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MISSISSIPPI
WATERSHED
MANAGEMENT
ORGANIZATION

AGENDA

Date: 12 March 2024

Attachment 2

Time: 3:00 PM

Location: 2522 Marshall Street NE, Minneapolis, MN 55418

Agenda

(D) — Signifies Decision Item

- 1) Welcome, Introduction of Commissioners and Roll Call
- 2) Approval of Agenda **(D)** Attachment 2
- 3) Approval of Minutes **(D)** Attachment 3
- 4) Consent Agenda **(D)** Attachment 4
- 5) Reports from Staff..... Attachment 5
- 6) General Business..... Attachment 6
 - a. 2024-008: Bottineau Park **(D)**..... Attachment 6.1
 - b. 2024-009: Fridley HDS **(D)** Attachment 6.2
 - c. 2024-010: Sylvan Hills Park **(D)** Attachment 6.3
 - i. Sylvan Hills Park Graphic Attachment 6.3.1
 - d. 2024-011: Towerside District System Matching Grant **(D)** Attachment 6.4
 - i. MPRB Matching Grant Graphic Attachment 6.4.1
 - e. 2024-012: Southern Regional Treatment System Grant Increase **(D)** Attachment 6.5
 - i. Capital Grant Increase Graphic Attachment 6.5.1
 - f. 2024-013: SRTS Agreement and REOA Amendment **(D)**..... Attachment 6.6
 - i. SRTS Agreement Attachment 6.6.1
 - ii. SRTS REOA Amendment Attachment 6.6.2

- g. 2024-014: Action & Planning Grants **(D)**.....Attachment 6.7
- h. 2024-015: MWMO Backyard Landscape Improvements **(D)**Attachment 6.8
 - i. MWMO Backyard Markup and PermittingAttachment 6.8.1
 - ii. MWMO Site Estimated Costs.....Attachment 6.8.2
- 7) Board Updates and Announcements
- 8) Open Public Input (Non-Agenda Items)Sign-in Sheet
- 9) Adjourn **(D)**



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MISSISSIPPI
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MEETING MINUTES

Date: 09 January 2024

Attachment 3

Time: 3:00 PM

Location: 2522 Marshall Street NE, Minneapolis, MN 55418

Attendance

Commissioners: Connie Buesgens, Columbia Heights and Hilltop; Tom Tilberry, Fridley; Jeff Dains, Lauderdale; LaTrisha Vetaw, Minneapolis; Billy Menz, Minneapolis Park and Recreation Board; Randy Stille, St. Anthony Village; and Michael Lukes, St. Paul.

Staff and Guests: Nick Busse, Shawn James, Akadia Johnson, Dan Kalmon, Kevin Reich, Abby Moore, Emily Resseger, Dustin McHenry, and Nancy Stowe, MWMO; Glenda Meixell, Anoka Conservation District; Steve Eggert; Sarah Nassif.

The meeting was called to order at 3:03 p.m. by Chair Stille.

Approval of Agenda

Motion by Dains to approve the agenda as presented. Motion carried unanimously.

Approval of Minutes

Motion by Menz to approve the minutes of the November 14, 2024 regular meeting minutes. Motion carried unanimously.

Consent Agenda

Motion by Dains, seconded by Lukes, to approve the consent agenda. Motion carried unanimously.

Reports from Staff

Emily Resseger introduced Dustin McHenry, the new water resources and instrumentation specialist. Dustin grew up in Rochester, went to school in LaCross, will be working on instrumentation on the MWMO monitoring team.

Sylvan Hills Park Feasibility Study

Shawn James presented update on the Sylvan Hills Park feasibility study. Located at the northern edge of watershed, the park collects water from the surrounding areas. The team looked at various stormwater and habitat options with Houston Engineering. Five different concepts were evaluated, and they're now trying to boil them down to two concepts in order to do a feasibility study. The consultant found an opportunity to bring in 7 additional acres of drainage area for a combination of above- and below-ground treatment. James said he may be coming forward with a funding request for the March board meeting.

Buesgens liked the concept. Stille said he wants to make sure MWMO funds will go for treatment above and beyond city requirements.

Upper Harbor Terminal Updates

Dan Kalmon gave update on southern regional treatment reuse project at Upper Harbor Terminal. They now have updated engineering estimate and have been working on the agreement. They will recommend qualified low bid at the March board meeting. The shoreline grading is done and plant plugs are in. Habitat, public space and stormwater is integrated throughout site, including on private land. Two ephemeral streams are being built. The southern regional treatment system will bring 75 acres of water from North Minneapolis through a pipe and treat it to supply volume for the Minneapolis Park and Recreation Board stream system. It will go through hydrodynamic separators, Contech Stormfilters, then enter a large storage tank. It will treat water to a level that meets city standards. An ultraviolet (UV) treatment system is also included.

Buesgens asked about auditorium. Kalmon said underground storage is included at the auditorium site. Buesgens asked about water storage capacity. Kalmon said it's 200,000 gallons. He said the ephemeral stream performance standard is to have macroinvertebrates. Buesgens

asked whether it can be connected to buildings for greywater. Kalmon said that is a possibility and that the MWMO offered to put in hook-ups.

Stille asked what the UV treatment does. Kalmon said it's for taking out bacteria; UV treatment keeps people safe if they come in contact with the water. It's a really high level of treatment. He said private developers in the future are responsible for the operation and maintenance of the system. Buesgens asked how long UV system lasts. Kalmon said it's likely 10 years, but at Towerside we had one fail because it was improperly maintained. It was \$16,000 to replace it. They have discussed operations and maintenance costs with the city and how to limit them.

Menz asked whether MPRB will have maintenance costs. Kalmon said MPRB and other partners have agreed to pay their share for maintenance. Menz said it's a good test for MWMO to maintain systems as it's been trying to do.

Kalmon said project cost estimates have increased by \$2,502,512. He is anticipating a bid of \$6,311,906 for the southern regional treatment system and reuse system. He said we'll know more as we get bids in. He plans to meet with city and MPRB partners on the adjusted cost estimate to discuss possible cost reductions, then will finalize the agreement and select a recommended project bid.

Menz said MPRB instituted a new stormwater fee to solidify funding for stormwater. He said MWMO should ask MPRB about how those funds will be used. He's unclear on how MPRB stormwater efforts play into MWMO relationship and says he hopes it's collaborative.

Stille said he thinks it's important to revisit the project often so they know what's happening.

General Business

2024-003: Upper Harbor General Services

Dan Kalmon introduced a request for an Upper Harbor general services agreement. The work order agreement reflects the time frame of the reciprocal easement and operating agreement (REOA) through 2030. The resolution would transition from a 90-percent agreement to a general services agreement. Would create a three-year agreement ending in 2027. This would allow MWMO to cut new work orders as additional projects require.

Motion by Stille, seconded by Dains, to approve. Motion passed unanimously.

2024-004: Art Program Planning and Expansion 2024

Abby Moore presented a resolution requesting funding to hire Sarah Nassif, the MWMO's artist-in-residence. Nassif does community engagement artwork to spark conversation about water, environment and climate change. Nassif's work has greatly expanded Moore's understanding of ways to connect with people around water. She looks forward to continuing to work with Nassif, who has already engaged more than 1,200 people through workshops and events and partnered with 13 other artists and 10 different organizations. Her 2023 work focused on the Minneapolis Southside Green Zone. Moore presented some participant quotes. She hopes to create a network of artists who are engaged on these topics and create a model for that programming. Moore also wants to develop a plan for interpretive art at MWMO facility to be ready to implement in 2025.

Nassif talked about textile skills and their origins in different cultures. She said it's an example of how human beings can collectively approach managing complex problems. Traditional models of community engagement rely on people having free time to show up and learn information. This is a more inclusive approach. It allows people a chance to learn what a watershed is. Menz said it's work that needs to be done and this is a minimal investment to facilitate real-world learning. Dains said he agrees, that it's the wave of the future. Stille asked if it's a hire or a contract; Abby said Sarah will be hired as a consultant. Lukes asked how program will be promoted. Abby said they're trying to be strategic and targeted but also have some larger events, too.

Motion by Menz, seconded by Lukes, to approve the resolution. Motion approved. (Buesgens absent.)

2024-005: Website Improvements

Nick Busse presented a request for \$35,000 for a series of improvements to the MWMO website. The idea started in board meeting as a result of requests for a fully integrated project map on the website. MWMO is looking at redesigning of a couple of sections, mainly the home page and project page interface, along with some design tweaks to modernize the look of the website and under-the-hood work on SEO and removing duplicative content. Busse presented mock-ups of some new pages. The project page interface currently has a map but no one uses it or knows it exists. It is also cluttered by the number of projects. The mockup of the new project interface resembles real estate websites. It includes drop-down menus to filter project types. Project pages are a significant part of the website where we have project information and news articles, and they receive a significant amount of traffic. The new interface will make navigation easier.

Although it's not in this scope of work, we are also looking to do an accessibility audit in 2024 so people with screen readers can navigate the website. Staff might bring a separate request to the board, depending on the cost and scope of work.

Lukes asked about ArcGIS Story Maps and if we had considered using it for projects and further down the line as a submission for funding so people could submit a story map with their funding request. Busse answered that we did look to use ArcGIS as the platform for our project pages as Shawn has done some work with implementing ArcGIS. In discussions with web developers, we found it didn't make sense. The grants team has driven the conversation about application forms, which are not part of this scope of work but could be talked about in a future conversations. Busse showed the MWMO's story map and Path to the River tool on the website.

Dains asked to clarify the accessibility audit. Busse clarified it is not part of the scope of this work, but later this year we would like to do an accessibility audit with real people who use screen-reading software to tell us where the flaws are in our website to address accessibility needs. It may be a second proposal later for the board, but it is not part of the current RBA.

