that 75% of the prioritized green space will be irrigated with reuse water because these business owners are already using water supply for irrigation and will likely be willing to use reuse water as a substitute to save money without installing a new irrigation system. The assumption of 75% is intended to provide a net balance as some areas that currently irrigate may not be included in the data provided while some that are marked as irrigating may not irrigate their entire vegetated area. As shown in Figure 12, the prioritized green space has a total area of 48 acres.

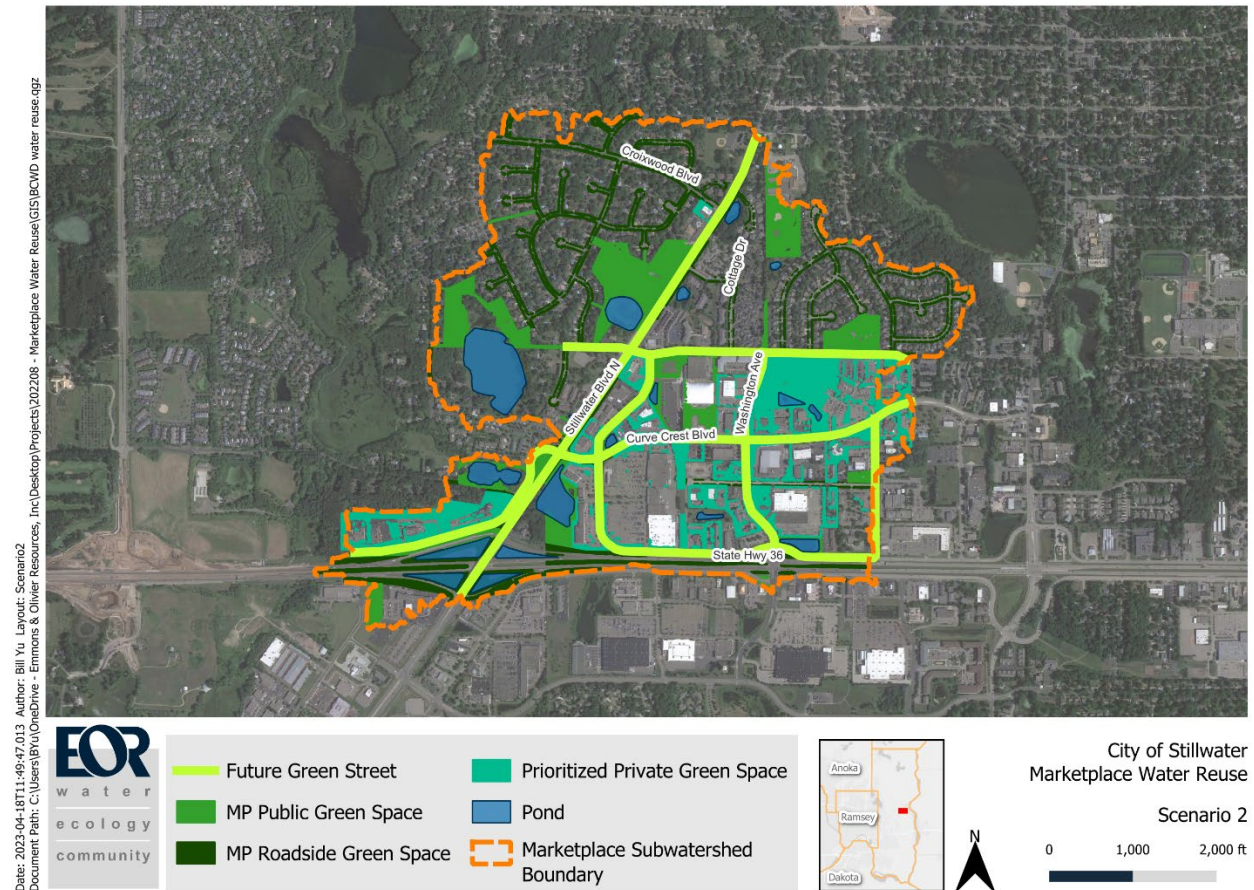


Figure 12. Green Space Cover for Irrigation – Scenario 2

Scenario 3

Scenario 3 assumes that 20% of all the remaining green space in the private parcels (except the prioritized private business included in Scenario 2 with 75% irrigated area) will be irrigated using reuse water. This approach would be realized if a public entity provided irrigation in lower density residential areas, which is not common (except Hugo, MN), but is possible. A low adoption rate of 20% is used because the majority of the additional parcels are single family residential parcels owned by many different people, who may not all have existing irrigation systems, and many others who do irrigate but may not want to switch sources. If a residential program were successful, this assumption may be overly conservative, and performance could be higher. Figure 13 shows the additional green space and yard, however in the model calculations only 20% of the green space in the remaining private land is assumed to use this irrigation source. This results in adding an additional 37 acres of irrigation area to the area assumed in Scenario 2.

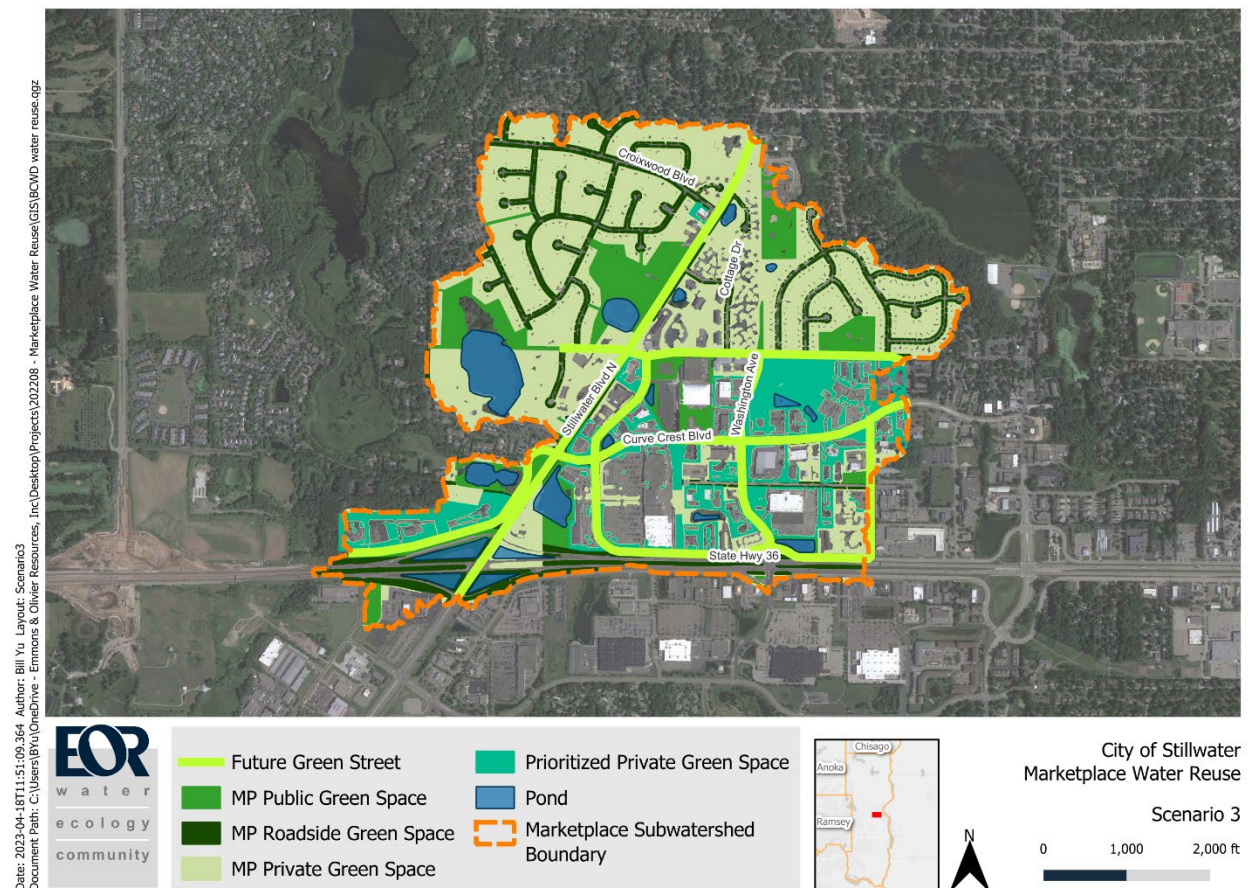


Figure 13. Green Space Cover for Irrigation – Scenario 3

Scenario 4

Scenario 4 adds some irrigation opportunities for the green space outside the Marketplace area to the irrigable area in Scenario 3. These other, extended areas are included in recognition that for pumped irrigation water, the subwatershed boundary is fairly arbitrary, and water could be delivered to appropriate adjacent green spaces. In this case, only 20% of the public and roadside green space and 10% of the private green space in the surrounding area are assumed to irrigate using reuse water as a conservative assumption. The green space (public, roadside, and private) in buffer area adds additional 31 acres of irrigation area, as shown in Figure 14. The irrigable areas from Scenario 3 remain the same, and this extended area is added to the total irrigable area.

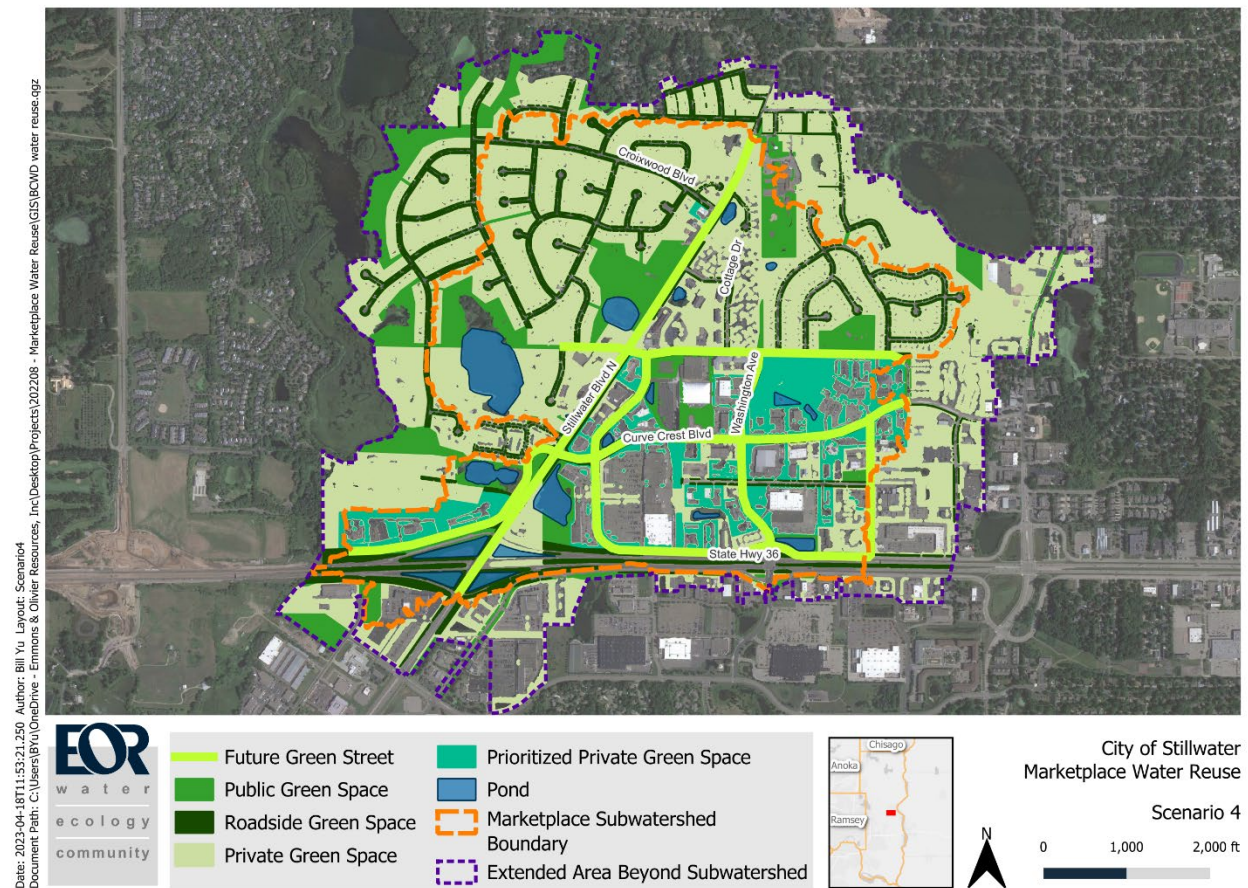


Figure 14. Green Space Cover for Irrigation – Scenario 4

Scenario 5

In this scenario, continuous commercial water use is considered on top of the Scenario 3 demands. One advantage of this is being able to use water even in the season changing “shoulder months” when irrigation demand may be less. An evaluation of the commercial businesses operating in the Marketplace Area identified the following list of non-potable water demands with high potential opportunities for water reuse:

- Car wash
- Nursery with potted plants
- Hotels – laundry
- Fitness center – laundry, facility cleaning
- Brewery – processing/wash water

Two car washes are located in the area, the Holiday Station Stores Car Wash, which has one tunnel; and the Marketplace Car Wash, which has four tunnels. Assuming each tunnel serves 50 cars per day and each car wash uses 120 gallons of water, for a total daily water consumption of 30,000 gallons for the car wash business (Carl Black Chevrolet Buick GMC Orlando, 2020).

A 3,000 ft² greenhouse with 2,400 ft² of plants requires a peak use rate of 720 to 960 gallons per day, according to a Greenhouse Water System study conducted by John W. Bartok in 2009. Abrahamson Nurseries has a 4,000 ft² greenhouse with approximately 3,000 ft² of plants, requiring an average of 1,000 gallons of water per day.

Four hotels are in the Marketplace area, Country Inn & Suites By Radisson, Coratel Inn & Suites By Jasper, GranStay Hotel & Suites Stillwater, and Americas Best Value Inn Stillwater. According to Colorado Waterwise's Water Savings Analysis for St. Regis Resort, an average hotel uses 100 gallons per day/room. Because we are unable to count the number of rooms in these hotels, we conservatively assume that each hotel has 20 rooms based on the footprint area, which estimates 8,000 gallons of water usage per day for on-site laundry at the hotels.

According to a case study for the Longfellow Clubs, a Boston group of seven sports facilities, the Marketplace area has eight fitness centers that require 5,000 gallons of water per day for cleaning and laundry (CleanLink, 2014).

There is one brewing company in the Marketplace area, which is the Lift Bridge Brewing Company. In 2018, a news article written by Kavita Kumar indicated that the Lift Bridge Brewing Company is expected to produce 27,000 barrels in that year and more in the future. In this case, we assume the

Lift Bridge Brewing Company can produce 30,000 barrels on average now, which is 1,274 gallons of beer per day. According to the article "Water Usage in Breweries" in Brewer World, one liter of beer requires 2.1 liter of process water, 1 liter of general-purpose water, and 0.2 liters of service water. In this case, the Lift Bridge Brewing Company could use 4,200 gallons of reuse water per day for the brewer processing. The total daily demand from these commercial sources is 48,200 gallons.