Tillberry asked how we chose Windmill. Busse explained MWMO has worked with Windmill for the last eight years and they were in the original website redesign RFP. Staff had a conversation about another potential RFP but opted to continue working with Windmill because of the quality of their work and their reliability.

Menz asked if accessibility would be in multiple languages and for people who are blind. Busse explained multiple languages could be part of it. He clarified someone who is visually impaired navigates the website using screen-reading software. We want someone using screen readers to be able to easily browse our site architecture. Menz said the cost doesn't seem excessive but the board should look for a cut-off for where they do need an RFP, said discussion could be for a future time.

Stille agreed that \$35,000 seemed reasonable. Menz and Stille agreed that they really like the website. Busse clarified we initially put \$50,000 into the website. The original website redesign was great and won awards, and we want to set it up for the next 8-10 years of success.

Stille asked if there is more space for a narrative description on the project. Nick clarified we still have to do the actual design work and there is room to tweak those things.

Motion by Menz, seconded by Tillberry, to approve the resolution. Motion passed. (Buesgens absent.)

2024-006: Acquisition of Universal Plating, Inc. Site

Reich presented a resolution to acquire a property adjacent to Edison High School. The project was originally conceived as part of the Phase II Edison Green Campus but had to be curtailed. Plans have come forward now. Edison's flood mitigation basin was improved with help from

Spark-Y. Safe Routes to School bumpouts were installed. Project partners are now looking to address the polluted property next door.

Reich had conversation with county about their objectives. They wanted affordable housing. Need to figure out how Minneapolis Public Schools and Spark-Y fit in. Project partners are looking at creating a permanent youth action laboratory on the site. The MWMO would hold the property as a public entity pass-through to coordinate the various partners.

Lukes asked about a tax forfeiture court case and whether there are any liability issues. Reich said the previous owners before the county went bankrupt, there was no point in a lawsuit. There was extensive legal investigation to make sure MWMO could work with county on this. The sale price is well below market value.

Stille asked how certain the development project is. Reich said it is pretty certain. Hennepin County is eager to work with Spark-Y on intergenerational activities. Menz asked whether this locks us into a particular design or a relationship with Spark-Y. Reich said no on both counts.

Menz asked what MWMO is committing to. Reich responded that we're not required to do any particular type of project. It will have to undergo environmental remediation. Menz asked whether MWMO would be bound to a cleanup cost. Reich said MPCA is doing vapor monitoring on the site. He anticipates getting state grant money for the cleanup. Any funding gaps for the cleanup will be absorbed by future owners. Expectation is that MWMO will receive the \$50,000 investment back from the future property users, along with any costs MWMO could incur in the meantime.

Menz asked about a parking lot at the athletic field. Reich said parking lot is no longer in the design.

Stille said the project is really cool and praised Reich for his work on it.

Motion by Tilberry, seconded by Menz, to approve the resolution. Motion passed without objection. (Dains and Buesgens absent.)

2024-007: Election of Officers and Meeting Dates

Stille proposed himself as the new board chair, Buesgens as vice chair, and Vetaw as Treasurer.

Motion by Vetaw, seconded by Lukes, to approve the resolution. Motion approved without objection. (Dains and Buesgens absent.)

Board Updates and Announcements

Stille recognized former Chair Stephen Eggert in the audience. Eggert said he wanted to take in one more board meeting. He recently moved and downsized; now lives in a cooperative overlooking Rush Lake. Eggert said he was not happy about missing the meeting in November. He really enjoyed working with the board, the staff, and the leaders. He is happy to see Tom Tilberry representing Fridley. He said MWMO has accomplished a lot in the last year, and he sees great opportunities going forward. Stille said Eggert has been a dedicated servant from Fridley and thanked him for his service.

Lukes said a community cleanup is scheduled for the Kasota Ponds; he will try to coordinate with MWMO for some publicity and event attendance.

Reich thanked Eggert for his service, said he was engaged with the staff.

Open public input. Glenda Meixell introduced herself. She said she represents the Anoka Conservation District, has really enjoyed coming here and isn't giving it up.

Vetaw thanked Eggert for his time on the MWMO board.

Open Public Input

None.

Adjourn

There being no further business, the meeting was adjourned at 4:47 p.m.



Request for Board Action

Attachment 5

Agenda Item: Staff Updates

Presenter: Various

Meeting Date: 12 March 2024

Flexibility: ☐ Yes ☒ No

Estimated Time: ☐ Consent Agenda ☒ 10 Min. ☐ 15 Min. ☐ 30 Min. ☐ 45 Min. ☐ 1 Hour

Action Request: ☒ Information/Review ☐ Motion to approve ☐ Budget Change ☐ Other

Board Action: ☐ Approved ☐ Denied ☐ Tabled ☐ Accepted Report ☐ Other

Date of Action: 12 March 2024

Background

Dan Kalmon:

- Upper Harbor Terminal MPRB Grant and Phasing Loan



Request for Board Action

Attachment 6.1

Agenda Item: Bottineau Field Park Habitat and Stormwater Implementation

Presenter: Nancy Stowe

Meeting Date: 12 March 2024

Flexibility: ☐ Yes ☒ No

Estimated Time: ☐ Consent Agenda ☒ 10 Min. ☐ 15 Min. ☐ 30 Min. ☐ 45 Min. ☐ 1 Hour

Action Request: ☐ Information/Review ☒ Motion to approve ☐ Budget Change ☐ Other

Board Action: ☐ Approved ☐ Denied ☐ Tabled ☐ Accepted Report ☐ Other

Date of Action: 12 March 2024

Background

At its July 11, 2023 meeting, the MWMO Board approved funding for a feasibility study to identify opportunities for water quality and habitat improvements at Bottineau Field Park in northeast Minneapolis (“*Bottineau Field Park Stormwater and Habitat Feasibility*”). The Minneapolis Park and Recreation Board (MPRB) has commissioned a redesign of Bottineau Field Park that will include a variety of new amenities, including a new playground, splashpad, skatepark, updated walking paths, and a full basketball court. MWMO staff have worked closely with the MPRB and the engineering consultant Emmons and Olivier Resources (EOR) to understand and assess the stormwater and habitat alternatives that were evaluated in this study. The study considered an array of flood reduction, reuse, water quality, and wildlife and pollinator habitat opportunities within the park.

Several opportunities were identified for incorporating both native habitat and stormwater features into the park for Phase I, with a goal of adding these amenities to the park in 2024. These opportunities include 0.53 acres of native habitat restoration and the construction of a tree trench along the western side of the park, adjacent to NE 2nd Street, providing water quality treatment,

along with the other urban canopy benefits of increased urban cooling, carbon sequestration, improved human health and well-being, forage and cover for migrating birds, and education.

The proposed native habitat includes a large restoration area adjacent to the railroad corridor along the west side of the park. This railroad corridor has been identified in the MPRB's Above the Falls Regional Master Plan as a Riverway Street, i.e., corridors intended to lead residents and visitors from the neighborhoods down to the riverfront parks. The inclusion of native pollinator plants along this corridor will enhance the park's contribution to supporting pollinators and will also serve as a corridor connector between this park and other pollinator-friendly areas along the future Riverway Streets and the river. The proposed habitat plan also includes native enhancements and a pollinator-friendly bee lawn adjacent to the soccer and baseball fields, and several native habitat pockets within the main park area.

Stormwater management alternatives were also assessed, many of which may be considered after further analysis in Phase II. However, for Phase I, a tree trench adjacent to NE 2nd Street is proposed that will treat stormwater runoff from 1.36 acres within the park and will result in annual removals of 305 pounds of TSS and 1.2 pounds of TP before entering the Mississippi River. The tree trench will collect water from the plaza on the western portions of the park, including the sidewalk, the basketball court, and some surrounding park areas near these features. The tree trench will include five new trees within the park, which provide important wildlife habitat and benefits for the neighborhood. Additionally, four new trees will be planted near the tree trench using traditional planting and watering means, and will serve as a study area to allow us to assess the effectiveness of tree trenches in urban landscapes.

Staff is requesting approval of a not-to-exceed amount of \$284,222 in CIP funding to complete the final engineering design, the installation of one tree trench, and the restoration of 0.53 acres of native habitat, along with three years of native habitat establishment support. The final design work will begin immediately, with the goal to complete construction in 2024.

Mississippi Watershed Management Organization

RESOLUTION 2024-008

A RESOLUTION APPROVING FUNDING FOR PHASE I NATIVE HABITAT IMPLEMENTATION AT BOTTINEAU PARK, AND

- WHEREAS, The MWMO strives to protect and improve water quality and habitat within its jurisdiction through planning and implementation of stormwater best management practices; and
- WHEREAS, The MWMO works to enhance and restore ecosystem functionality within its jurisdiction through the planning and implementation of habitat projects; and
- WHEREAS, The Bottineau Field Park Stormwater and Habitat Feasibility Study analyzed several alternatives and identified a preferred concept to implement habitat improvements and stormwater treatment within the park, which has been agreed upon by both MWMO and MPRB staff; and
- WHEREAS, The MWMO has funds available in the CIP fund to cover the cost of the proposed work; and
- WHEREAS, Staff recommends the Board of Commissioners approve funding for the Bottineau Field Park Stormwater and Habitat Phase I Project.

NOW THEREFORE BE IT RESOLVED, the MWMO Board of Commissioners approves up to \$284,222 for finalization of the tree trench and restoration plans, construction of the tree trench and supporting infrastructure, native habitat restoration of 0.53 acres of land at Bottineau Field Park, and authorizes MWMO staff to take all necessary administrative actions to implement the resolution.

Adopted this the 12th day of March, 2024.