Scenario 6

Commercial areas have a higher demand for water for continuous use and irrigation. With an existing irrigation system in the commercial area, the resistance to implementing a new irrigation system or retrofitting the current irrigation system's connection to the new irrigation system is considered lower for commercial landowners than for residential landowners. Commercial area and public area are more centralized in the downstream area, which is closer to the ponds that provide the supply for water reuse. The commercial and public areas are more centralized in the downstream area, which is closer to the ponds that supply water for reuse. Meanwhile, the residential area is located upstream of the Marketplace subwatershed, which has a higher cost of delivering reuse water as well as a significant barrier and uncertainty regarding residential landowners' willingness to install an irrigation system. The uncertainty is more of an issue for single family neighborhoods than for multi-family housing, which has common ownership & and maintenance of green spaces and past successful applications of reuse.

In this scenario, water reuse and irrigation are prioritized to the central commercial area in order to achieve higher water reuse efficiency, as shown in Figure 15. By not including the multi-family housing in the estimates, it is a conservative analysis. More capacity may be gained if these multi-family residential areas were added.

Date: 2023-04-18T11:57:24.096 Author: Bill Yu Layout: Scenario6
 Document Path: C:\Users\B\OneDrive - Emmons & Oliver Resources, Inc\Desktop\Projects\202208 - Marketplace Water Reuse\GIS\BCWD water reuse.ggz

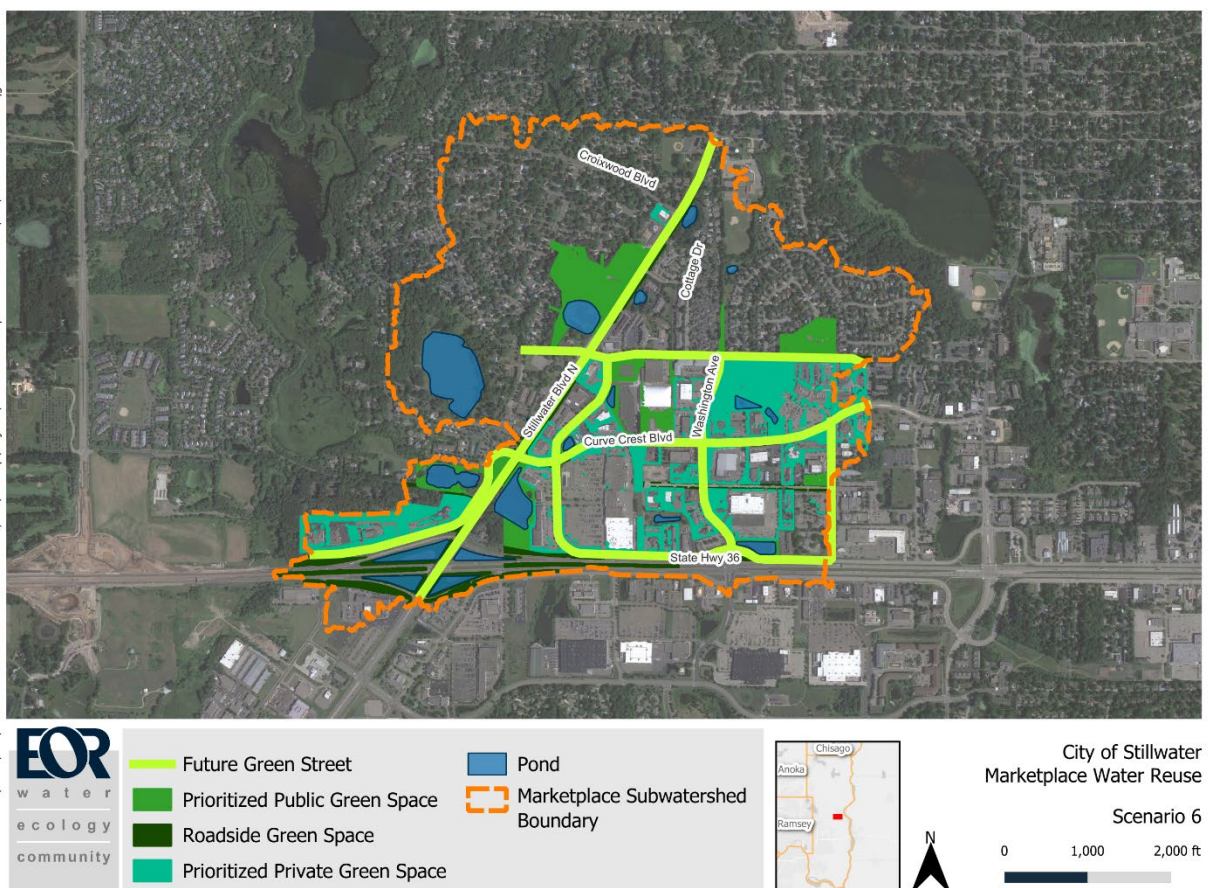


Figure 15. Green Space Cover for Irrigation – Scenario 6

Results

Table 3 summarizes the reuse model results for all scenarios and storage options, and Figure 16 - Figure 21 illustrate the annual dynamics of the combined pond storage volumes. When compared to Storage Option 1, the additional storage provided by the 5 ponds in Storage Option 2 slightly increases the flow reduction to Long Lake by between 1%-5% in all scenarios. If larger storage areas such as Brewer’s Pond are available, then the benefits of additional storage volume provided by these 5 ponds is not significant. There is also the logistics of managing the outflow from additional ponds, either with additional 4 pumps stations or valves. If larger storage areas like Brewer’s Pond are not feasible, then these storage areas may become more important.

As the irrigation area increases from 70 acres in Scenario 1 to 174 acres in Scenario 4, the annual flow to Long Lake is reduced by 32.5% in Storage Option 1 to 50.9% in Scenario 4, showing that adding end uses/irrigation area is effective at increasing volume reductions. Scenario 5 adds continuous commercial water reuse to the irrigation use in Scenario 3, resulting in an additional 11%

reduction in flow to Long Lake. In Scenario 6, reducing the irrigation area from 143 acres to the prioritized 79 acres increases flows to Long Lake over Scenario 5, reducing infrastructure, while still providing approximately a 45% annual flow reduction. Meanwhile, because irrigation is only focused on the prioritized area, the cost and difficulty of installing new irrigation is significantly reduced. In Scenarios 5 and 6, Storage Option 1 reduces annual flow to Long Lake by approximately 58% (10.7 million ft³) and 47% (8.7 million ft³) respectively, compared to current average annual flows.

Storage Option 3 excludes Brewer's Pond, which is the largest in size and potentially has the most storage volume. Scenarios 1-4 still result in a considerable 33% to 46% annual flow reduction. The drainage area contributing to Brewer's Pond (53 ac) was removed from the estimation of annual runoff volume. The annual flow reduction with commercial water reuse, as estimated in Scenarios 5 and 6 is 52% and 45%, respectively.

Irrigation Scenario	Storage Option	Summary	Drainage Area (acres)	Irrigation Area (acres)	From the Watershed (ft ³ /year)	To Overflow	To Irrigation	To Evaporation	To Continuous Use	Total Reuse
Existing	1	Existing Condition	648	0	18,550,204	77%	0%	17%	0%	0%
	2		648		18,550,204	75%	0%	17%	0%	0%
	3		595		17,027,225	86%	0%	10%	0%	0%
1	1	Green Street + Marketplace Public Green Space	648	70	18,550,204	44%	36%	17%	0%	36%
	2		648		18,550,204	42%	37%	17%	0%	37%
	3		595		17,027,225	55%	33%	10%	0%	33%
2	1	Green Street + Marketplace Public and Prioritized Private Green Space	648	106	18,550,204	36%	44%	17%	0%	44%
	2		648		18,550,204	33%	47%	17%	0%	47%
	3		595		17,027,225	48%	40%	10%	0%	40%
3	1	Green Street + Marketplace Public and All Private Green Space	648	143	18,550,204	29%	51%	17%	0%	51%
	2		648		18,550,204	26%	54%	17%	0%	54%
	3		595		17,027,225	44%	44%	10%	0%	44%
4	1	Green Street + Public and Private Green Space Within Buffer Boundary	648	174	18,550,204	26%	55%	17%	0%	55%
	2		648		18,550,204	21%	59%	17%	0%	59%
	3		595		17,027,225	42%	46%	10%	0%	46%
5	1	Scenario 3 + Commercial Water Usage	648	143	18,550,204	24%	47%	17%	11%	58%
	2		648		18,550,204	21%	50%	17%	11%	61%
	3		595		17,027,225	38%	41%	10%	11%	52%
6	1	Prioritized Public and Private Green Space + Commercial Water Usage	648	79	18,550,204	36%	35%	17%	12%	47%
	2		648		18,550,204	33%	37%	17%	12%	49%
	3		595		17,027,225	45%	33%	10%	13%	45%