Review for the Board:

Randy Stille, Chair

Review for Administration:

Kevin Reich, Executive Director



Request for Board Action

Attachment 6.2

Agenda Item: City of Fridley Buchanan Street Hydrodynamic Separator

Presenter: Emmy Baskerville-Doeckel

Meeting Date: 12 March 2024

Flexibility: ☐ Yes ☒ No

Estimated Time: ☐ Consent Agenda ☒ 10 Min. ☐ 15 Min. ☐ 30 Min. ☐ 45 Min. ☐ 1 Hour

Action Request: ☐ Information/Review ☒ Motion to approve ☐ Budget Change ☐ Other

Board Action: ☐ Approved ☐ Denied ☐ Tabled ☐ Accepted Report ☐ Other

Date of Action: 12 March 2024

Background

The City of Fridley (City) submitted a Capital Project Grant application for the installation of a Hydrodynamic Separator (HDS) within a residential neighborhood at the intersection of Buchanan Street NE, Lincoln Street NE, and 52nd Avenue NE. The purpose of the HDS would be to reduce pollutants reaching Sullivan Lake, which is on the State Impaired Waters list for nutrients, and discharges into the Mississippi River.

The proposed project was identified and analyzed in the 2019 Anoka Conservation District / MWMO report: “*Highland and Sullivan Lakes Stormwater Retrofit Analysis*” (Report). The 2019 Report identified and analyzed many potential Best Management Practices (BMPs), ranging from large regional ponds, iron-enhanced sand filters, small street-side bioinfiltration and biofiltration basins, and HDSs. They were each assessed for their costs and their effectiveness to improve water quality to Highland and Sullivan Lakes. The Buchanan HDS will treat a 16.2-acre drainage area and is estimated to remove 1.0 pounds per year of Total Phosphorus (TP) and 366 pounds per year of TSS from the stormwater before entering Sullivan Lake, which discharges to the Mississippi River.

Within the 2019 Retrofit Report, the BMPs were ranked for effectiveness by calculating the cost per pound of TP removed and the cost per 1,000 pounds of TSS removed. Considering the most recent cost estimate provided by the City, the Buchanan HDS is the highest-ranked HDS out of a total of 18 identified in the study in terms of cost-effectiveness for both TSS and TP removal.

MWMO staff is requesting approval not-to-exceed \$64,000 in Capital Project Grant funding for construction of the Hydrodynamic Separator at Buchanan Street NE to support water quality improvement (nutrient and sediment reduction) efforts for Sullivan Lake and the Mississippi River.

Mississippi Watershed Management Organization

RESOLUTION 2024-009

A RESOLUTION APPROVING FUNDING FOR THE INSTALLATION OF A HYDRODYNAMIC SEPARATOR SUPPORTING WATER QUALITY IMPROVEMENTS TO SULLIVAN LAKE IN THE CITY OF FRIDLEY

- WHEREAS, The MWMO's 10-Year Plan has established a goal to protect and improve water quality within its jurisdiction through planning and implementation of stormwater best management practices; and
- WHEREAS, The MWMO Board of Commissioners created the Capital Project Grants Program to support larger-scale stormwater management projects that protect or improve water quality and habitat within the MWMO watershed; and
- WHEREAS, A Capital Project Grant application was submitted, which meets the guidance of the Capital Project fund; and
- WHEREAS, Staff have reviewed the application and cost estimate and have determined it is a realistic cost for the project; and
- WHEREAS, The MWMO has funds available in the Capital Project fund to cover the cost of the proposed work; and
- WHEREAS, Staff recommends the Board of Commissioners approve \$48,000 in funding for the installation of a hydrodynamic separator to treat 16.2 acres of runoff flowing to Sullivan Lake and the Mississippi River.

NOW THEREFORE BE IT RESOLVED, the MWMO Board of Commissioners approves up to \$64,000 for the installation of a Hydrodynamic Separator at the intersection of Buchanan Street NE, Lincoln Street NE, and 52nd Avenue NE in Fridley, and authorizes MWMO staff to take all necessary administrative actions to implement the resolution.

Adopted this the 12th day of March, 2024.

Review for the Board: _____

Randy Stille, Chair

Review for Administration: _____

Kevin Reich, Executive Director



Request for Board Action

Attachment 6.3

Agenda Item: Sylvan Hills Park Regional Treatment

Presenter: Shawn James

Meeting Date: 12 March 2024

Flexibility: ☐ Yes ☒ No

Estimated Time: ☐ Consent Agenda ☒ 10 Min. ☐ 15 Min. ☐ 30 Min. ☐ 45 Min. ☐ 1 Hour

Action Request: ☐ Information/Review ☒ Motion to approve ☐ Budget Change ☐ Other

Board Action: ☐ Approved ☐ Denied ☐ Tabled ☐ Accepted Report ☐ Other

Date of Action: 12 March 2024

Background

At its September 2023 meeting, the Board approved funding for a feasibility study to identify opportunities for water quality and habitat improvement at Sylvan Hills Park in the City of Fridley (City). MWMO staff have worked closely with the City, Houston Engineering, Inc., and Davey Resource Group over the past five months to develop and analyze two alternative concept plans and complete a cost-benefit analysis of each, leading to the selection of one preferred concept for implementation (see Attachment A).

The preferred stormwater concept represents a combination of surface and underground stormwater treatment features and maximizes the amount of stormwater that can be captured through curb cuts, stormsewer pipe redirection, and an underground pipe diversion, all of which bring off-site water into the neighborhood park. The underground features include an infiltration tank, along with its accessory pre-treatment and conveyance infrastructure. Surface features include two smaller infiltration basins (around 2,500 square feet each), one larger infiltration basin (around 7,000 square feet) and two bioswales that act as ephemeral streams. The surface stormwater features are accompanied by native pollinator habitat throughout the park and a nature-focused play area (Aspen

Basin) that integrates the natural areas with the more traditional playground. These features expand on the concept plan previously adopted by the City while still reflecting the interests of the community.

The feasibility study for this project identified water quality, habitat, and flooding benefits. The preferred concept is designed to capture and treat stormwater from up to a 1.1-inch rainfall event from an approximately 77-acre drainage area upstream of the park. Estimated water quality benefits include approximately 16.1 pounds per year of total phosphorus (TP) removal and over 5,000 pounds per year of total sediment removal. The preferred concept would also reduce flooding in and around the park in both 10- and 100-year events, including reduced flooding at nearby intersections. In addition to the native plantings associated with the infiltration basins (around 12,000 square feet), an additional 15,000 square feet of native plantings would be created along the bioswales and at other areas of the park, for a total of 27,000 square feet of newly created habitat. Factoring in maintenance costs and an assumed lifespan of 30 years, the cost-benefit ratio is \$3,406 per pound of TP removed, which is equivalent to or better than similar projects the MWMO has previously funded. The preferred concept represents the efficiencies that can be achieved with regional treatment and could serve as a model for other neighborhood park redesign efforts.

Sylvan Hills Park is identified in the 10-Year Watershed Management Plan as a Capital Improvement Project with eligible costs that include both a feasibility study and implementation. Staff is requesting a not-to-exceed amount of \$1,493,000, as estimated in the feasibility study, which includes design, construction administration, and contingency. Design is planned to begin immediately, and construction would follow in Summer 2024.

Mississippi Watershed Management Organization

RESOLUTION 2024-010

A RESOLUTION TO APPROVE A GRANT TO THE CITY OF FRIDLEY FOR REGIONAL WATER QUALITY, FLOOD MITIGATION, AND HABITAT FEATURES AT SYLVAN HILLS PARK.

WHEREAS, the MWMO strives to protect and improve water quality within its jurisdiction through planning and implementation of stormwater best management practices; and

WHEREAS, the MWMO strives to enhance and restore ecosystem functionality within its jurisdiction through the planning and implementation of habitat projects; and

WHEREAS, the Sylvan Hills Park project is prioritized in the Capital Improvement Projects (CIP) program within the 10-Year Watershed Management Plan to improve water quality, mitigate flooding, and restore habitat; and

WHEREAS, the Sylvan Hills Park Stormwater and Habitat Enhancement Feasibility Study identified a preferred concept to implement water quality, flooding, and habitat improvements agreed upon by both MWMO and City staff; and

WHEREAS, the MWMO has funds available in the Capital Project fund to cover the cost of the Sylvan Hills Park project.

WHEREAS, Staff recommends the Board of Commissioners approve funding for the Sylvan Hills Park project.

NOW THEREFORE BE IT RESOLVED, the MWMO Board of Commissioners approves up to \$1,493,000 for the Sylvan Hills Park Regional Water Quality, Flood Mitigation, and Habitat project and authorizes MWMO staff to take all necessary administrative actions to implement the resolution.

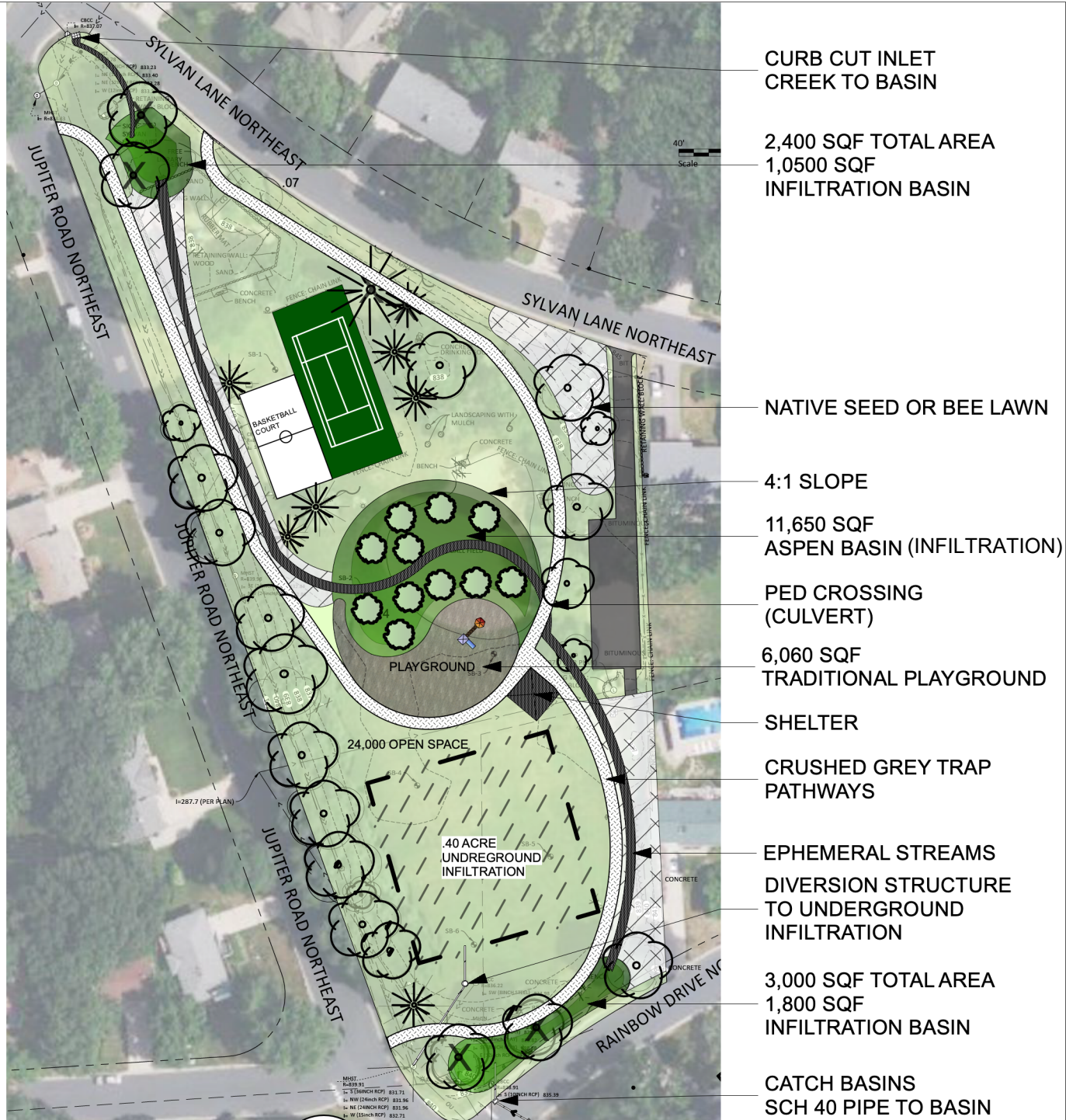
Adopted this the 12th day of March, 2024.

Review for the Board:

Randy Stille, Chair

Review for Administration:

Kevin Reich, Executive Director



A

SYLVAN PARK CONCEPT

Scale: 1" = 100'-0"



SIZE	CAGE CODE	DRAWING NUMBER	REV.
		FIGURE 2 - CONCEPT A	
SCALE	1" = 100'-0"	SHEET	Sht-1 OF 1



Request for Board Action

Attachment 6.4

Agenda Item: Approval of Matching Grant Funds for the Towerside District System

Presenter: D. Kalmon

Meeting Date: March 12, 2024

Flexibility: ☐ Yes ☒ No

Estimated Time: ☐ Consent Agenda ☒ 10 Min. ☐ 15 Min. ☐ 30 Min. ☐ 45 Min. ☐ 1 Hour

Action Request: ☐ Information/Review ☒ Motion to approve ☐ Budget Change ☐ Other

Board Action: ☐ Approved ☐ Denied ☐ Tabled ☐ Accepted Report ☐ Other

Date of Action: March 12, 2024

Background: (ATT 6.4.1 MPRB Matching Grant Graphic)

In January 2021, staff finalized a Board-approved \$32,500 MWMO grant agreement with Wall Companies for the Towerside Phase II District Stormwater System Project. Additional partners on the project have included the Metropolitan Council (via regional trail funding), the City of Minneapolis (via a pre-development grant), the Minneapolis Park and Recreation Board (via land dedication and easements), and Towerside representatives (via community participation).

The current 30-percent design process is advancing conceptual designs that integrate stormwater into public and private green spaces to provide a more complete public realm with water quality treatment, reuse, habitat, and rate control benefits built in as the basis for redevelopment.

MPRB staff are currently requesting a \$140,000 grant (25 percent match) from the MWMO that will leverage a Met Council grant of \$420,000 (75 percent). If received, the total funding would be used towards purchasing a new 1-acre park (outlined in blue) in front of the Crusher Elevators, adding on to other parkland that could be used to implement a co-designed MPRB and MWMO District System that manages habitat, public space, and surface stormwater within the larger Malcolm Yards area.

At this time, MWMO staff are requesting a \$140,000 grant to MPRB that will leverage \$420,000 in Met Council funding to acquire a new 1-acre park in front of the Crusher Elevators.

Mississippi Watershed Management Organization

RESOLUTION 2024-011

A RESOLUTION APPROVING AN MPRB MATCHING GRANT FOR THE TOWERSIDE DISTRICT SYSTEM.

WHEREAS, The MWMO's 10-Year Plan has established a goal to protect and improve the Mississippi River with implementation actions that improve habitat structure and ecosystem function within highly urban settings; and

WHEREAS, The MWMO is an active member in the Towerside Innovation District, which supports the development of new innovative urban stormwater management practices; and

WHEREAS, The site owned by Wall Development Companies has the capacity to provide significant above-and-beyond water quality treatment, reuse, habitat, and rate control benefits; and

WHEREAS, The MWMO Board entered into an MOU with MPRB and Wall Companies on Aug. 16, 2018, to work towards a District System design that manages habitat, public space (parks), and surface stormwater within the larger Malcolm Yards area; and

WHEREAS, The \$140,000 grant will leverage a \$420,000 Met Council grant that adds parkland to the project that can be used to implement components of a District System; and

WHEREAS, The \$140,000 in funds is currently available in MWMO's Land Acquisition fund; and

WHEREAS, Staff recommends the Board of Commissioners approve a \$140,000 grant to MPRB that will leverage \$420,000 in Met Council funding, thereby closing the funding gap needed to acquire 1-acre of parkland in front of the Crusher Elevators

NOW THEREFORE BE IT RESOLVED, the MWMO Board of Commissioners approves a \$140,000 grant to MPRB that will leverage \$420,000 in Met Council funding, thereby closing the funding gap needed to acquire 1 acre of parkland in front of the Crusher Elevators, and authorizes MWMO staff to take all necessary administrative actions to implement the resolution.

Adopted this the 12th day of March, 2024.

Review for the Board: _____

Randy Stille, Chair

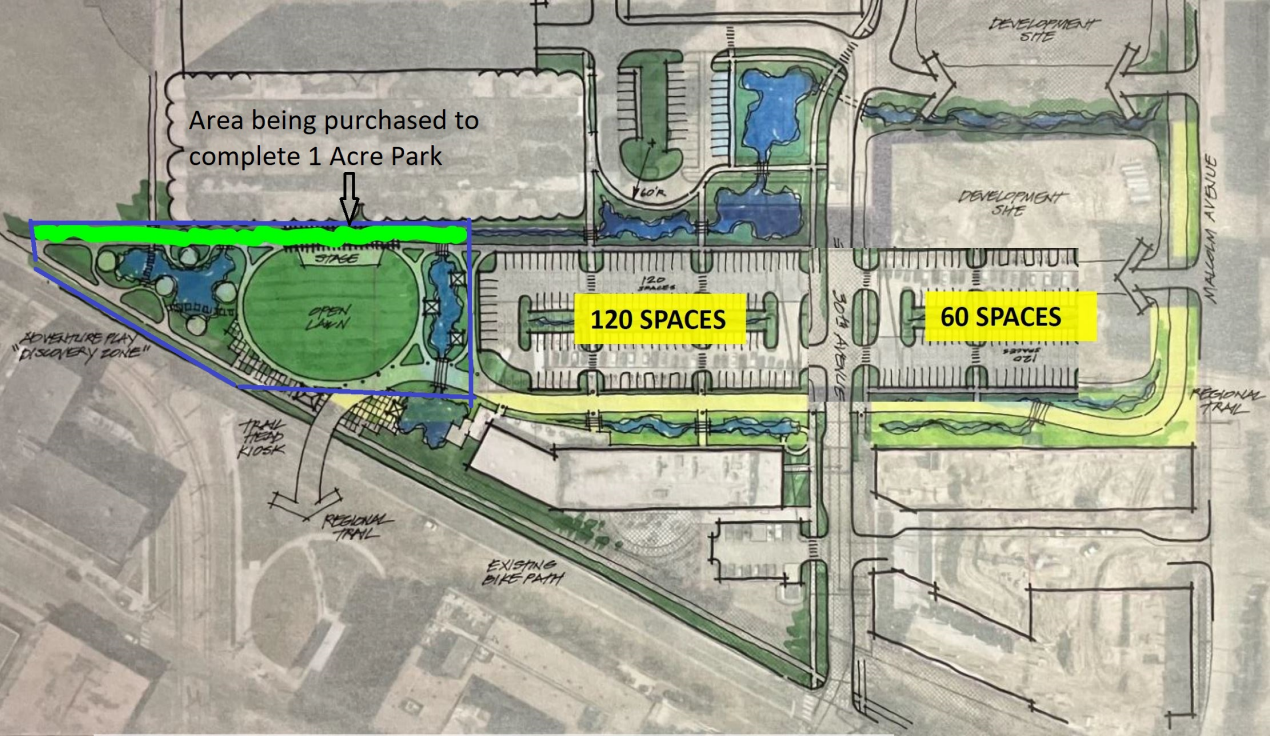
Review for Administration: _____

Kevin Reich, Executive Director

Area being purchased to
complete 1 Acre Park

120 SPACES

60 SPACES





Request for Board Action

Attachment 6.5

Agenda Item: Request approval of the US SiteWork Inc bid and a Capital Grant Increase for the Southern Regional Treatment & Common Reuse Systems at Upper Harbor