Table 3. Summarized Reuse Model Results for all scenarios and storage options

Scenario 1

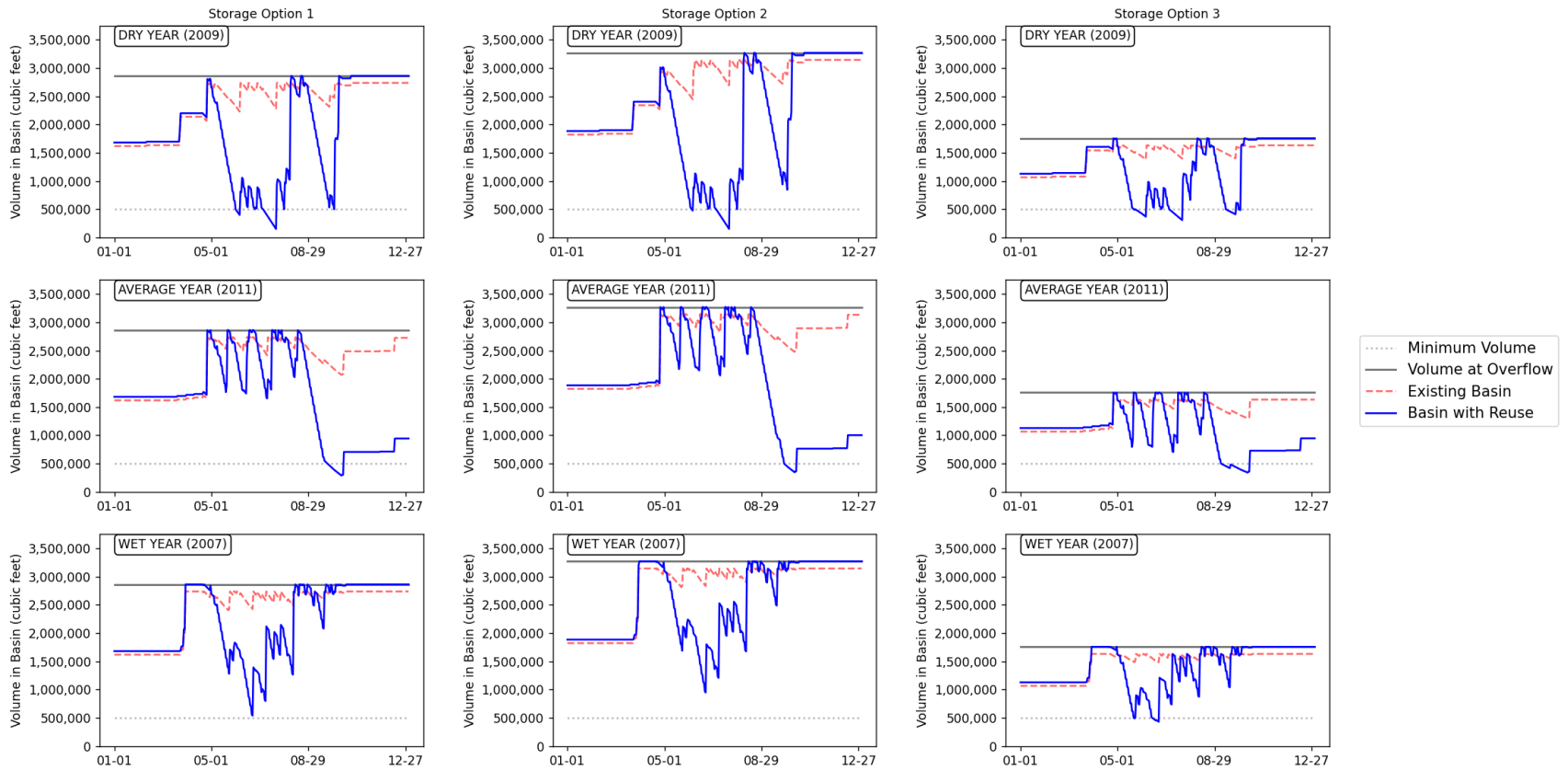


Figure 16. Annual Basin Dynamics – Scenario 1

Scenario2

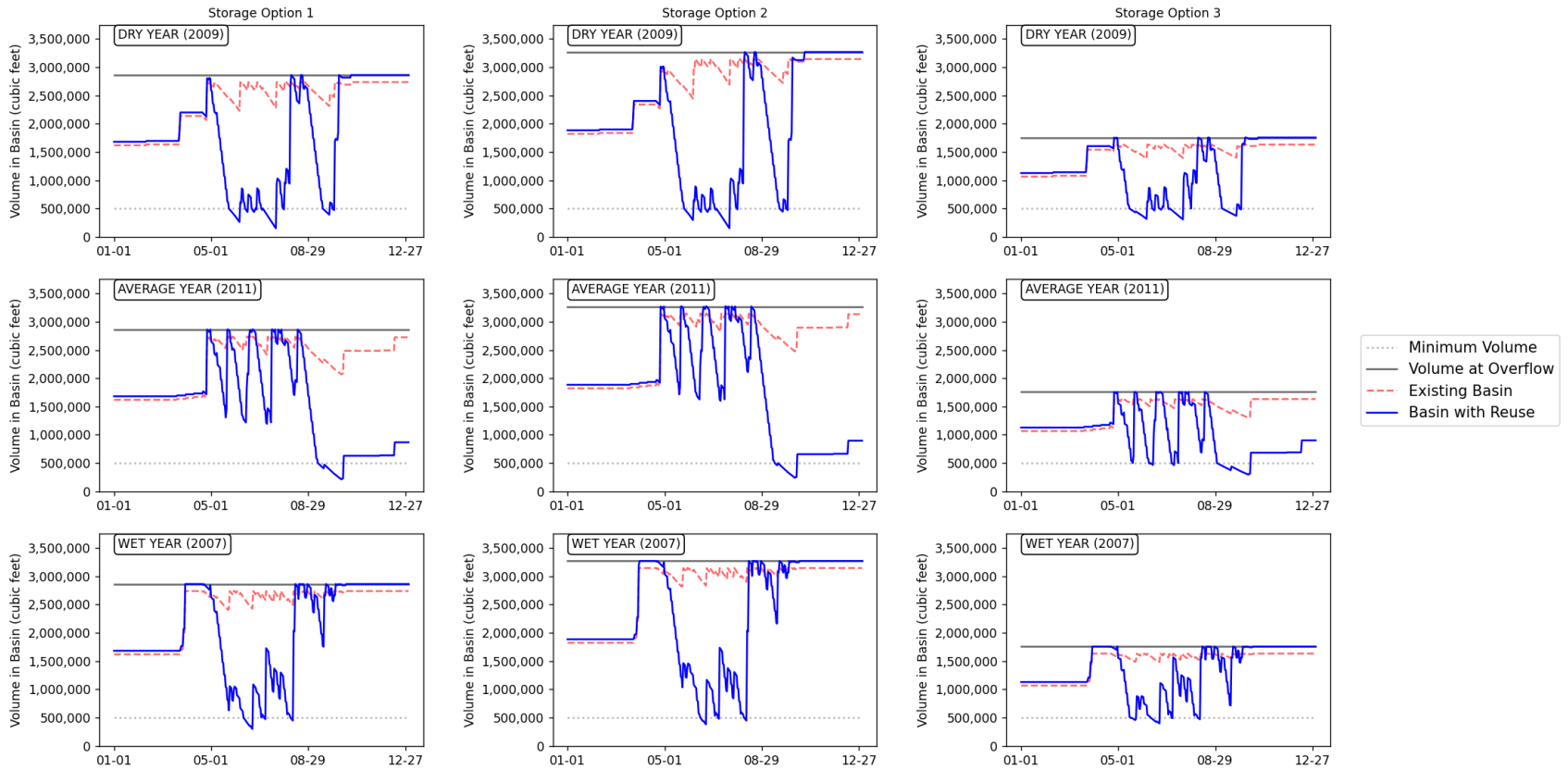


Figure 17. Annual Basin Dynamics – Scenario 2

Scenario3

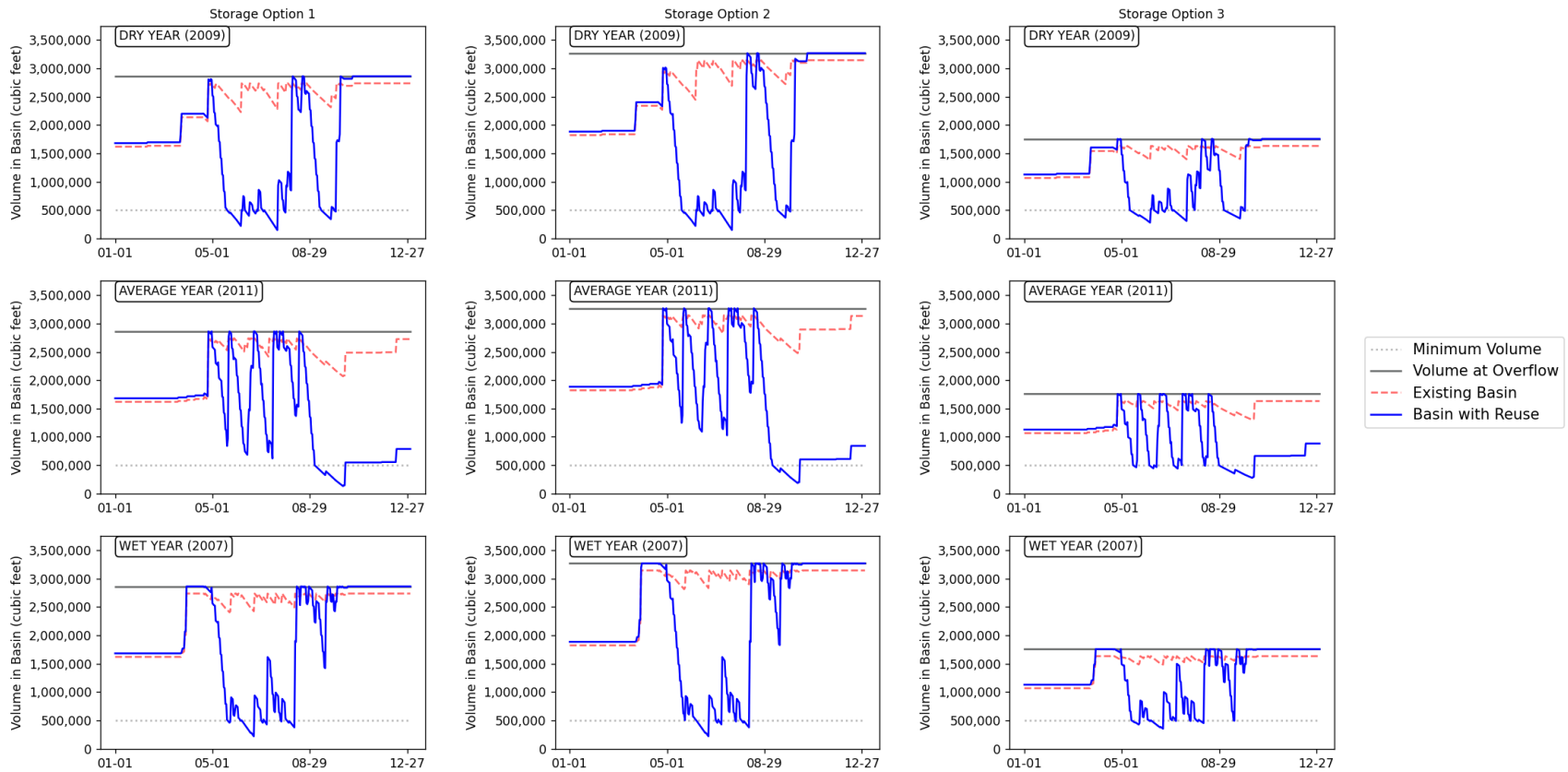


Figure 18. Annual Basin Dynamics – Scenario 3

Scenario4

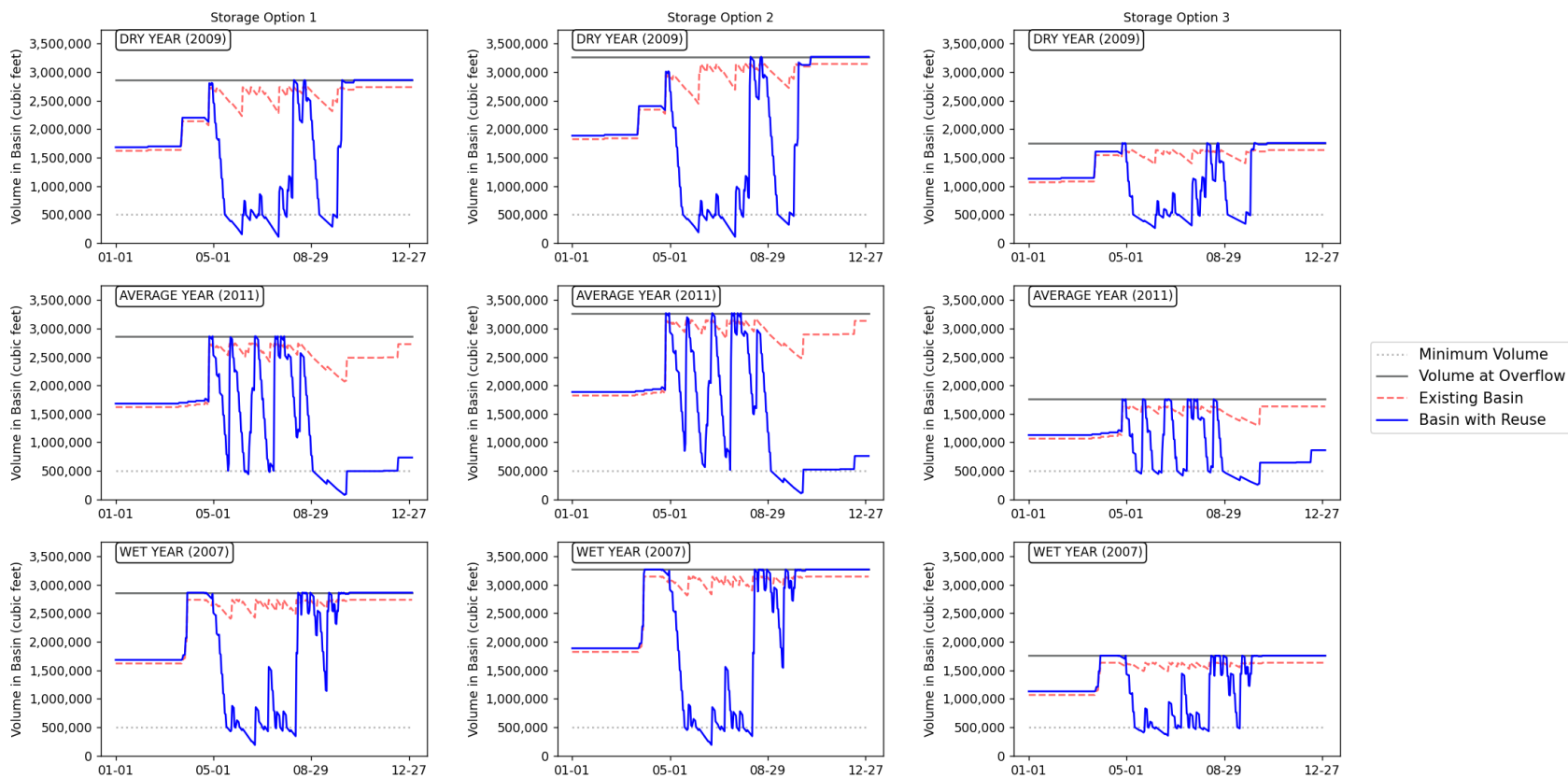


Figure 19. Annual Basin Dynamics – Scenario 4

Scenario5

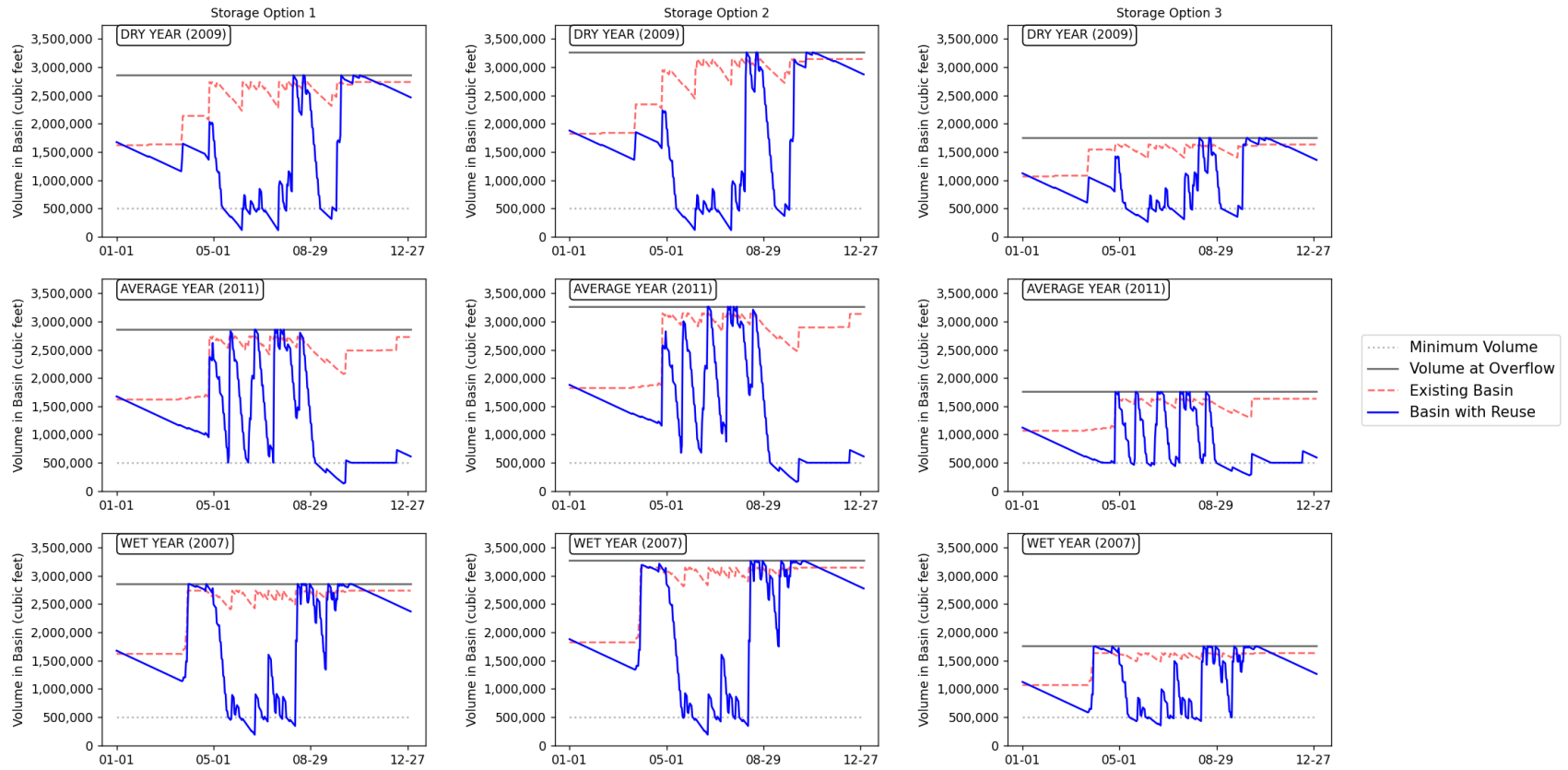


Figure 20. Annual Basin Dynamics - Scenario 5

Scenario6

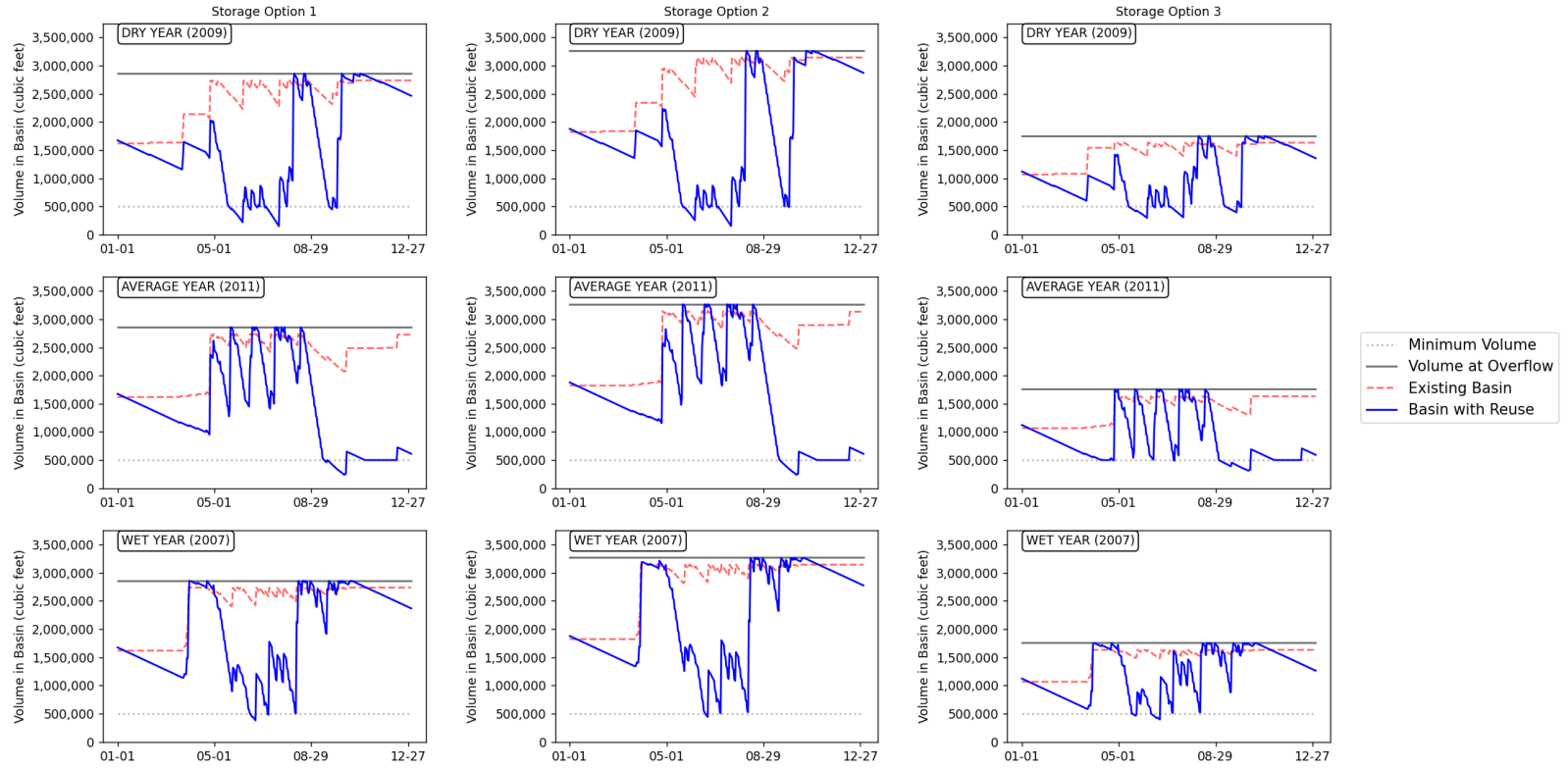


Figure 21. Annual Basin Dynamics – Scenario 6

Irrigation System Layout

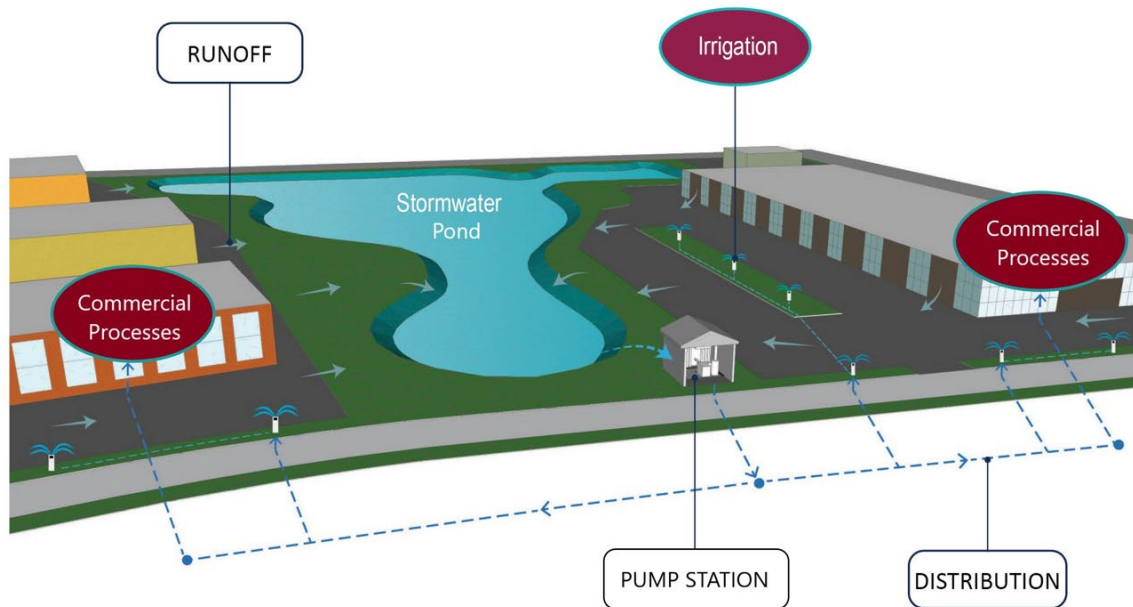


Figure 22. Stormwater Pond Water Reuse Concept Diagram

As shown in Figure 22, the pump station lifts water from the stormwater pond and transports it through the distribution line to the commercial process or irrigation. To manage the reuse water flow, each pump station has its own zone and distribution line system, as well as shut-off valves and a controller. Common non-potable water uses in commercial processes may require minimal treatment to reach usable water quality. For situations that require treatment, it will likely involve filtering and UV lamps to prevent biofouling and kill pathogens. UV treatment systems for large commercial-scale sites cost between \$140,000 and \$230,000 (Rainfresh Commercial 2021).

Cost Estimate

Based on the information provided, it appears that Storage Option 1 and Storage Option 3 are the most cost-effective options for the source of water reuse depending on whether storage water in Brewer's Pond is restricted for water reuse, and a conceptual plan has been developed to convey reuse water to irrigate the green space throughout the Marketplace Area. This plan includes pump station locations and a distribution line system layout, but details such as pump sizes and service areas have not been determined. Conceptually the entire district could be centralized with final distribution from the larger storage area and supplied throughout the area, but likewise, it may be

more feasible and practical to set up some districts either for phasing purposes and/or piping infrastructure efficiencies. The districtwide vs. sub area system layout should be examined further in future phases.

It is important to note that while Storage Option 2 may provide additional water supply and reduce flow volume to Long Lake, the cost of building at least 4 more pump stations are likely to outweigh these benefits. To realize the added volume of Storage Option 2 in a more cost-effective way, there may be opportunities to reduce the number of pump stations by modifying the outlet elevation of the upstream ponds and adding a smart valve to control the release of water to downstream ponds. By lowering the outlet elevation and controlling the water release, the need for some of the pump stations may be eliminated, resulting in potential cost savings. It is important to recognize that implementing these control modifications would require more detailed design and construction, which would incur additional costs. Therefore, the feasibility and cost-effectiveness of these control option modifications would need to be carefully evaluated.

Overall, the conceptual plan for Storage Option 3 is presented in Figure 23, which provides a starting point for conveying reuse water to irrigate green spaces in the Marketplace Area. Further planning and design will be necessary to determine specific details such as pump sizes and service areas.

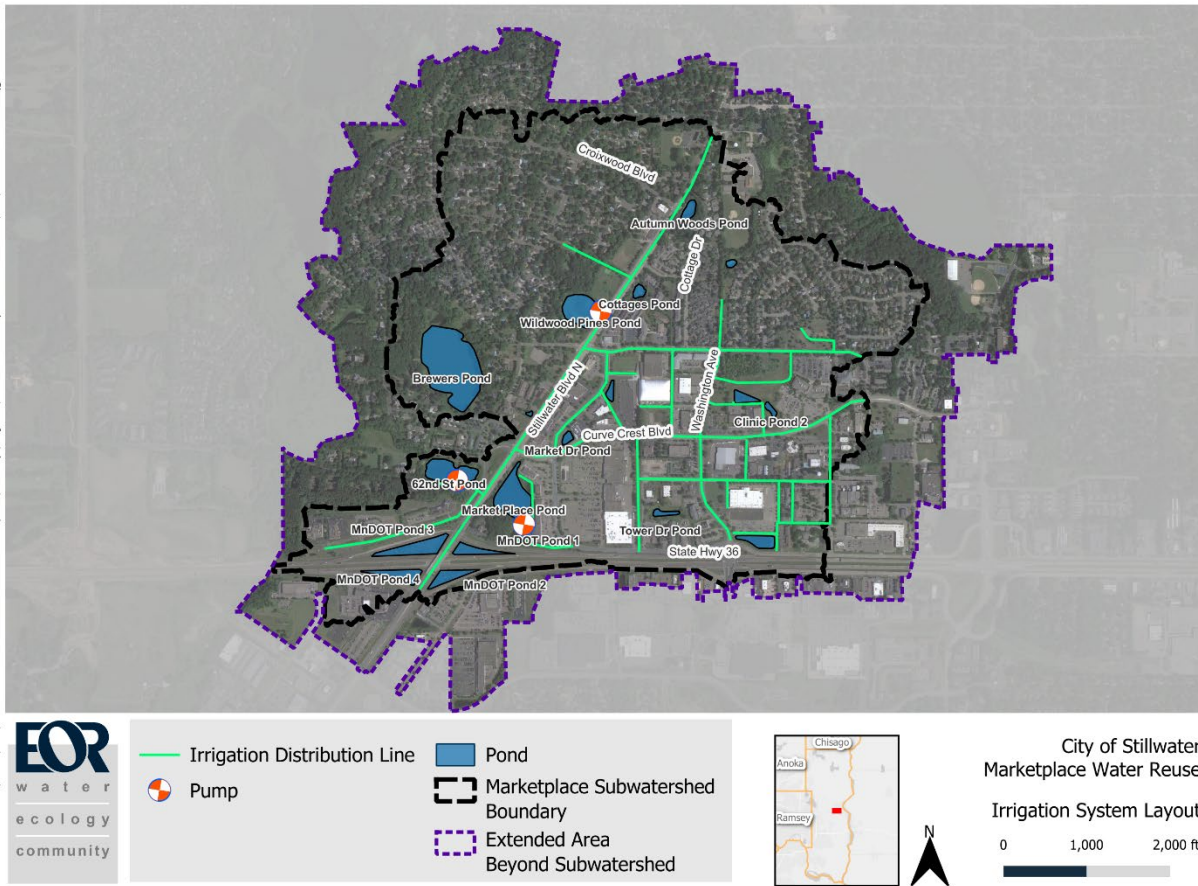


Figure 23. Marketplace Irrigation Distribution System Conceptual Layout Plan, Storage Option 3

As illustrated in Figure 23, the irrigation system distribution piping is proposed to cover the public space, and commercial/industrial users. Ideally, the City will be able to generate buy-in from the majority of property owners in a specific neighborhood or on a specific route or street and bring the treated stormwater to areas with demand while saving costs by not servicing areas with less support or commitment to tie into it. Broad distribution of treated stormwater throughout residential neighborhoods with an assumed uptake of 20% seems reasonable, but also presents challenges. The irrigation would need to be strategic, since putting piping in all residential neighborhoods for only a 20% hookup would appear cost prohibitive. For this reason, extension into the residential areas is not included. One priority to examine in the future would be to connect to multi-family properties, since these have one/common ownership, shared open space maintenance, and often have existing irrigation present. The estimated cost for the irrigation system within the Marketplace commercial area (Scenario 6) is \$5,376,000 (Storage Option 1) and the cost reduces to \$4,776,000 (Storage Option 3) when Brewer’s Pond is removed from the evaluation (see Table 4). The cost estimate is