Presenter: D. Kalmon

Meeting Date: March 12, 2024

Flexibility: ☐ Yes ☒ No

Estimated Time: ☐ Consent Agenda ☐ 10 Min. ☒ 15 Min. ☐ 30 Min. ☐ 45 Min. ☐ 1 Hour

Action Request: ☐ Information/Review ☒ Motion to approve ☐ Budget Change ☐ Other

Board Action: ☐ Approved ☐ Denied ☐ Tabled ☐ Accepted Report ☐ Other

Date of Action: March 12, 2024

Background

The Upper Harbor District System Reciprocal Easement Operating Agreement (REOA) was approved at the Board's special meeting in February 2023. The agreement includes \$10,711,931 in grant funding for capital projects, operations, maintenance, and professional services at the Upper Harbor site. This agreement was put in place to assure successful implementation of a District System that supports connected habitat, public places and surface stormwater throughout the 14 redevelopment projects that encompass the 50-acre site. Included in the REOA were funding commitments from the MWMO and Public Works for the Southern Regional Treatment and Common Reuse System.

The Southern Regional Treatment System and the Common Reuse Systems noted above are central to MWMO's ability to generate and cycle water through a system of connected habitat, public places, stormwater basins, and living streams which all exist at various design and completion levels throughout the site.

MWMO staff, Barr Engineering, Minneapolis Public Works, First Avenue, and United Properties started working together on the Southern Regional Treatment System design in May 2023. Final designs and bid

documents were completed and released for bid on February 16, 2024. Barr Engineering sent staff a recommended responsive bid from U.S. SiteWork, Inc., on Friday, March 8.

As noted at the January Board meeting, staff are anticipating the bids for MWMO's construction projects in 2024 and 2025 will come in 10 percent or greater than MWMO's current funding commitments in the REOA, resulting in an estimated total funding shortfall of **\$(3,202,512)**.

The table below, which includes the recent responsive bid for the Southern Regional Treatment System — Common Reuse System, is less than January's estimated total funding shortfall by \$75,660.

Recommended Responsive Bids & Proposed Revisions MWMO's REOA Funding Commitments						
	Engineer's Estimates			Recommended Responsive Bids		
Project Components	2022 60% Cost (Inflated by ENR Mpls Construction Index to December 2023, 0.3%)	Jan 2024 90% Opinion of Probable Cost	Difference	MWMO's Current REOA Funding Commitments	(Proposed) MWMO's Revised REOA Funding Commitments	Funding Shortfalls
Southern Regional Treatment System & Common Reuse System (Green Graphic)	\$2,788,340	\$3,975,000	\$(1,186,660)	\$2,000,000	\$3,416,000	\$(1,416,000)
Park Board Common Reuse System (Blue Graphic)	\$1,021,054	\$2,336,906	\$(1,315,852)	\$1,021,054	\$2,336,906	\$(1,315,852)
Estimate & Bid Subtotals	\$3,809,394	\$6,311,906	\$(2,502,512)	\$3,021,054	\$5,752,906	\$(2,731,852)
Additional Project Costs						
6% Contingency				\$0	\$345,000	\$(345,000)
Xcel Energy hook up				\$0	\$50,000	\$(50,000)
Additional Project Costs Subtotal				\$0	\$395,000	\$(395,000)
Grand Totals				\$3,021,054	\$6,147,906	\$(3,126,852)

The \$3,126,852 in cost overages in the table above exceeded MWMO's previously approved REOA funding by more than 10 percent, thus triggering the requirement for MWMO Board approval of the requested additional \$3,126,852 in funding for the Southern Regional Treatment System and the Common Reuse System projects.

Increased costs for the Southern Regional Treatment System (SRTS) resulted from:

- Additional 90 percent design system components, which were not present in the preliminary 30 percent design. These components include a diversion structure, pretreatment structures, upstream storage, and a storm sewer return line.
- The addition of pretreatment structures, required the underground storage to be pushed deeper, resulting in higher costs for construction.
- Even though the overall Minneapolis construction inflation costs have been low, the vendor prices for prefabricated concrete structures are significantly higher, in some cases we're seeing costs increase by 10% or more.

Increased costs for the Common Reuse System resulted from:

- A portion of cost represents increase on Parcel 2 from MPRB bids received in 2023. (*\$1,172,135 previously Board approval May 2023*).
- The piping, wet wells, and pumps needed to bring water from the SRTS into the recirculating system on the MPRB's Parcel 2 (Park).
- Additional structures along force mains for blow out valves.
- Electrical hook-up to Parcel 5 coming from 33rd.
- Pumping costs increased.
- Significant material cost changes since 2022 (greater than what inflation suggests).

By the end of 2025, expenditures to date, including this current request for \$3,126,852 will exceed the current capital grant limit of \$7,884,151 but not the overall \$10,711,931 grant limit which includes grants for professional services and operations and maintenance. We are currently on course to spend \$8,352,906 by end of 2025 (see table below). These costs may be eased a bit depending the final cost of these projects or if future bids come in lower. For example, to date some projects have come in lower than the initial engineers estimate, which will offset these current overages by \$300,000.

Estimated Upper Harbor expenditures by the end of 2025:

\$2,600,000 MPRB Riverbank & Overlook (under construction and within budget)
\$3,416,000 SRTS & Reuse (bid over \$1,416,000)
\$2,336,906 Common Reuse System (bid over \$1,315,852)
\$ 8,352,906

Given the circumstances at this time, staff is requesting for the Board to increase MWMO's grant commitment in the REOA for the Southern Regional Treatment System from \$2,000,000 to \$3,416,000 and for the Common Reuse System from \$1,021,054 to \$2,336,906 while maintaining the current *not to exceed* for Upper Harbor at \$10,711,931.

Mississippi Watershed Management Organization

RESOLUTION 2024-012

A RESOLUTION APPROVING AN INCREASE IN THE REOA'S GRANT COMMITMENT FOR THE COMMON REUSE SYSTEM AND THE SOUTHERN REGIONAL TREATMENT SYSTEM

WHEREAS, The MWMO's 10-Year Plan has established a goal to protect and improve the Mississippi River with implementation actions that improve habitat structure and ecosystem function within highly urban settings; and

WHEREAS, The Southern Regional Treatment System and the Common Reuse System will improve habitat in the Mississippi River Corridor Critical Area; and

WHEREAS, The Southern Regional Treatment System and the Common Reuse System will improve the quality of 75 acres of untreated stormwater before reaching the Mississippi River; and

WHEREAS, The Southern Regional Treatment System and the Common Reuse System will provide additional water to the downstream District System, improving the habitat on site and the aquatic ecosystem entering the Mississippi River; and

WHEREAS, MWMO staff are recommending U.S. SiteWork, Inc., as the successful responsive bidder with a bid of \$3,416,000 to construct the Southern Regional Treatment System and the Common Reuse System; and

WHEREAS, Sufficient cash will be available to the 2023–2025 expenses being requested for the Upper Harbor project; and

WHEREAS, Staff recommends the Board of Commissioners approve the following increases to grant commitments within the Upper Harbor District System Reciprocal Easement and Operating Agreement (REOA): raising the Common Reuse System grant commitment to \$2,336,906 and raising the Southern Regional Treatment System grant commitment to \$3,416,000 while maintaining the current not-to-exceed for Upper Harbor at \$10,711,931.

NOW THEREFORE BE IT RESOLVED, the MWMO Board of Commissioners approves U.S. SiteWork, Inc., as the successful responsive bidder with a bid of \$3,416,000 to construct the Southern Regional Treatment System and the Common Reuse System and approves the following increases to grant commitments within the Upper Harbor District System Reciprocal Easement and Operating Agreement (REOA): raising the Common Reuse System grant commitment to \$2,336,906 and raising the Southern Regional Treatment System grant commitment to \$3,416,000 while maintaining the current *not-to-exceed* for Upper Harbor at \$10,711,931.

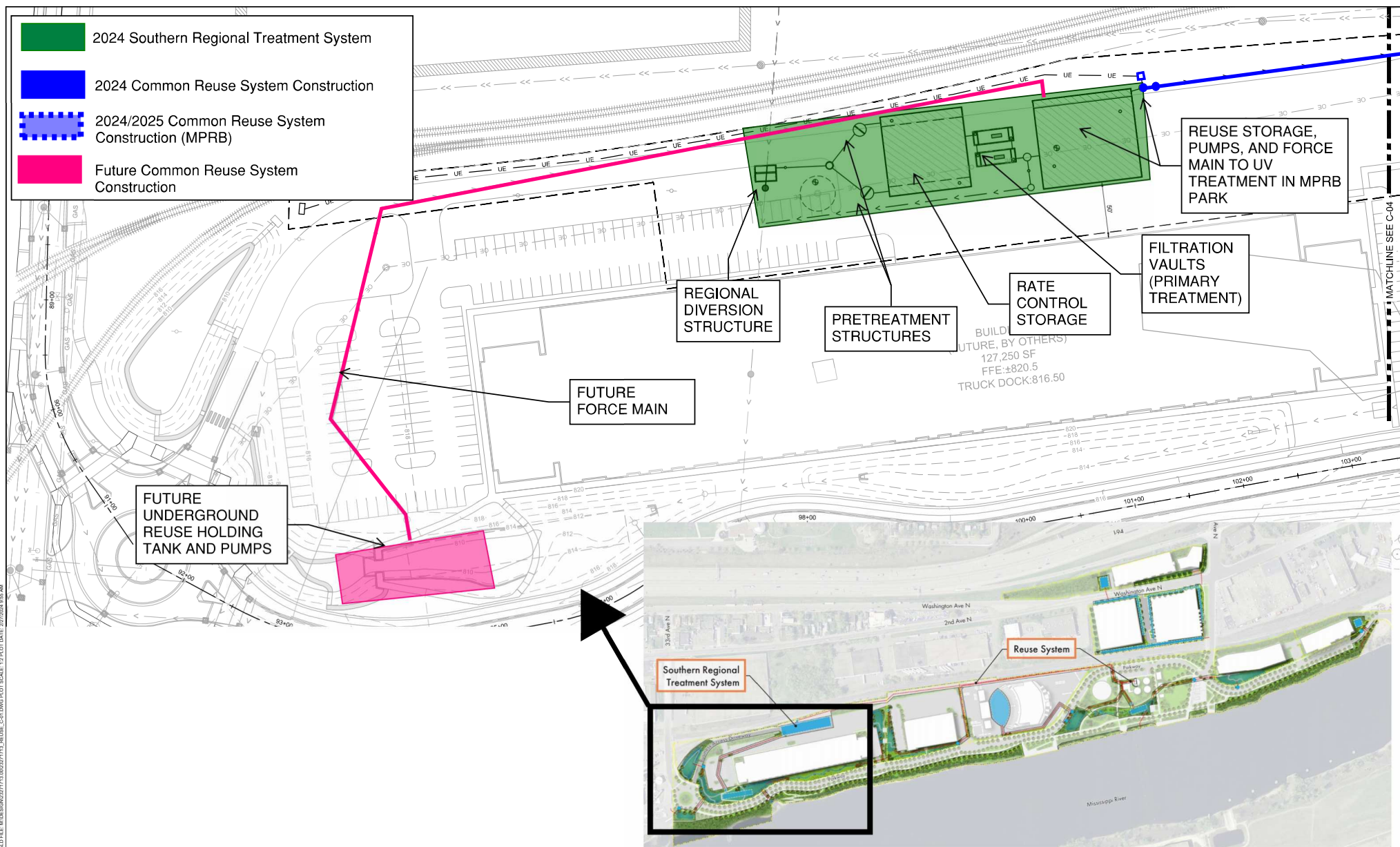
Adopted this 12th day of March, 2024.

Review for the Board: _____

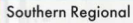
Randy Stille, Chair

Review for Administration: _____

Kevin Reich, Executive Director



										I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.										CLIENT BIP CONSTRUCTION RECORD										02/16/24										AS SHOWN										Project Office: BARR ENGINEERING CO. 4300 MARKETPOINTE DRIVE Suite 200 MINNEAPOLIS, MN 55433 Ph: 1-605-632-2277 Fax: (602) 832-2601 www.barr.com										Date 02/16/2024																				BRUCE JACOBSON																				UPPER HARBOR TERMINAL DISTRICT STORMWATER SYSTEM										BARR PROJECT No. 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Request for Board Action

Attachment 6.6

Agenda Item: Approval of the Southern Regional Treatment System Agreement and the 1st Amendment to the Upper Harbor REOA

Presenter: D. Kalmon

Meeting Date: 12 March 2024

Flexibility: ☐ Yes ☒ No

Estimated Time: ☐ Consent Agenda ☐ 10 Min. ☒ 15 Min. ☐ 30 Min. ☐ 45 Min. ☐ 1 Hour

Action Request: ☐ Information/Review ☒ Motion to approve ☐ Budget Change ☐ Other

Board Action: ☐ Approved ☐ Denied ☐ Tabled ☐ Accepted Report ☐ Other

Date of Action: 12 March 2024

Background

See ATT 6.6.1 – Southern Regional Treatment System Agreement
ATT 6.6.2 - 1st Amendment to the Upper Harbor REOA

At the January 9 Board of Commissioners meeting, staff provided a brief update on the Southern Regional Treatment System (SRTS) Agreement that Minneapolis Public Works and MWMO staff were in the midst of writing and reviewing.

The SRTS agreement is closely tied to the Upper Harbor District System Reciprocal Easement and Operating Agreement (REOA), which is the primary agreement guiding all design, build, funding, operations and maintenance between parcel owners at Upper Harbor.

Easements for the SRTS were identified on Parcel 5, as a part of the Upper Harbor design process (2019–2022) and finalized with the titling of the REOA in 2023. The REOA also included funding commitments by MWMO and Minneapolis Public Works for estimated capital and operations and maintenance costs.

MWMO staff began writing the Southern Regional Treatment System (SRTS) Agreement with Minneapolis Public Works, once the facility's design reached 60 percent in May of 2023. This SRTS Agreement is now substantially complete along with a companion amendment to the REOA that recognizes completion of the SRTS's Agreement, design, construction start date, and the water it will supply to the District System. Approvals and signatures for both documents are being requested from all parties prior to May 1st 2024 notice to proceed date.

The primary roles and responsibilities within the SRTS's Agreement between the MWMO and the City of Minneapolis to are as follows:

Partner Goals

The City's goals for the Southern Regional Treatment System are to provide a regional stormwater treatment system to effectively and efficiently improve water quality prior to discharge to the Mississippi River. The City's goal is also to have a regional stormwater treatment system that is comparable to or more efficient on a cost per pound basis than the City's other stormwater treatment facilities.

The MWMO's goals for the Southern Regional Treatment System are to provide a primary source of treated water that will improve the quality, functionality, and performance of the Upper Harbor's District System, with an emphasis on the water volume, quality, flow rate, and temperature needed to establish and maintain the living ephemeral stream system's macroinvertebrates taxa, including mayflies, dragonflies, and damselflies, which will intermittently be discharged directly into the Mississippi River.

MWMO

- Monitors the performance of the Southern Regional Treatment System
- Provides a project manager for oversight of the construction and inspections
- Coordinates with the City on any changes to the approved SRTS Plan

MWMO pays for:

- Professional services related to engineering, design, and construction administration
- The construction of the Southern Regional Treatment System
- The construction of the Common Reuse System
- Annual O&M exceedances that go beyond a \$120,000 annual cost cap (ends January 1, 2045)

- Modifications to the Southern Regional Treatment System needed to achieve agreed upon meet upon performance benchmarks

MWMO receives:

- Water quality treatment for 75 urban acres in North Minneapolis
- Water volume discharging from the Southern Regional Treatment System
- Rights to additional treatment gained through the District system treatment train
- City agrees it will not unreasonably divert water from the District System after this Agreement terminates
- Stormwater runoff volume or pollution reduction credits may be generated the additional water volume that goes into the District System

Minneapolis

- Provides land for the Southern Regional Treatment System and Common Reuse System
- Provides a project manager for oversight of the construction and inspections
- Coordinates with the MWMO on any changes to the approved SRTS Plan

Minneapolis pays for:

- After commissioning in 2025, Minneapolis owns the Southern Regional Treatment System and pays for all costs associated with the facility. Except for any annual operations and maintenance cost that exceed \$120,000, before January 1, 2045.

Minneapolis receives:

- Water quality treatment for 75 urban acres in North Minneapolis
- A turn key Southern Regional Treatment System

MWMO Staff are requesting Board approval of this Southern Regional Treatment System Agreement between the MWMO and the City of Minneapolis and the related approval of a 1st Amendment to the Upper Harbor REOA.

Mississippi Watershed Management Organization

RESOLUTION 2024-013

A RESOLUTION APPROVING THE SOUTHERN REGIONAL TREATMENT SYSTEM AGREEMENT

- WHEREAS, The MWMO's 10-Year Plan has established a goal to protect and improve the Mississippi River with implementation actions that improve habitat structure and ecosystem function within highly urban settings; and
- WHEREAS, The water from the Southern Regional Treatment System will improve habitat and aquatic ecosystems located in the Mississippi River Corridor Critical Area; and
- WHEREAS, The Southern Regional Treatment System will capture stormwater from 75 acres and effectively and efficiently improve water quality prior to discharge to the Mississippi River; and
- WHEREAS, Approvals and signatures for both the Southern Regional Treatment System Agreement and the related 1st Amendment to the Upper Harbor REOA are being requested from all parties prior to the May 1st 2024 notice to proceed date; and
- WHEREAS, The City and MWMO's staff have no substantial objections to the current Southern Regional Treatment System Agreement and the 1st Amendment to the Upper Harbor District System Reciprocal Easement and Operating Agreement; and
- WHEREAS, The MWMO Board has received and approved a final bid to construct the Southern Regional Treatment System; and
- WHEREAS, MWMO Staff recommends the Board of Commissioners approve the Southern Regional Treatment System Agreement and the 1st Amendment to the Upper Harbor District System Reciprocal Easement and Operating Agreement.

NOW THEREFORE BE IT RESOLVED, the MWMO Board of Commissioners approves Southern Regional Treatment System Agreement and the 1st Amendment to the Upper Harbor District System Reciprocal Easement and Operating Agreement and authorizes MWMO staff to take all necessary administrative actions to implement the resolution.

Adopted this the 12th day of March, 2024.