based on the average manufacturers' bidding price from previous water reuse projects EOR designed in the City of Stillwater and does not include minor items (e.g. valves, irrigation heads, etc.). The other projects used for source cost data included irrigation and pumps for large water users with high delivery demands, namely golf courses. The pump requirements for smaller scale, residential settings may not require the same delivery capacities, and thus may be less expensive systems than assumed here.

Table 4. Cost Estimate of Irrigation System for Scenario 6

Item	Quantity		Unit Price	Sum	
	Storage Option 1 with Brewer's Pond	Storage Option 3 w/o Brewer's Pond		Storage Option 1 with Brewer's Pond	Storage Option 3 w/o Brewer's Pond
Pump Station Package	4 EA	3 EA	\$400,000	\$1,600,000	\$1,200,000
Distribution Line	40,000 ft	38,000 ft	\$70	\$2,800,000	\$2,660,000
Irrigation Pipe	79 acres	79 acres	\$4,000	\$316,000	\$316,000
UV treatment	4 EA	3 EA	\$200,000	\$800,000	\$600,000
Total:				\$5,516,000	\$4,776,000

Conclusion

The six scenarios for stormwater capture and reuse detailed in this memo were developed first with the highest potential water reuse opportunities and new use opportunities were added in each subsequent scenario. Further analysis of the available storage and confirmed end uses, such as using the District detailed H&H model, would be needed to quantify the benefits, but the relatively large size of the reduction, often exceeding 50% volume reductions, warrants further investigation into what benefits downstream could be realized.

Annual Runoff Volume **Reductions** to Long Lake Range from 33% - 69%:

- Smallest Scale = **33%**
 - Scenario 1, Storage Option 3
 - Irrigation of only Public (Parks and Rd ROW) - 70 Ac.
 - Lessor Storage (3 Storm Ponds, w/out Brewer's Pond)
- Moderate Scale = **51%**
 - Scenario 3, Storage Option 1
 - Irrigation of Some Public (Parks and Rd ROW) and Private – 143 Ac.
 - Larger Storage (9 Storm Ponds, including Brewer's Pond)
- Larger Scale = **69%**
 - Scenarios 4 + Commercial Water Use (Scenarios 5 & 6), Storage Option 1
 - Irrigation of Public and Private Open Spaces in Extended Area – 174 Ac.
 - Commercial Water Use
 - Larger Storage (9 Storm Ponds, including Brewer's Pond)
- Optimized & Scaled Scenario = **45%**
 - Scenario 6, Storage Option 3
 - Irrigation of Prioritized Public and Private – 79 Ac.
 - Lessor Storage (3 Storm Ponds, w/out Brewer's Pond)

It is worth noting that these scenarios were developed using existing storage ponds as currently configured in the study area. If new storage were created, either through new development/redevelopment of ponds and tanks, modifying the existing pond outlets to optimize storage, or district/city-led project(s) to create storage, the performance could be improved and the added reductions from using challenging, larger basins like Brewer's Pond would be unnecessary.

One main driver and tangible consideration for the reconfigured Market Place district stormwater system and utilization of this new stormwater reuse approach, are the existing risks of flooding on Long Lake. No detailed analysis or H&H analysis of how reuse could benefit flooding on Long Lake was performed in this preliminary analysis. Using past models of the area, based on order of magnitude volumes involved, it does appear promising that reuse could provide some benefit by reducing the Long Lake flooding and is worth examining further to better quantify.

- ▶ Long Lk flood reductions from earlier modelling – Simplified reduction estimates:
 - ▶ 100-year water level rise on Long Lake = 5.1 feet
 - ▶ Market Place HWL depth contribution (all runoff removed) = 24% (1.2 feet)
 - ▶ If reuse provides 50% volume reduction = ~ 0.6 feet
 - ▶ Reduced volumes could lead to less frequent and shorter duration flooding
- ▶ Local flooding of streets and private lots could also benefit

If this approach were to be extended to the other three areas or quadrants along the Hwy 36 corridor (see Fig. 1), as has been discussed at previous Board meetings, the benefits could be significant.

Flooding concerns that could be mitigated through reuse not only occur regionally on Long Lake, but also locally. The updated BCWD SWMM H&H model in 2021 reveals that the roads and parking lots near Washington Ave. Pond, Wildwood pond, 62nd St. Pond, Market Place Pond, and Market Dr. Pond will experience overland flooding based on 100-year HWL footprint. However, implementing water reuse opportunities has the potential to reduce the HWLs. A reduction in HWLs is possible since the ponds are planned to be drawn down by 3 feet for reuse, freeing up storage for runoff during storm events and mitigating the anticipated overland flooding in these areas.

There are a host of co-benefits to a reuse approach that should also be considered. The substantial water quality benefits realized through projects that use stormwater for irrigation are achieved by reducing the amount of stormwater runoff that flows out of a watershed, and keeping all the nutrients, solid and dissolved, that cause lake algae blooms out of the lake. The water can be captured and distributed over a vegetated surface through irrigation. This reclaimed water evaporates during irrigation, evapotranspires through plants, or percolates through the soil where it has the potential to replenish local groundwater supplies (WERF, 2001).

Reductions of total phosphorus are a priority in the management of Long Lake, and ultimately Brown's Creek and the St. Croix River, as well as critical to meeting regulatory TMDL targets. By

reusing stormwater runoff in the local stormwater ponds for irrigation (or other reuse), nearly all of the phosphorus contained in the stormwater is also captured. In Scenario 6, approximately 55% of phosphorus is estimated to remain in the pond sediment and the other 45% is treated and applied to the Marketplace green space through irrigation and commercial water usage. From the reuse model and its simple water quality analysis, it is estimated that a maximum of 150 lbs/yr of phosphorus could be removed if Scenario 6 were implemented with Storage Option 3. Phosphorus reductions would be less, though roughly proportional, for scenarios that reuse less captured runoff.

It is important to realize that a significant benefit to lake and stream water quality is in removing dissolved, bio-available phosphorus. Traditional ponds are very poor at removing dissolved, bio-available phosphorus and studies have recently indicated that bio-available phosphorus has a disproportionately large impact on lakes. The dissolved fraction of phosphorus is the hardest to remove and control, however reuse is ideally suited to preventing its discharge into receiving waters making reuse very valuable for water quality improvement.

Since a key component in stormwater reuse is the ability to capture and store runoff for later use, there are other management scenarios worth exploring in the future. Further quantification of benefits and planning would be required to determine the feasibility and cost-effectiveness of these potential solutions:

- ▶ Excavate existing ponds to restore water volume and increase available storage, since this is something that is needed to maintain urban ponds regardless.
- ▶ Raise the normal water level above the outlet elevation temporarily using a smart control system while using storm prediction services to release water at the appropriate time before large events. Use of smart control system would require careful analysis and design to ensure the efficient and effective use of the storage capacity, but these technologies are already in use in other jurisdictions and types of infrastructure (e.g. water distribution, wastewater systems, traffic control, etc).

In summary, the effectiveness of District Reuse would range based on the storage volume available (existing basins, future storage) and end use of stored water (irrigation, businesses). Implementing water reuse opportunities can effectively reduce the flow volume to Long Lake and reduce flooding, both within Long Lake and other previously identified street/lot flooding.

Next Steps

The next steps necessary to move this concept forward will require **discussions and collaboration between City of Stillwater, BCWD, Washington County, and MNDOT. Local landowners and business owners are also stakeholders that will need to be part of the conversation.** EOR can provide additional context and support with technical input on the various combination of variables and outcomes, as requested. Potential next steps and actions include:

1. Storage - Determine the maximum reasonable drawdown and actual storage volume in each pond that is being considered as a source of reuse water.
 - Is it feasible to use storage water from Brewer's Pond? Is drawdown of another amount such as 6 inches, one (1) foot, or two (2) feet reasonable?
 - What is the lowest water level that practically works for each pond?
 - Obtain detailed information for the ponds for parameters that were assumed in this assessment, including side slopes, depths and outlet controls, to improve the estimation of pond storage volumes.
 - Can ponds be physically altered to improve their storage availability, such as dredging out sediments in the ponds (good maintenance practice regardless) to hold more water?
 - Can pond outlet structures be modified to hold more water?
 - Would smart controls, that are tied into weather predictions, provide more optimized storage for greater storage and better results?
2. End Use - Determine the feasibility of irrigation opportunities and commercial water use opportunities.
 - Is 75% of public green space irrigated by reuse water achievable?
 - Is it feasible to use stormwater to irrigate 75% of prioritized private green spaces that currently irrigate (mostly commercial land use)? Is the private owner willing to switch to reused water?
 - Identify multi-family residential sites that could be connected to the reuse irrigation.
 - Develop preliminary designs of green street, layout and design components (permeable paver, tree trench, curb extension, etc.) to facilitate straight-forward implementation when city reconstruction is needed or redevelopment triggers a change.
 - In consultation with the City, evaluate the cost-benefit effectiveness and practicality of the reuse scenarios and storage options.
3. Landowner Interest & Outreach – Contacting private landowners to expand water end uses.

- What is the process of reaching landowners and who should lead the outreach process?
 - What supporting and outreach materials would be most effective and needed to improve reception by landowners?
 - What are the legal aspects of supplying stormwater for irrigation and how can those be managed?
4. Irrigation Zones - Integration of the stormwater sources into the Marketplace irrigation system.
 - Are smaller zones from single ponds or large distribution areas from collector ponds preferred, or a combination depending on each site and surrounding development? What criteria will be used to optimize distribution zones?
 - How does the system need to be designed so that the pump stations and valves are able to convey the water from a downstream pond to upstream irrigation areas?
 5. Modeling and Quantify Benefits – Utilize information collected above to test the system performance and HWL reductions using the District’s SWMM model.
 - Analyze flood benefits, integrating the annual water budget form of reuse modeling and event-based form of flood evaluation. Methods could include continuous simulation of past “flood events” on Long Lake (or local streets), or it could look at the amount of time the reuse ponds will provide benefits (periods where they are drawing down).
 - Note that the flood risks currently exist, so any decrease in frequency or probability of flooding provides benefit, particularly in comparison to designing a new system and utilizing “conservative” worst-case assumptions of stormwater ponds that are full.
 6. Preliminary Design – Develop the design of selected reuse scenario and storage options in coordination with the City and Watershed District.
 - Conduct detailed water reuse analysis for each pond considering the benefits of combining volumes from multiple ponds, potential demands of proximal development or redevelopment and irrigation opportunities.
 - Review phasing issues and scenarios to determine if and when sub-areas should be implemented.
 7. Costs - Detailed cost estimate for each irrigation sub-district, or districtwide, depending on the preferred approach.
 8. Funding - Discuss cost-sharing options with partners, recuperating capital costs with permit in lieu of fees, irrigation water supply user fees to support operations and maintenance

(Waconia example), and other funding sources (e.g., grants) to pursue the Marketplace Area reuse project.

9. Regional Compliance Approach – Develop a framework and potential policy language to determine when and how development impacts can be offset by District/Sub-District Reuse to meet some stormwater permit requirements.

- Weigh the benefits (👍) and limitations (👎) of District Reuse to meet some BCWD requirements

- 👍 Less design time and time spent on questions for applicant

- 👍 More certainty in the permitting process for applicant and District from a streamlined process

- 👍 Significantly greater performance/outcomes for volume control and water quality than site-based BMPs (MIDS, DWSMA restrictions on infiltration) translating directly into improved protection of Long Lake

- 👍/👎 Payment into regional system fund eases complexity of up-front payments, but results in less transparency on how fees are set and what they are used for

- 👎 Development may occur ahead of facilities coming on-line resulting in significant capital outlay with potentially unknown payback period

- 👎 Uncertainty about which agency/department is responsible for O&M (BCWD, City, Contracted, other)

- 👎 Uncertainty about adoption rates and requirements/demands for end uses (irrigation, industrial/commercial users)

Board Training Survey

July 2023



Minnesota Watersheds is seeking input from member boards on education and training needs. The survey is based on providing education and training opportunities at our three events: Legislative Briefing and Day at the Capitol, Summer Tour, and the Annual Conference.

Question 1. The **Legislative Briefing and Day at the Capitol** is held in St. Paul so that members can learn about our organization’s legislative activities and meet with legislators to discuss watershed needs. It should be noted that the number of representatives from metropolitan watersheds is minimal. What is your level of attendance for **the Legislative Briefing and Day at the Capitol**?

Question 1	Always	Most of the time	Sometimes	Seldom	Never
Board Member 1					
Board Member 2					
Board Member 3					
Board Member 4					
Board Member 5					
Board Member 6					
Board Member 7					
Board Member 8					
Board Member 9					
Board Member 10					
Board Member 11					

Question 2. If your answer was sometimes, seldom, or never, what would improve your likelihood of attending?

Question 2	Content	Time of Year	Other
Board Member 1			
Board Member 2			
Board Member 3			
Board Member 4			
Board Member 5			
Board Member 6			
Board Member 7			
Board Member 8			
Board Member 9			
Board Member 10			
Board Member 11			

Question 3. What training and education would be most beneficial for you at the **Legislative Briefing and Day at the Capitol?** (Please rank from 1 to 6)

Question 3	How to meet with legislators	How to work with county boards	How to interact with state agencies	Legislative process	Minnesota Watersheds resolutions process	Other
Board Member 1						
Board Member 2						
Board Member 3						
Board Member 4						
Board Member 5						
Board Member 6						
Board Member 7						
Board Member 8						
Board Member 9						
Board Member 10						
Board Member 11						

Question 4. The **Summer Tour** rotates between the three Minnesota Watersheds regions (Region 1 – northern Minnesota, Region 2 – southern Minnesota, and Region 3 – metro). This year’s Summer Tour was held in Region 2 and there was limited representation from Region 1 managers. What is your level of attendance for the **Summer Tour?**

Question 4	Always	Most of the time	Sometimes	Seldom	Never
Board Member 1					
Board Member 2					
Board Member 3					
Board Member 4					
Board Member 5					
Board Member 6					
Board Member 7					
Board Member 8					
Board Member 9					
Board Member 10					
Board Member 11					

Question 5. If your answer was sometimes, seldom, or never, what would improve your likelihood of attending?

Question 5	Content	Time of Year	Other
Board Member 1			
Board Member 2			
Board Member 3			
Board Member 4			
Board Member 5			
Board Member 6			
Board Member 7			
Board Member 8			
Board Member 9			
Board Member 10			
Board Member 11			

Question 6. What training and education would be most beneficial for you at the **Summer Tour**? (Please rank from 1 to 4)

Question 6	General watershed management	Watershed project successes and challenges	How to partner with state agencies and other entities	Other
Board Member 1				
Board Member 2				
Board Member 3				
Board Member 4				
Board Member 5				
Board Member 6				
Board Member 7				
Board Member 8				
Board Member 9				
Board Member 10				
Board Member 11				

Question 7. It is necessary for the **Annual Conference** to be held in the **most geographically centered location** to accommodate travel for all members. What is your level of attendance for the **Annual Conference**?

Question 7	Always	Most of the time	Sometimes	Seldom	Never
Board Member 1					
Board Member 2					
Board Member 3					
Board Member 4					
Board Member 5					
Board Member 6					
Board Member 7					
Board Member 8					
Board Member 9					
Board Member 10					
Board Member 11					

Question 8. If your answer was sometimes, seldom, or never, what would improve your likelihood of attending?

Question 8	Content	Time of Year	Other
Board Member 1			
Board Member 2			
Board Member 3			
Board Member 4			
Board Member 5			
Board Member 6			
Board Member 7			
Board Member 8			
Board Member 9			
Board Member 10			
Board Member 11			

Question 9. What training and education would be most beneficial for you at the **Annual Conference**? (Please rank from 1 to 7)

Question 9	Watershed governance	Board management	Working with staff	Budgeting finances	Working with county boards and legislators	General watershed management	Other
Board Member 1							
Board Member 2							
Board Member 3							
Board Member 4							
Board Member 5							
Board Member 6							
Board Member 7							
Board Member 8							
Board Member 9							
Board Member 10							
Board Member 11							

Question 10. Minnesota Watersheds offers watershed management training for new and experienced board members (Your Role in Watershed Management; Your Role in Watershed Planning and Implementation; Your Role as a Government Official; Your Role as a Drainage Authority) at the Annual Conference. We are considering offering this training at other times of the year. What time of year would you suggest?

Question 10	Spring	Summer	Fall	Winter
Board Member 1				
Board Member 2				
Board Member 3				
Board Member 4				
Board Member 5				
Board Member 6				
Board Member 7				
Board Member 8				
Board Member 9				
Board Member 10				
Board Member 11				

MEMORANDUM



DATE: July 1, 2023
TO: Minnesota Watersheds Members
FROM: Linda Vavra and Jamie Beyer, Resolutions Committee Co-Chairs
RE: **2023 REQUEST FOR MINNESOTA WATERSHEDS RESOLUTIONS**

It is that time of year for Minnesota Watersheds members to submit their policy recommendations through our resolutions process. This is YOUR organization and policy statements start with YOU! Here are the next steps and timeline:

- July / August** Members write, discuss, and approve resolutions at your WD/WMO meetings. The more detail you can provide, the easier it will be for the committee to make a recommendation.
- September 1** Administrators submit resolutions and background information documents to Jan Voit, Executive Director at jvoit@mnwatersheds.com by **September 1**. If more time is needed, please contact her so the Resolutions Committee is aware that another resolution may be submitted. The latest possible date to submit a resolution is **60 days before** the annual meeting (October 1). We ask that resolutions be submitted according to the described timeframe to ensure distribution to members for discussion by your boards in November.
NOTE: If all the requested information is not included, the Resolution will NOT be accepted.
- September / October** The Resolutions Committee will review the resolutions, gather more information, or ask for further clarification when deemed necessary; work with the submitting watersheds to combine similar resolutions; reject resolutions already active; discuss and make recommendations to the membership on the passage of resolutions.
- October 31** Resolutions (with committee feedback) will be emailed to each organization by **October 31**.
NOTE: If possible, please hold a regional meeting to discuss the Resolutions BEFORE the annual conference.
- November** Members should discuss the resolutions at their November meetings and decide who will be voting on their behalf at the annual meeting (2 voting members and 1 alternate are to be designated per watershed organization)
- December 3** Delegates discuss and vote on resolutions at the annual resolutions hearing. Please be prepared to present and defend your resolution.
- December / January** The Legislative Committee will review existing and new resolutions and make a recommendation to the Minnesota Watersheds Board of Directors for the 2024 legislative platform.
- January 2024** Minnesota Watersheds Board of Directors will finalize the 2024 legislative platform.
- February 12, 2024** First day of the 2nd half of 93rd legislative biennium.

NOTE: Resolutions passed by the membership will remain Minnesota Watersheds policy for five years after which they will sunset. If a member wishes to keep the resolution active, it must be resubmitted and passed again by the membership. Enclosed with this memorandum are the active resolutions and those that will sunset on 12/31/23. If you have questions, Please feel free to contact co-chairs at lvavra@fedtel.net or 320-760-1774, bds wd@runestone.net or 701-866-2725, or our Executive Director at jvoit@mnwatersheds.com or 507-822-0921.

THANK YOU FOR YOUR EFFORTS IN OUR POLICY DEVELOPMENT!

Proposing Watershed: _____

Contact Name: _____

Phone Number: _____

Email Address: _____

Resolution Title: _____

Background that led to the submission of this resolution:

Describe the problem you wish to solve and provide enough background information to understand the factors that led to the issue. Attach statutory or regulatory documents that may be helpful.