Review for the Board: _____

Randy Stille, Chair

Review for Administration: _____

Kevin Reich, Executive Director

SOUTHERN REGIONAL TREATMENT SYSTEM AGREEMENT

between

MISSISSIPPI WATERSHED MANAGEMENT ORGANIZATION,

and

CITY OF MINNEAPOLIS

Dated _____, 2024

This document was drafted by:
Kennedy & Graven, Chartered (TJG)
150 South Fifth Street, Suite 700
Minneapolis, Minnesota 55402-1299
Telephone: 612-337-9300

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**UPPER HARBOR
SOUTHERN REGIONAL TREATMENT SYSTEM AGREEMENT**

This Southern Regional Treatment System Agreement (“**Southern Regional Treatment System Agreement**” or this “**Agreement**”) is made and entered into this ___ day of _____ 2024, between the Mississippi Watershed Management Organization, a joint powers watershed pursuant to Minnesota Statutes, Sections 103B.201-103B.251, and organized under the laws of the State of Minnesota (“**MWMO**”) and City of Minneapolis, a municipal corporation, home rule city, and political subdivision of the State of Minnesota (“**City**”). MWMO and City are herein referred to as a “Party” and collectively referred to as the “Parties.”

RECITALS

- A. MWMO, City, and City of Minneapolis acting by and through its Park and Recreation Board previously entered into a Reciprocal Easement and Operating Agreement dated September 7, 2023, pursuant to which MWMO agreed to provide financial and technical assistance in the design and construction of a shared public and private District System (as defined herein).
- B. MWMO has agreed to assist with funding and constructing of the Southern Regional Treatment System and the Reuse Tank Component (as defined herein), with the intent that the treated stormwater runoff will be a source of reuse water for the District System.

AGREEMENT

In consideration of the foregoing recitals and the mutual covenants and promises hereinafter set forth, the Parties hereby agree to the following:

SECTION 1. DEFINITIONS

For the purposes of this Southern Regional Treatment System Agreement, the following terms shall have the meaning given them in this section. Capitalized terms not defined herein shall have the meanings ascribed to them in the REOA.

- 1.1 “Access Agreement” means that certain Perpetual Property Access Agreement dated June 1, 2023, recorded with the Hennepin County Registrar of Titles’ Office on September 14, 2023 as Document # 6035845.
- 1.2 “City” means City of Minneapolis, a municipal corporation, home rule city, and political subdivision of the State of Minnesota.
- 1.3 “Design Modifications” mean the changes made to the Southern Regional Treatment System by mutual agreement of the Parties as a result of the Parties determining the Southern Regional Treatment System is not performing in some respect as set out in the Performance Expectations.
- 1.4 “District System” has the same meaning given the term in the REOA.
- 1.5 “Engineer” means Barr Engineering Co.
- 1.6 “Final Designs” means the 100% design of the Southern Regional Treatment System and the Reuse Tank Component? prepared by the Engineer dated _____, 2024 as more fully described in Exhibit B that have been approved by City.

- 1.7 “MWMO” means the Mississippi Watershed Management Organization, a joint powers watershed pursuant to Minnesota Statutes, Sections 103B.201-103B.251, and organized under the laws of the State of Minnesota.
- 1.8 “Party” or “Parties” means one or more of the parties to this Southern Regional Treatment System Agreement named in the first paragraph of this Agreement, and their successors or assigns.
- 1.9 “Performance Expectations” means the expectations of the Parties with respect to the functionality and costs related to the Southern Regional Treatment System as outlined in Exhibit C.
- 1.10 “Property” means Lot 3, Block 3 according to the plat of Upper Harbor Development, Hennepin County, Minnesota.
- 1.11 “REOA” means the Upper Harbor Reciprocal Easement and Operating Agreement, dated September 7, 2023, between the MWMO, the City, and the City of Minneapolis Acting by and through its Park and Recreation Board recorded on September 12, 2023 as Document No. T6035280 as amended from time to time, pursuant to which, certain easements were dedicated for the purposes of constructing, operating and maintaining the District System and the Southern Regional Treatment System (the “Easement Area”).
- 1.12 “Reuse Tank Component” means the reuse tank, the force main connected to it, and all other piping and wiring installed as part of the project to support the function of the reuse tank. The Reuse Tank Component encompasses those improvements NOT shown in blue on the drawing attached hereto as Exhibit A.
- 1.13 “Southern Regional Treatment System” means the improvements related to an underground filtration water quality best management practice and storage system (to be located exclusively on Parcel 5 as reflected in blue on the Final Designs to be owned and operated by City. The Southern Regional Treatment System will include any pretreatment required for the filtration system as well as the connections to the City’s existing stormwater infrastructure. The Southern Regional Treatment System encompasses those improvements shown in blue on the drawing attached hereto as Exhibit A and does not include the Reuse Tank Component.
- 1.14 “Southern Regional Treatment System Agreement” (or “this Agreement”) means this Southern Regional Treatment System Agreement to provide for the construction and on-going operation and maintenance of the Southern Regional Treatment System and the Reuse Tank Component.

SECTION 2. SOUTHERN REGIONAL TREATMENT SYSTEM

- 2.1 MWMO Obligations. Pursuant to this Agreement, subject to the terms herein, MWMO has agreed to do the following:
- Work cooperatively with City and other parties and Consulting Parties to the REOA to amend the REOA to provide for the construction of the Southern Regional Treatment System and the Reuse Tank Component in 2024;
 - Pay the costs of the Engineer to design the Southern Regional Treatment System and the Reuse Tank Component;

- Pay for the capital costs of constructing the Southern Regional Treatment System and the Reuse Tank Component;
- Let the contract and pay for the construction of the Southern Regional Treatment System and Reuse Tank Component, including construction oversight;
- Provide a project manager for oversight of the construction and inspections of the Southern Regional Treatment System and the Reuse Tank Component;
- If the Southern Regional Treatment System does not perform in some respect as provided in the Performance Expectations, work cooperatively with City to develop and install, at MWMO's expense, Design Modifications to the Southern Regional Treatment System or the Reuse Tank Component; and
- Pay any operation and maintenance costs on the Southern Regional Treatment System in any year that City's costs to operate and maintain the Southern Regional Treatment System exceed City's annual \$120,000 cap as adjusted in Section 7.3 below.

2.2 City Obligations. Pursuant to this Agreement, subject to the terms herein, City has agreed to do the following:

- Work cooperatively with MWMO and other parties and Consulting Parties to the REOA to amend the REOA to provide for the construction of the Southern Regional Treatment System in 2024;
- Accept ownership of the Southern Regional Treatment System once it is constructed pursuant to the system inspection and commissioning process in Section 5.6. below;
- Operate and maintain the Southern Regional Treatment System consistent with Section 7 of this Agreement through 2044;
- If the Southern Regional Treatment System does not perform in some respect as provided in the Performance Expectations, work cooperatively with MWMO to develop Design Modifications to the Southern Regional Treatment System provided the City shall not be required to incur any additional capital, operations or maintenance costs; and
- Accept sole responsibility to operate and maintain the Southern Regional Treatment System at City's own costs, as it determines is needed, as of January 1, 2045. at which point, this agreement terminates unless otherwise extended by agreement of the parties.

2.3 Separation of Project Components. This Agreement provides for the installation of the Southern Regional Treatment System and the Reuse Tank Component as part of the same project, but the ownership and responsibility to provide for the on-going maintenance and operation of each component part are separate. The City will own and provide for the on-going operation, maintenance and replacement of the Southern Regional Treatment System, while the Reuse Tank Component will become part of the District System and will be owned, operated, maintained and replaced as part of that system, all in accordance with the terms and conditions of this Agreement and, with respect to the District System, in accordance with the REOA.

2.4 Additional Information. For additional information regarding the Southern Regional Treatment System, refer to Sections 3.3, 3.4, 4.8, 5.2, 5.3, 7.1, 9.6, 15.1 through 15.10, and 17.3 of the REOA.

2.5 Term. Unless terminated early pursuant to Section 5.1 below or extended by agreement of the parties, this Agreement shall terminate on January 1, 2045, at which time, MWMO shall no longer have any obligation to contribute to the costs of the Southern Regional Treatment System and the City may, in its sole discretion, make decisions on how to operate, maintain or replace the Southern Regional Treatment System.

SECTION 3. MWMO AND CITY GOALS FOR SOUTHERN REGIONAL TREATMENT SYSTEM

- 3.1 City Goals. City's goals for the Southern Regional Treatment System are to provide a regional stormwater treatment system to effectively and efficiently improve water quality prior to discharge to the Mississippi River. City's goal is also to have a regional stormwater treatment system that is comparable to or more efficient on a cost per pound basis than City's other stormwater treatment facilities.
- 3.2 MWMO Goals. MWMO's goals for the Southern Regional Treatment System are to provide a primary source of treated water that will improve the quality, functionality, and performance of the Upper Harbor's District System, with an emphasis on the water volume, quality, flow rate, and temperature needed to establish and maintain the living Ephemeral Stream System's macroinvertebrates taxa including mayflies, dragonflies, and damselflies which will intermittently be discharged directly into the Mississippi River.

SECTION 4. DESIGN OF SOUTHERN REGIONAL TREATMENT SYSTEM

- 4.1 Engineer. MWMO has engaged the Engineer to lead the design of the Southern Regional Treatment System and the Reuse Tank Component up to the Final Designs.
- 4.2 Design and Construction Costs. MWMO has agreed to pay for the design and construction of the Southern Regional Treatment System and the Reuse Tank Component.
- 4.3 Design. MWMO and Engineer have coordinated with City on the design of the Southern Regional Treatment System.