Ideas for how this issue could be solved:

Describe potential solutions for the problem. Provide references to statutes or rules if applicable.

Efforts to solve the problem:

Document the efforts you have taken to try to solve the issue. For example: have you spoken to state agency staff, legislators, county commissioners, etc.? If so, what was their response?

Anticipated support or opposition:

Who would be willing to partner with our watershed or state association on the issue? Who may be opposed to our efforts? (Ex. other local units of government, special interest groups, political parties, etc.)?

This issue: (check all that apply)

- _____ Applies only to our district
- _____ Applies only to 1 or 2 regions
- _____ Applies to the entire state

- _____ Requires legislative action
- _____ Requires state agency advocacy
- _____ Impacts Minnesota Watersheds bylaws or MOPP
(MOPP = Manual of Policies and Procedures)

Active Minnesota Watersheds Resolutions

December 2, 2022



FINANCE

2021-01A: Support SWCD Capacity Fund Sources

Minnesota Watersheds supports SWCD capacity funds to come from county and state general funds.

2021-01B: Support Clean Water Funds for Implementation, Not Capacity

Minnesota Watersheds supports Clean Water Funds being used for implementation and not for capacity.

2021-02: Support Capacity Funding for Watershed Districts

Minnesota Watersheds supports capacity base funding resources directed to non-metro watershed district who request this assistance, to implement the activities as outlined in approved watershed district watershed management plans or comprehensive watershed management plans.

2019-08: Heron Lake Watershed District General Operating Levy Adjustment

Minnesota Watersheds supports an increase in Heron Lake Watershed District's general operating levy cap from \$250,000 to an amount not to exceed \$500,000.

2019-09: Shell Rock River Watershed District General Operating Levy Adjustment

Minnesota Watersheds supports an increase in Shell Rock River Watershed District's general operating levy cap from \$250,000 to an amount not to exceed \$500,000.

2019-10: Pelican River Watershed District General Operating Levy Adjustment

Minnesota Watersheds supports an increase in Pelican River Watershed District's general operating levy cap from \$250,000 to an amount not to exceed \$500,000.

2019-11: Buffalo Red River Watershed District General Operating Levy Adjustment

Minnesota Watersheds supports an increase in Buffalo Red River Watershed District's general operating levy cap from \$250,000 to an amount not to exceed \$500,000.

2017-05 Middle Fork Crow River Watershed District General Operating Levy Adjustment

Minnesota Watersheds supports the efforts of Middle Fork Crow River Watershed District to draft and advance special legislation affecting a change in its general fund levy cap.

URBAN STORMWATER

2022-01 Support Creation of a Stormwater Reuse Task Force

Minnesota Watersheds supports administratively or legislatively including at least one Minnesota Watersheds member on the Minnesota Department of Health's workgroup to move forward, prioritize, and implement the recommendations of the interagency report on reuse of stormwater and rainwater in Minnesota.

2022-02 Support Limited Liability for Certified Commercial Salt Applicators

Minnesota Watersheds supports enactment of state law that provides limited liability protection to commercial salt applicators and property owners using salt applicators who are certified through the established state salt-applicator certification program and follow best management practices.

WATER QUANTITY, DRAINAGE, AND FLOOD CONTROL

2022-03: Seek Increased Support and Participation for the Minnesota Drainage Work Group (DWG)

- Minnesota Watersheds communications increase awareness of the DWG (meeting dates and links, topics, minutes, reports) amongst members.
- Minnesota Watersheds training opportunities strongly encourage participation in the DWG by watershed staff and board managers (for watersheds that serve as ditch authorities or work on drainage projects) – for e.g., add agenda space for DWG member updates, host a DWG meeting as part of a regular event.
- In preparation for Minnesota Watersheds member legislative visits, staff add a standing reminder for watershed drainage authorities to inform legislators on the existence, purpose, and outcomes of the DWG, and reinforce the legitimacy of the DWG as a multi-faceted problem-solving body.
- During Minnesota Watersheds staff Board of Water and Soil Resources (BWSR) visits, regularly seek updates on how facilitation of the DWG is leading to improvements for member drainage authorities and convey this information to members.

2022-05: Obtain Stable Funding for Flood Damage Reduction and Natural Resources Enhancement Projects

Minnesota Watersheds supports collaborating with the Red River Watershed Management Board and state agencies to seek funding from the Minnesota Legislature to provide stable sources of funding through existing or potentially new programs that provide flood damage reduction and/or natural resources enhancements. A suggested sustainable level of funding is \$30 million per year for the next 10 years.

2021-05: Support Crop Insurance to Include Crop Losses Within Impoundment Areas

Minnesota Watersheds supports expansion of Federal Multi-Peril Crop Insurance to include crop losses within impoundment areas.

2020-04 Support Temporary Water Storage on DNR Wetlands during Major Flood Events

Minnesota Watersheds supports the temporary storage of water on existing DNR-controlled wetlands in the times of major flood events.

2019-02: Add a Classification for Public Drainage Systems that are Artificial Watercourses

Minnesota Watersheds supports removal of the default Class 2 categorization for public drainage systems that are artificial watercourses and supports a default Class 7 categorization for public drainage systems that are artificial watercourses.

2019-03 Support for Managing Water Flows in the Minnesota River Basin Through Increased Water Storage and Other Strategies and Practices

Minnesota Watersheds supports efforts to manage the flow of water in the Minnesota River Basin and the Minnesota River Congress in its efforts to increase water storage on the landscape; and Minnesota Watersheds supports the Minnesota River Congress in its efforts to secure state and federal programs targeted specifically to increase surface water storage in the Minnesota River Watershed.

2019-04: Clarify County Financing Obligations and/or Authorize Watershed District General Obligation Bonding for Public Drainage Projects

Minnesota Watersheds supports legislation to achieve one or both of the following:

- a) To clarify that an affected county must finance a watershed district drainage project on project establishment and request of the watershed district; and
- b) To authorize watershed districts to finance drainage project establishment and construction by issuance of bonds payable from assessments and backed by the full faith and credit of the watershed district; and further provide for adequate tax levy authority to assure the watershed district's credit capacity.

WATER QUALITY, LAKES, WETLANDS, RIVERS, AND STREAMS

2022-06: Limit Wake Boat Activities

Minnesota Watersheds supports working with the Minnesota Department of Natural Resources (DNR) to utilize the research findings from the St. Anthony Falls Laboratory and seek legislation to achieve one or more of the following:

- Limit lakes and areas of lakes in which wake boats may operate;
- Require new and existing wake boats to be able to completely drain and decontaminate their ballast tanks; and
- Providing funding for additional research on the effects of wake boats on aquatic systems.

2020-03 Soil Health Goal for Metropolitan Watershed Management Plans

Minnesota Watersheds supports amending Minnesota Rule 8410.0080 to include a goal for soil health in watershed management plans and ten-year plan amendments.

2019-07 Chinese Mystery Snail Designation Change and Research Needs

Minnesota Watersheds supports Chinese Mystery Snail prevention and control research and to change the Chinese Mystery Snail designated status in Minnesota as a regulated species to a prohibited species.

2017-02 Temporary Lake Quarantine Authorization to Control the Spread of Aquatic Invasive Species (AIS)

Minnesota Watersheds supports legislation granting to watershed districts, independently or under DNR oversight, the authority, after public hearing and technical findings, to impose a public access quarantine, for a defined period of time in conjunction with determining and instituting an AIS management response to an infestation.

WATERSHED MANAGEMENT AND OPERATIONS

2022-04: Clarification of Watershed District Project Establishment with Government Aid or as Part of a Plan

Minnesota Watersheds supports working with BWSR to clarify Minnesota Statutes § 103D.605, Subd. 5.

2021-03: Support Increased Flexibility in Open Meeting Law

- Minnesota Watersheds supports changes to the Open Meeting Law to provide greater flexibility in the use of interactive technology by allowing members to participate remotely in a nonpublic location that is not noticed, up to three times in a calendar year per manager.
- Minnesota Watersheds supports allowing public participation from a remote location by interactive technology, or alternatively from the regular meeting location where interactive technology will be made available for each meeting, unless otherwise noticed under Minnesota Statutes Section 13D.021.
- Minnesota Watersheds supports changes to the Open Meeting Law requiring watershed districts to prepare and publish procedures for conducting public meetings using interactive technology.

2021-06: Support 60-day Review Required for State Agencies on Policy Changes

Minnesota Watersheds supports requiring state agencies to provide a meaningful, not less than 60-day review and comment period from affected local units of government on new or amended water management policies, programs, or initiatives with a response to those comments required prior to adoption.

2021-07: Support Metro Watershed-based Implementation Funding (WBIF) for Approves 103B Plans Only

Minnesota Watersheds supports BWSR distribution of metro WBIF among the 23 watershed management organizations with state-approved comprehensive, multi-year 103B watershed management plans. Those plans implement multijurisdictional priorities at a watershed scale and facilitate funding projects of any eligible local government unit (including soil and water conservation districts, counties, cities, and townships).

AGENCY RELATIONS

2019-01 Streamline the DNR permitting process

Minnesota Watersheds supports legislation, rules, and/or agency policies to streamline the DNR permitting process by increasing responsiveness, decreasing the amount of time it takes to approve permits, providing a detailed fee schedule prior to application, and conducting water level management practices that result in the DNR reacting more quickly to serious, changing climate conditions.

REGULATIONS

2020-01 Appealing Public Water Designations

Minnesota Watersheds supports legislation that would provide landowners with a more formal process to appeal decisions made by the DNR regarding the designation of public waters including the right to fair representation in a process such as a contested case proceeding which would allow landowners an option to give oral arguments or provide expert witnesses for their case.

2019-05 Watershed District Membership on Wetland Technical Evaluation Panels

Minnesota Watersheds supports legislation to allow technical representatives of watershed districts to be official members of wetland technical evaluation panels.

2019-06: Oppose Legislation that Forces Spending on Political Boundaries

Minnesota Watersheds opposes legislation that establishes spending requirements or restricts watershed district spending by political regions or boundaries.

NATURAL RESOURCES

No resolutions currently in this category.

Resolutions to Sunset

Effective December 31, 2023

It should be noted that in July of 2022, the sunset deadline was extended for resolutions expiring in 2017 by two years due to the pandemic and its influence on lobbying efforts. **All 2017 resolutions will have a sunset date of 2024.**

2018-02 Increase the \$250k General Fund Tax Levy Limit

Minnesota Watersheds supports legislation to increase or remove the \$250,000 general fund ad valorem tax levy limit set in MN statute 103D.905 Subd. 3. If the limit is raised to a new dollar amount, Minnesota Watersheds supports an inflationary adjustment be added to statute.

2018-03 Require Timely Appointments to the BWSR Board

Minnesota Watersheds supports legislation that requires the Governor to make BWSR board appointments within 90 days of a vacancy or board member term expiration.

2018-04 Require Watershed District Permits for the DNR

Minnesota Watersheds supports an amendment to the MN Statute § 103D.315, Subd. 5, to include the MN Department of Natural Resources as a state agency required to get permits from watershed districts when applicable.

2018-06 Ensure Timely Updates to Wildlife Management Area (WMA) Plans

Minnesota Watersheds supports that WMA operation and maintenance plans and/or management plans are either drafted or brought current in a timely fashion, with input from local governmental entities, to ensure their consideration in future One Watershed, One Plan efforts.

2018-08 Reinforce Existing Rights to Maintain/Repair 103E Drainage Systems

Minnesota Watersheds supports legislation modeled after House File 2687 and Senate File 2419 of the ninetieth legislature (2017-2018) reinforcing that the DNR cannot restrict existing rights to maintain and repair 103E public drainage systems.

2018-09 Clean Water Council Appointments

Minnesota Watersheds may ask the representative of the Clean Water Council to resign when they lose their direct association to a watershed district; and that Minnesota Watersheds will recommend to the Governor's office that managers and/or administrators in good standing with Minnesota Watersheds be appointed to the Clean Water Council.

Project Name	BCWD Permit Program	Date	7/6/2023
To / Contact info	BCWD Board of Managers		
Cc / Contact info	Karen Kill, District Administrator		
From / Contact info	John Sarafolean; Paul Nation, PE / EOR		
Regarding	July Permit Inspection Update		

Background

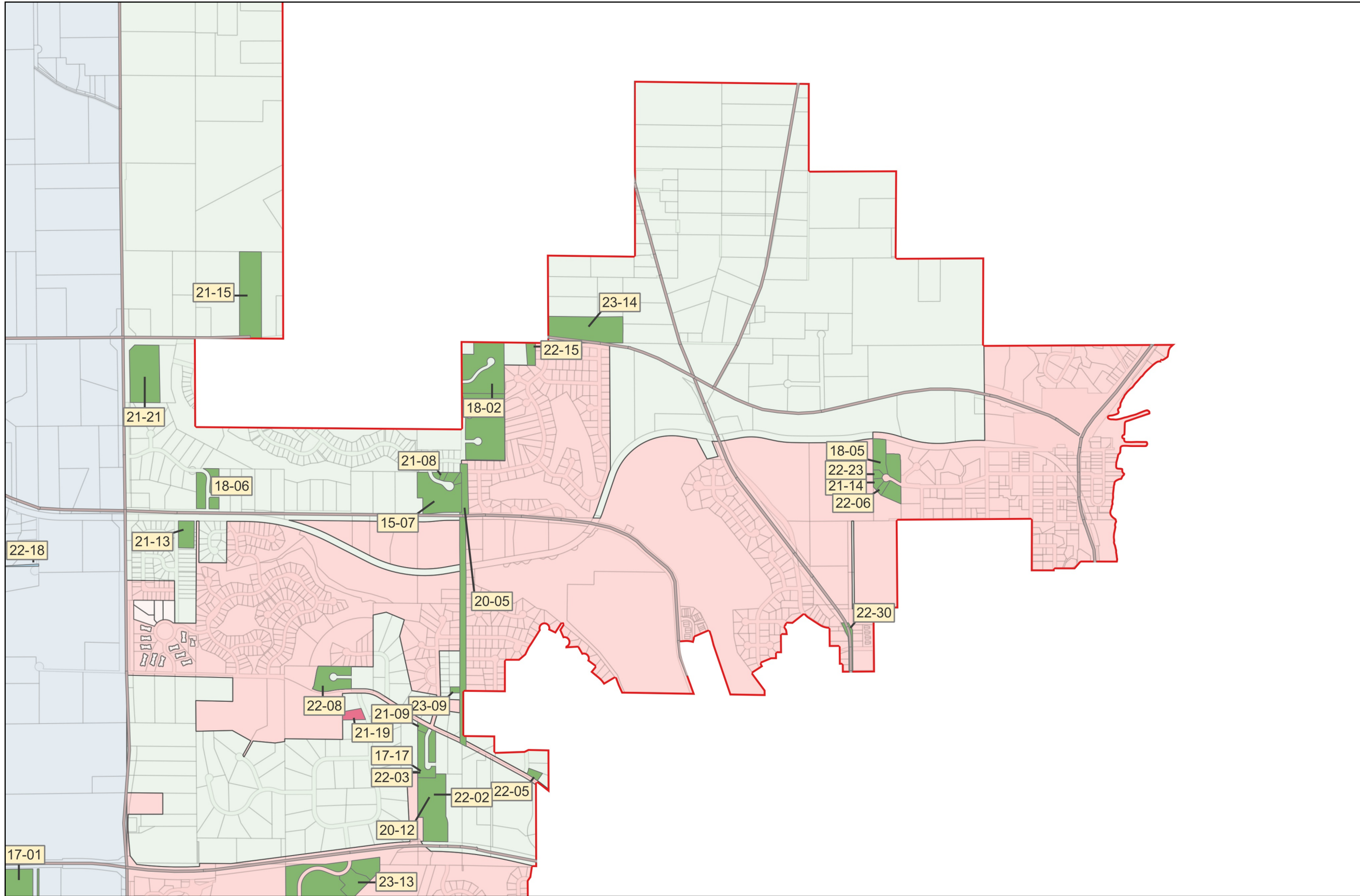
BCWD has an on-going permit review process in support of the District Rules. Developments within the District Jurisdictional Boundary are reviewed for compliance with the Rules and conditions of the permit. This memo documents inspections from 6/6/2023 through 7/6/2023.

Inspection of Existing Permits

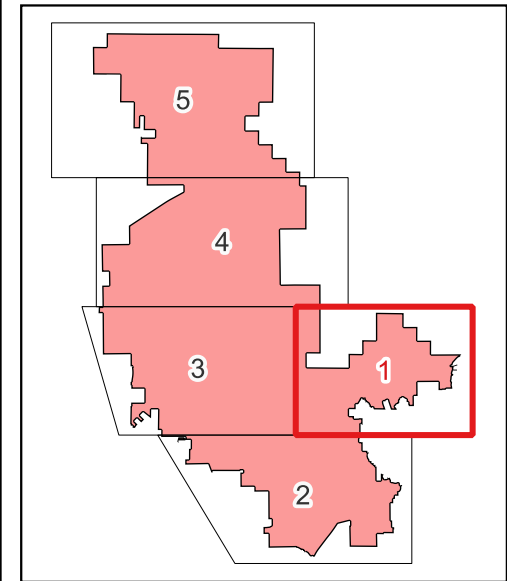
Project Name	Permit ID	Date	Grade
White Oaks Savanna	17-01	7/5/2023	A
West Ridge General Development	17-17	7/5/2023	B
Heifort Estate	18-02	6/16/2023	B
Boutwell Farm	18-04	7/5/2023	B
Heritage Ridge	18-05	6/16/2023	B
White Pine Ridge	20-12	6/16/2023	C
Westridge Block 1 Lot 1	21-09	7/5/2023	B
White Oaks Savanna Lot 104	21-35	6/23/2023	B
Valdres Residence (WOS Lot 110)	21-36	6/23/2023	A
GreenHalo Builds at Westridge	22-03	7/5/2023	C
Wiechmann Residence (WOS Lot 106)	22-11	6/23/2023	C
		7/6/2023	C
Cahill Residence (Heritage Ridge Lot 5)	22-14	06/16/2023	B
Ferguson Residence (Heritage Ridge Lot 4)	22-23	06/16/2023	A
Benjamin-Mohammed Residence (WOS Lot 109)	22-24	6/23/2023	C
		7/6/2023	C
Miller-Duis Residence (WOS lot 113)	22-25	6/23/2023	B
		7/6/2023	C
CSAH 5 Phase 2	22-30	6/16/2023	B
CR61 Improvements	23-01	7/5/2023	C
Tweden Residence (WOS Lot 114)	23-02	6/23/2023	B
		7/6/2023	C

Boutwell Farm Block 1 Lot 1	23-03	7/5/2023	B
2023 Street Improvements	23-06	6/16/2023	B
Villa Rococo Residence (WOS Lot 118)	23-07	6/23/2023	B
		7/6/2023	C
72nd Street Improvements	23-08	6/16/2023	B
		7/6/2023	A
Sandhill Shores (Lakes of Stillwater Phase 3)	23-13	6/16/2023	B
		7/6/2023	B

Date: 2023-07-07T10:19:10.356
 Document Path: X:\Clients_WD\041_BCWD\001_PERMIT_PROGRAM\09_GIS\2023\BCWD_Permit_Map.cpg
 Author: Allison
 Mark
 Layout:
 Permit
 Update
 Map



Permit No.	Applicant/Permit Name	Status
15-07	Brown's Creek Cove	Active
16-03	The Ponds at Heifort Hills	Active
17-01	White Oaks Savanna	Active
17-04	The Lakes of Stillwater	Active
17-17	Westridge	Active
18-02	Heifort Hills Estates	Active
18-04	Boutwell Farm	Active
18-05	Heritage Ridge	Active
18-06	Nottingham Village	Active
20-05	Neal Avenue Reconstruction	Active
20-12	White Pine Ridge	Active
21-07	Brown's Creek Cove Lot 11	Active
21-08	Brown's Creek Cove Lot 14	Active
21-09	Westridge B1L1	Active
21-13	Marylane Gateway	Active
21-14	Heritage Ridge (lot 3)	Active
21-15	Schwartz Residence	Active
21-21	Millbrook West Park	Active
22-02	White Pine Ridge, remaining lots	Active
22-03	Westridge, remaining lots	Active
22-05	13290 Boutwell Rd N	Active
22-06	Heritage Ridge Lot 2	Active
22-08	Boutwell Farm, remaining lots	Active
22-14	Cahill Residence (Heritage Ridge Lots 5/6)	Active
22-15	13199 Dellwood Rd	Active
22-18	Stillwater Oaks	Review
22-23	Ferguson Residence (Heritage Ridge Lot 4)	Active
22-30	CSAH 5 Phase 2	Active
23-09	Kirn Residence	Review
23-13	Sandhill Shores (Phase III of Lakes at Stillwater)	Review
23-14	Wiskow Berm	Active

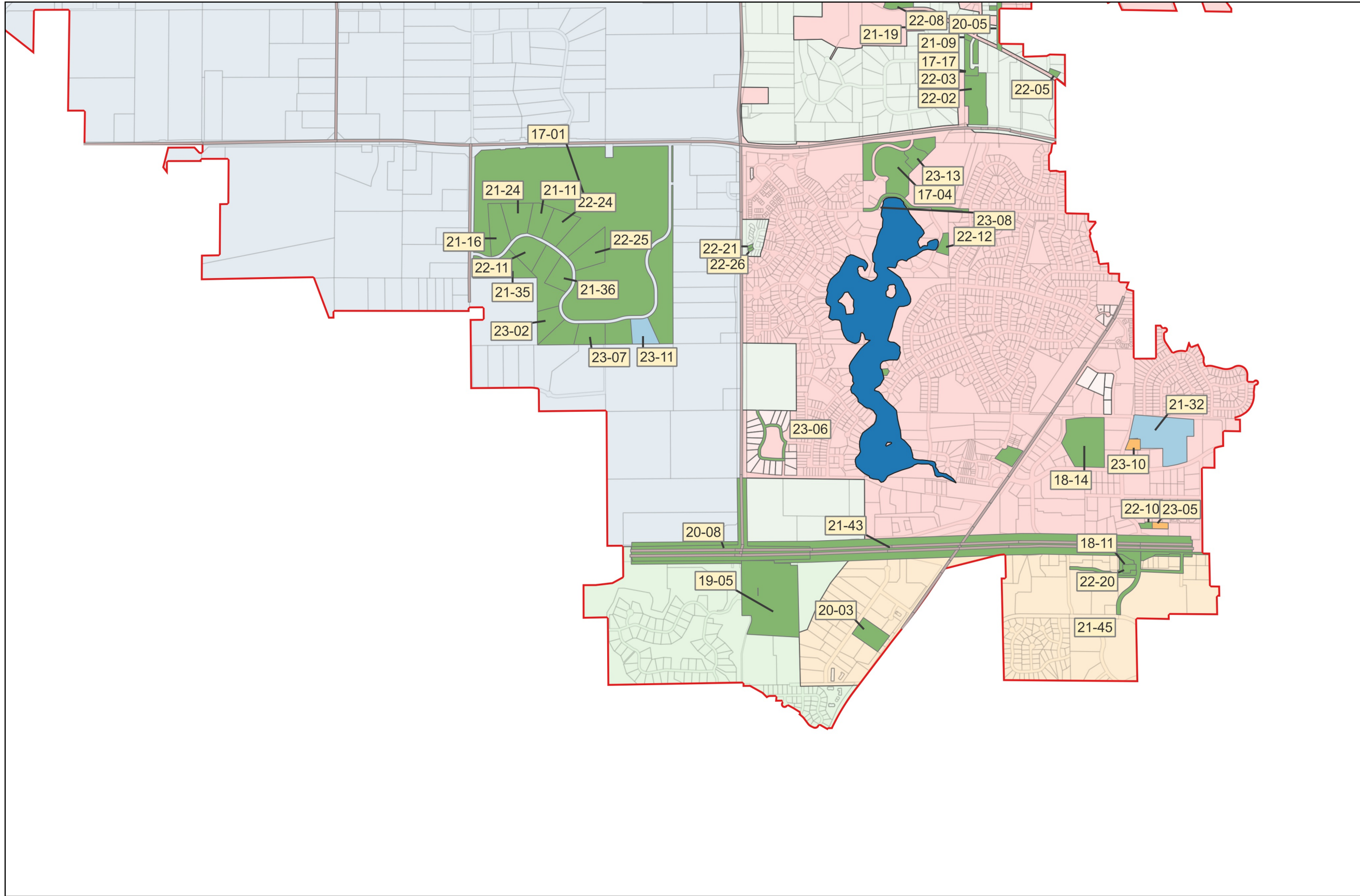


BCWD Board Packet 7-12-2023
Page 157

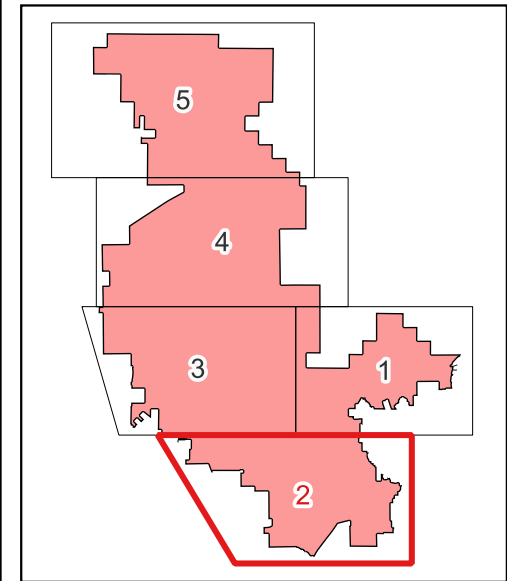
- Active Permit
- Conditional Approval
- Under Review
- BCWD Political Boundary

BCWD Permit Sites July 6, 2023

Map
Update
Permit
Layout:
Mark
Allison
Author:
Date:
Document Path:



Permit No.	Applicant/Permit Name	Status
17-01	White Oaks Savanna	Active
17-04	The Lakes of Stillwater	Active
17-14	Parkwood Townhomes	Active
17-17	Westridge	Active
18-04	Boutwell Farm	Active
18-11	Ridgecrest	Active
18-14	St. Croix Valley Recreation Center Expansion	Active
19-05	Central Commons	Active
20-03	Twin Cities Orthopedics	Active
20-05	Neal Avenue Reconstruction	Active
20-08	TH36 CSAH 15 Interchange	Active
20-12	White Pine Ridge	Active
21-09	Westridge B1L1	Active
21-11	Hegarty Residence (WOS Lot 107)	Active
21-16	Ignagni Residence - WOS B1L2	Active
21-24	Nepal Residence - WOS B1L3	Active
21-32	Lakeview EMS	Review
21-35	WOS Lot 104	Active
21-36	Valdres Residence (WOS Lot 110)	Active
21-43	MnDOT TH-36	Active
21-45	Norell Avenue Improvements	Active
22-02	White Pine Ridge, remaining lots	Active
22-03	Westridge, remaining lots	Active
22-05	13290 Boutwell Rd N	Active
22-08	Boutwell Farm, remaining lots	Active
22-10	Caribou	Active
22-11	Wiechmann Residence	Active
22-12	7171 Mid Oaks Ave Pool	Active
22-19	Miller Flood Protection	Active
22-20	Popeyes OPH	Active
22-21	Kreller Residence	Active
22-24	Benjamin-Mohammed Residence (WOS Lot 109)	Active
22-25	Miller-Duis Residence (WOS Lot 113)	Active
22-26	3823 Tending Green	Active
23-02	Tweden Residence	Pending
23-05	Rocket Carwash	Pending
23-06	Stillwater 2023 Street Improvements	Review
23-07	Villa Rocco Residence	Review
23-08	72nd St Improvement	Review
23-09	Kirn Residence	Review
23-10	Curio Dance Studio	Review
23-11	Freiroy Residence	Review
23-13	Sandhill Shores (Phase III of Lakes at Stillwater)	Review



EOR
water
ecology
community

- Active Permit
- Conditional Approval
- Under Review
- BCWD Political Boundary

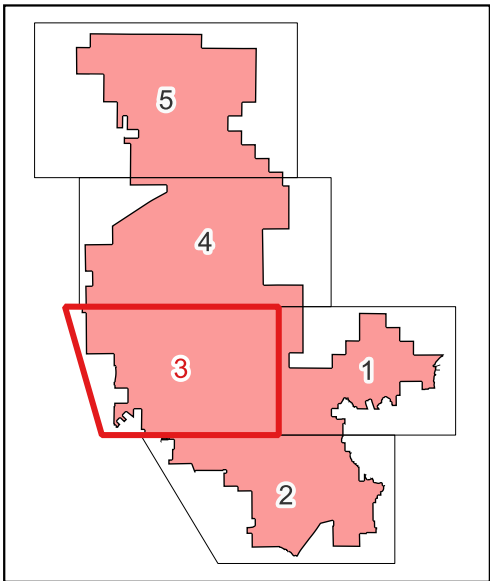
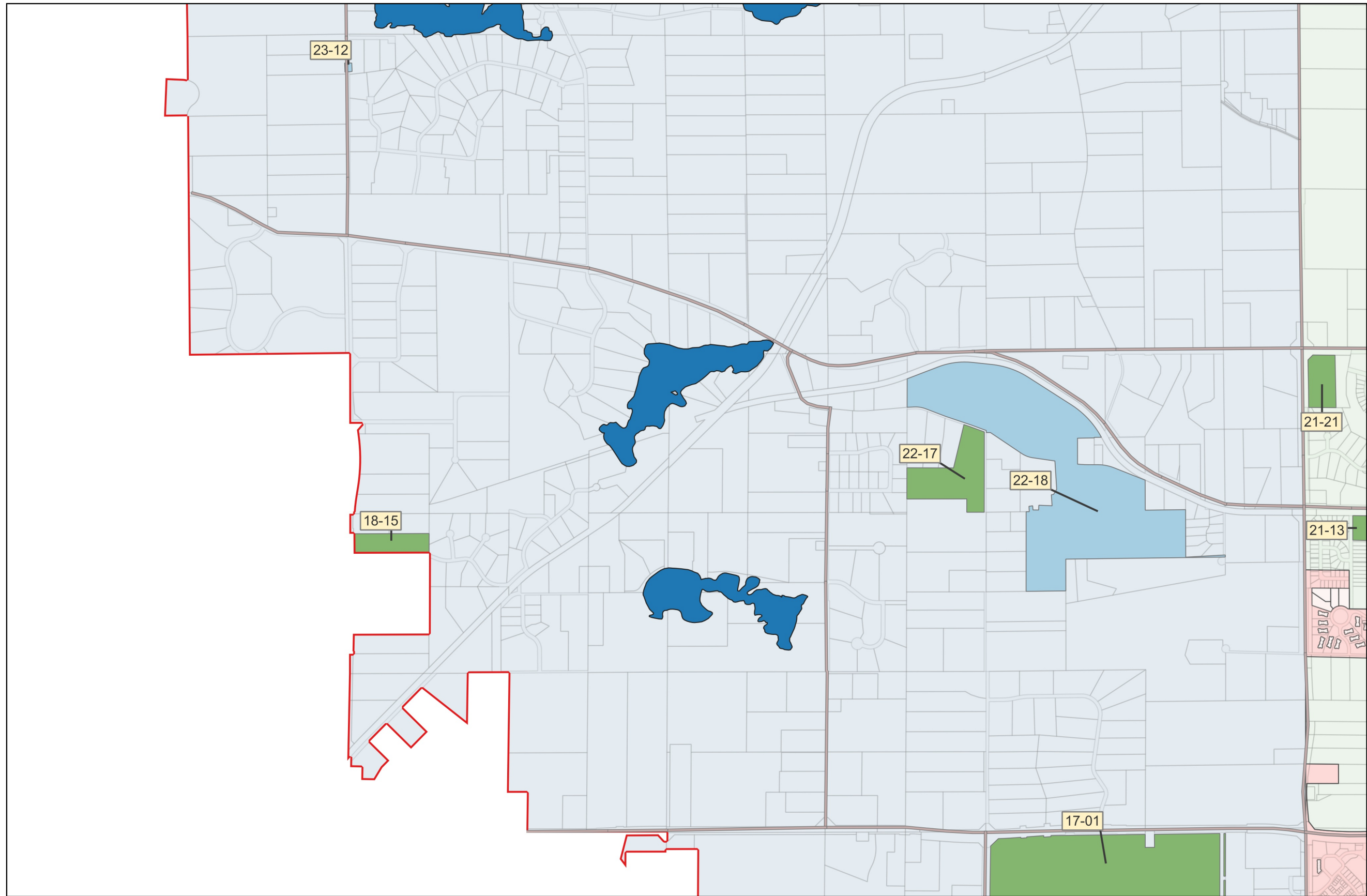
BCWD Board Packet 7-12-2023
Page 158

BCWD Permit Sites
July 6, 2023

N

0 1,000 2,000 ft

Permit No.	Applicant/Permit Name	Status
17-01	White Oaks Savanna	Active
18-15	Rogness Residence	Active
21-13	Marylane Gateway	Active
21-21	Millbrook West Park	Active
22-17	Read Residence	Active
22-18	Stillwater Oaks	Review
23-12	CSAH 9 Culvert Replacement	Review

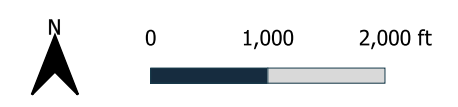


EOR
water ecology
community

- Active Permit
- Conditional Approval
- Under Review
- BCWD Political Boundary

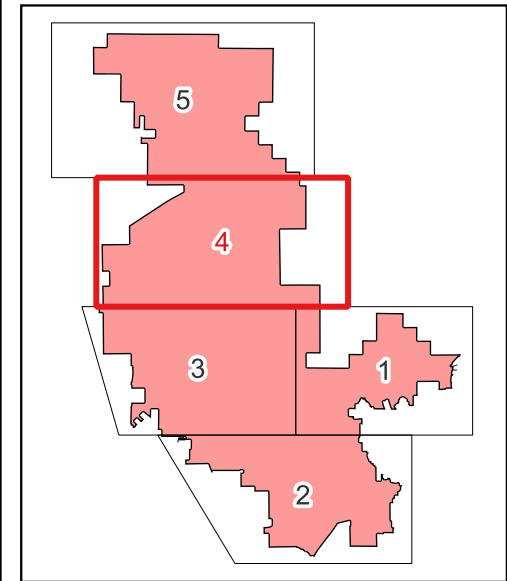
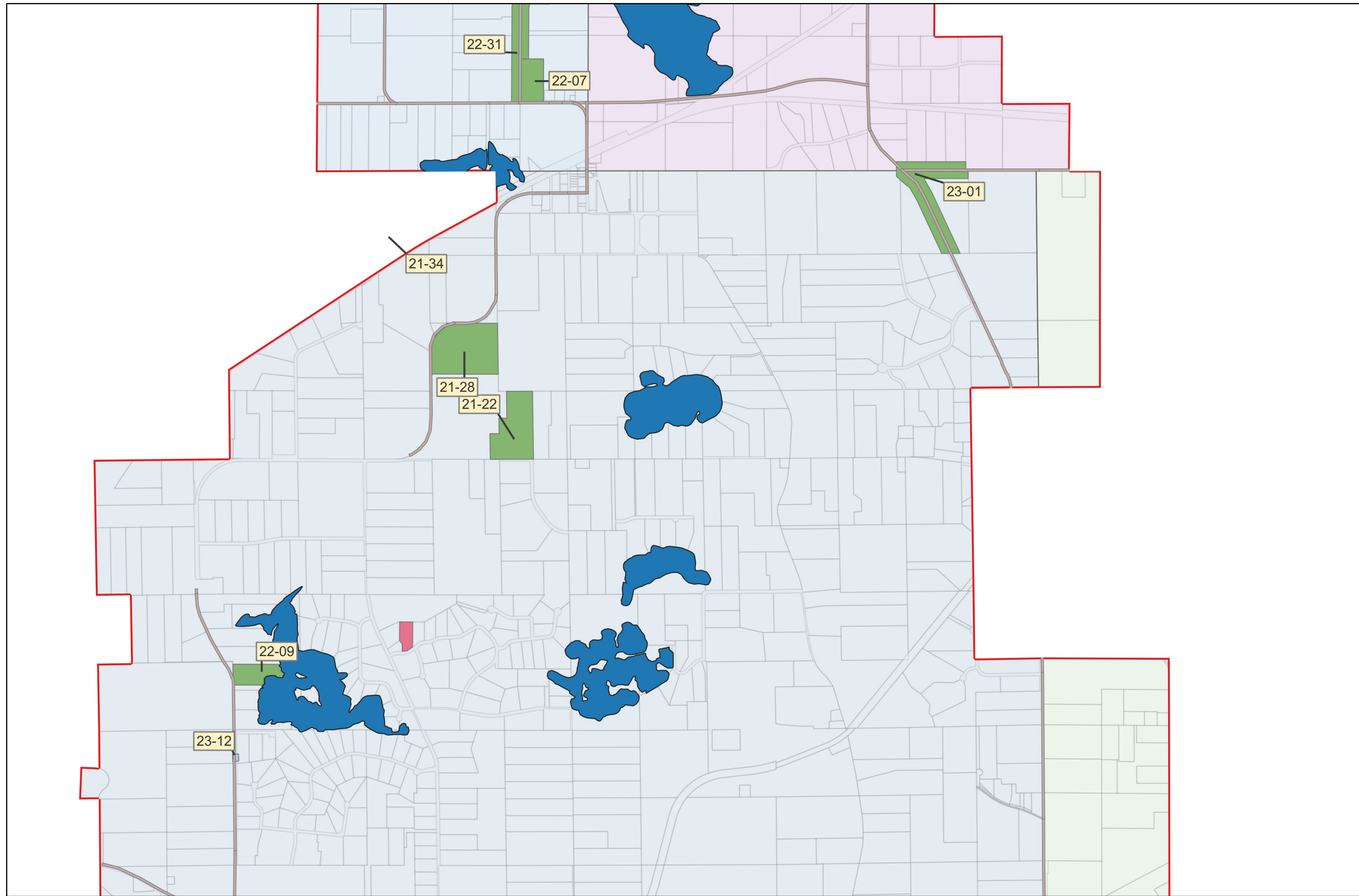
BCWD Board Packet 7-12-2023
Page 159

BCWD Permit Sites July 6, 2023



Date: 2023-07-07T10:19:24.793
 Document Path: X:\Clients_WD\041_BCWD\001_PERMIT_PROGRAM\09_GIS\2023\BCWD_Permit_Map.cpg
 Author: Allison
 Mark
 Layout:
 Permit
 Update
 Map

Permit No.	Applicant/Permit Name	Status
21-22	Bond Residence	Active
21-28	Guerrino Residence	Active
21-34	Fahey Residence	Active
22-07	Liberty Classical Academy	Active
22-09	Helmer Residence	Active
22-31	County Road 57 Culverts	Active
23-01	County Road 61 Improvements	Active
23-12	CSAH 9 Culvert Replacement	Review

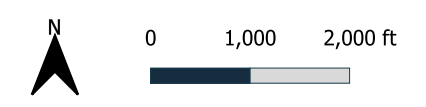


Date: 2023-07-07T10:19:29.393
 Document Path: X:\Clients_WD\041_BCWD\001_PERMIT_PROGRAM\09_GIS\2023\BCWD_Permit_Map.cdg
 Author: Allison
 Mark
 Layout:
 Permit
 Update
 Map

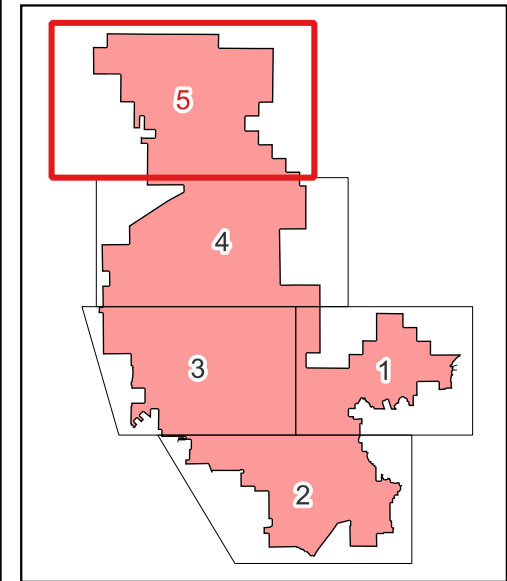
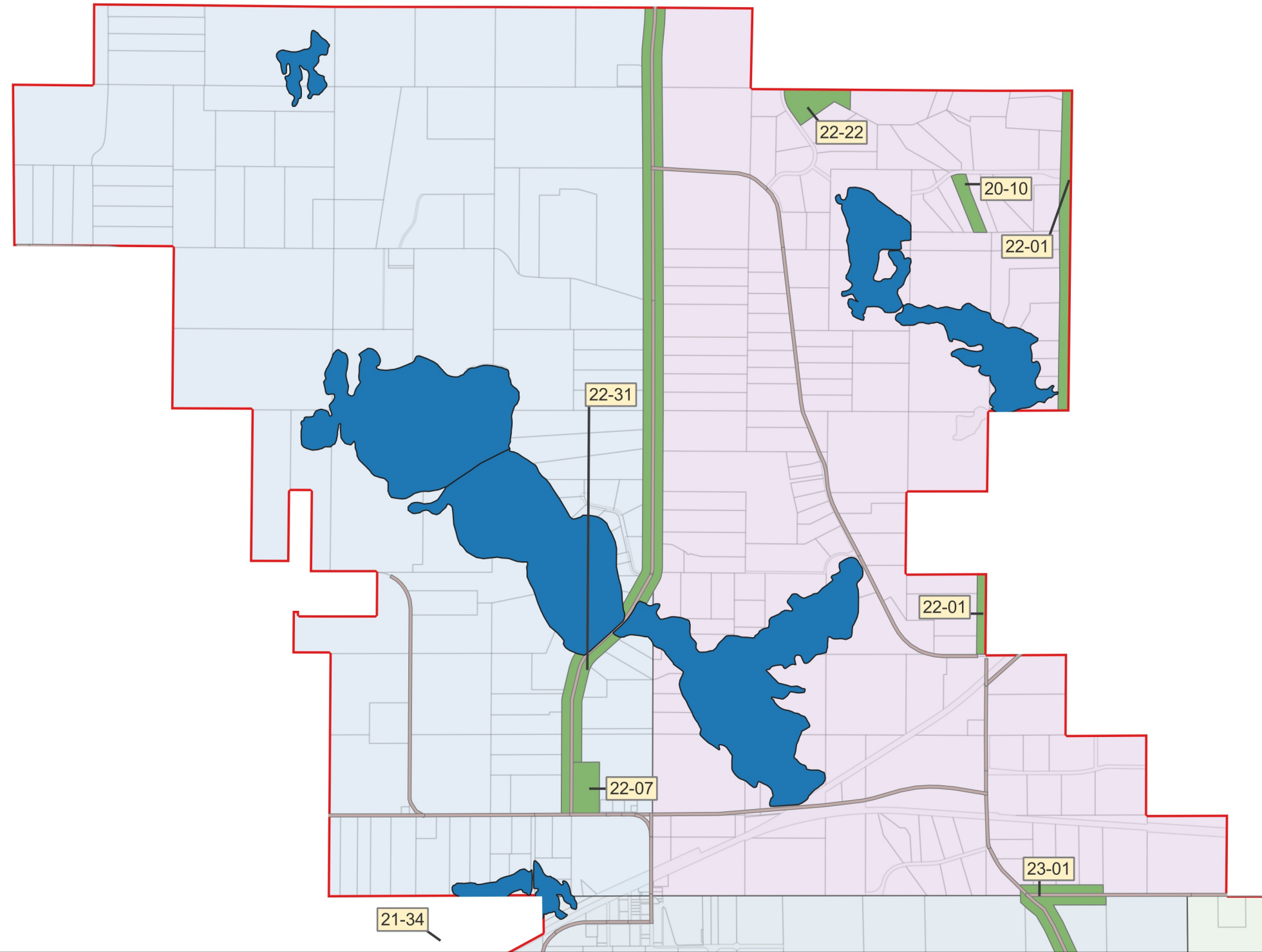
■ Active Permit
■ Conditional Approval
■ Under Review
 BCWD Political Boundary

BCWD Board Packet 7-12-2023
 Page 160

BCWD Permit Sites July 6, 2023



Permit No.	Applicant/Permit Name	Status
20-10	Wahlquist Residence	Active
21-34	Fahey Residence	Active
22-01	CSAH 15 Culverts	Active
22-07	Liberty Classical Academy	Active
22-22	Fanberg Residence	Active
22-31	County Road 57 Culverts	Active
23-01	County Road 61 Improvements	Active



Date: 2023-07-07T10:19:33.926
 Document Path: X:\Clients_WD\041_BCWD\001_PERMIT_PROGRAM\09_GIS\2023\BCWD_Permit_Map.cpgz
 Author: Allison
 Mark
 Layout:
 Permit
 Update
 Map

BCWD Board Packet 7-12-2023
 Page 161

- Active Permit
- Conditional Approval
- Under Review
- BCWD Political Boundary

BCWD Permit Sites July 6, 2023