SECTION 5. CONSTRUCTION OF SOUTHERN REGIONAL TREATMENT SYSTEM

- 5.1 Agreement Contingencies. This Agreement, and MWMO's obligation to construct the Southern Regional Treatment System, are contingent upon the following:
 - a. MWMO determining, in its sole discretion, that the costs to construct the Southern Regional Treatment System and the Reuse Tank Component, based on the bids it receives, is reasonably feasible on or before _____, 2024 and starting construction of the Southern Regional Treatment System by _____, 2024 ;
 - b. MWMO and City collaboratively obtaining an amendment to Section 5.2 of the REOA to allow MWMO the right to access the Easement Area of the REOA and proceed with building the Southern Regional Treatment System prior to June 1, 2025 on the Property pursuant to Section 17.3 of the REOA.

If the preceding conditions in this Section 5.1 are not met or waived by the parties by _____, 2024, this Agreement shall terminate automatically and neither party shall have any further obligations hereunder.

- 5.2 Initial Requirements. MWMO must work with the parcel developers impacted by the construction of the Southern Regional Treatment System and the Reuse Tank Component in order to minimize any issues caused by the construction of the Southern Regional Treatment System and the Reuse Tank Component.

- 5.3 Pre-Construction Responsibilities. MWMO agrees to obtain the permits necessary for constructing the Southern Regional Treatment System and the Reuse Tank Component, including, but not limited to, permits from the Minnesota Pollution Control Agency (including construction stormwater permit), the National Pollutant Discharge Elimination System permit, City soil erosion permit, and the construction permit.
- 5.4 Construction of Southern Regional Treatment System. MWMO will comply with applicable statutory municipal contracting procedures to advertise for bids, accept and review bids, and to award the contract, if the MWMO determines the project is financially feasible, to construct the Southern Regional Treatment System. MWMO will not award the contract unless this Agreement has been fully executed and the contingencies identified in Section 5.1 above have been satisfied.
- 5.5 Changes in the Work. MWMO shall not permit changes to the Final Plans without the City's prior written approval, which approval will not be unreasonably withheld.
- 5.6 System Inspection and Commissioning. The Southern Regional Treatment System will need to be inspected and tested by MWMO with the results forwarded to City for approval to confirm that the Southern Regional Treatment System meets or exceeds the Performance Specifications of the Southern Regional Treatment System stated in the corresponding approved Final Designs as a condition of the City accepting ownership of the Southern Regional Treatment System. Until such time as the City accepts ownership pursuant to Section 7 below, MWMO shall retain ownership and all financial responsibility for the Southern Regional Treatment System. City agrees it will not unreasonably delay the acceptance process or unreasonably refuse to accept financial responsibility for the Southern Regional Treatment System.
- 5.7 Repairs Required Due to Construction. Any repairs required due to the construction of the Southern Regional Treatment System or the Reuse Tank Component on the impacted parcels shall be addressed by MWMO in accordance with Section 4.9 of the REOA.
- 5.8 Failure to Meet Performance Expectations. If the Southern Regional Treatment System does not meet the Performance Expectations, MWMO will work with City to ensure that the Performance Expectations are being met or a Design Modification is installed as provided herein.

SECTION 6. MODIFICATIONS OF SOUTHERN REGIONAL TREATMENT SYSTEM

- 6.1 Performance Expectations. The Performance Expectations of the Parties associated with the Southern Regional Treatment System are set out in the memo attached hereto as Exhibit C, which were developed as part of the Engineer's Final Design. The Parties agree the Performance Expectations will be used to identify whether any Design Modifications are needed to the Southern Regional Treatment System because it is not performing in some respect as intended. Any such agreed upon Design Modifications will be made by MWMO at MWMO's expense. At no time is City required to agree to any Design Modification that in the City's reasonable determination imposes additional capital, operating or maintenance costs on the City.
- 6.2 Evaluation of Southern Regional Treatment System Performance. The Parties agree Exhibit C represents a modeled estimated benchmark of performance for the Southern Regional Treatment System. MWMO and City agree to work cooperatively to review the data developed from the monitoring provided for in Section 11 of this Agreement to develop an accurate trend line to help determine if the actual performance of the Southern Regional Treatment System is effectively meeting the goals of each Party or if Design Modifications are needed.

- 6.3 Design Modifications. City may transition to an alternate Southern Regional Treatment System design plan if the Southern Regional Treatment System is not performing as designed or in accordance with the Performance Expectations. City and MWMO will work together in good faith for a period not to exceed 12 months to identify and implement Design Modifications that meet both Parties goals. The Parties understand and agree the implementation of any agreed upon Design Modification may extend beyond the initial 12-month period. Possible Design Modifications may include decommissioning or replacing individual components of the Southern Regional Treatment System or the Southern Regional Treatment System altogether, in place of a treatment system that does more for lower costs and maintains MWMO's goal for the living ephemeral stream system's macroinvertebrates taxa. Notwithstanding the foregoing, however, if the Performance Expectations on Exhibit C are not being met and City and MWMO cannot agree upon such Design Modifications, or if MWMO is unwilling to continue to reimburse City for costs of maintenance over and above the maintenance cap in Section 7.3 below, City may make such modifications at its own cost and this Agreement shall terminate.

SECTION 7. OPERATIONS AND MAINTENANCE OF SOUTHERN REGIONAL TREATMENT SYSTEM

- 7.1 Ownership. Upon completion of the Southern Regional Treatment System construction, system inspection and testing in accordance with Section 5 of this Agreement and written acceptance by City's Director of Surface Water and Sewers, the Southern Regional Treatment System shall become City property and operated and maintained consistent with Public Works infrastructure policies.
- 7.2 Operations and Maintenance. Subject to adequate future appropriations from City budget process, City agrees to maintain and operate the Southern Regional Treatment System in a manner consistent with other stormwater management BMPs it is responsible for and in manner reasonable to help achieve the Performance Expectations. If City determines, for any reason, it is not possible to continue to maintain and operate the Southern Regional Treatment System to this degree, City shall consult in good faith with MWMO on potential Design Modifications to the system or its operations as provided in Section 6 of this Agreement.
- 7.3 Maintenance Cap. If City's costs to operate and maintain the Southern Regional Treatment System in any year through 2044 exceeds \$120,000 (annually adjusted as provided herein), MWMO agrees to pay the additional maintenance costs for such year. City shall notify MWMO if it anticipates its costs will exceed the amount of the maintenance cap in a year and shall work cooperatively with MWMO to identify the scope of the needed work that will exceed the above cap. The amount of the maintenance cap shall annually be adjusted by increasing it by 2% over the amount of the previous year's maintenance cap.
- 7.4 Continued Functionality. The City agrees it will not unreasonably divert water from the District System after this Agreement terminates to help ensure the continued flow of water volume into the District System provided that the City is under no obligation to ensure any continued flow of water volume into the District System by keeping the Southern Regional Treatment System in operation or by maintaining the Southern Regional Treatment System to any particular level.

SECTION 8. INTENTIONALLY LEFT BLANK

SECTION 9. TREATMENT LEVELS

City is not committing to providing any defined level of treatment for the Southern Regional Treatment System as it relates to anticipated reuse needs in the District System. City is making no assurances as to the quality, volume, flow rate, or temperature of the treated water from the Southern Regional Treatment System. However, City agrees to work cooperatively with MWMO to identify and consider changes that may improve the treated water to better support MWMO's goals for reuse of the water including, but not limited to, operational changes or Design Modifications as provided for herein so long as such changes or modifications shall not impose any additional capital, operating or maintenance costs on the City.

SECTION 10. EMERGENCY RESPONSE.

- 10.1 Preparation of Plan. MWMO has hired the Engineer to draft a Regional Emergency Response Plan for the Southern Regional Treatment System. City and MWMO, along with Engineer, will work together to review, revise, and approve the Emergency Response Plan. The manual will be completed as a part of the Southern Regional Treatment System construction documents.
- 10.2 Implementation. City will make reasonable attempts to follow the protocols in the Regional Emergency Response Manual in order to limit the impacts to Southern Regional Treatment System or the downstream District System.
- 10.3 Temporary Shutdown. If the Southern Regional Treatment System is being negatively impacted by stormwater entering the Southern Regional Treatment System, then City can temporarily shut down the Southern Regional Treatment System until the conditions negatively affecting the Southern Regional Treatment Systems have been remedied. If MWMO determines the Southern Regional Treatment System is being negatively impacted, it may request City to temporarily shut down the Southern Regional Treatment System. The City agrees to reasonably review such request and provided the City is in agreement, act as soon as is reasonably possible to shut down the Southern Regional Treatment System.

SECTION 11. MONITORING AND RESEARCH

- 11.1 Monitor Performance. MWMO will, at its option and expense, monitor performance of the Southern Regional Treatment System in accordance with the monitoring protocols established by the City and MWMO for the Southern Regional Treatment System during the term of this Agreement. The City may, at its discretion, additionally monitor the Southern Regional Treatment System on its own behalf or through another agent at the City's own cost.
- 11.2 Monitoring Protocols. MWMO and City will establish monitoring protocols before construction of the Southern Regional Treatment System is completed. These will include but are not limited to the following:
 - Identify the purpose of the monitoring defining the monitoring season;
 - Establish the procedures to be followed in order to access the Southern Regional Treatment System;
 - Setting water quality parameters to be monitored;
 - Gathering data needed for future loading calculations;
 - Setting an end date for regular seasonal monitoring;
 - Both parties agree to meet and discuss future monitoring needs and the roles each will take on;

- What entity will provide the resources, including equipment, staff, and transportation to carry out the monitoring; and
- What reporting may be required.

SECTION 12. STORMWATER CREDITS AND REUSE WATER

- 12.1 Stormwater Credits. To the extent any stormwater runoff volume or pollution reduction credits may be generated and assignable under applicable laws resulting from the installation and operation of the Southern Regional Treatment System or the Reuse Tank Component, those credits shall be assigned to the Parties as provided in this section. City shall receive any such credit attributable to the treatment provided by the Southern Regional Treatment System and MWMO shall receive any such credit attributable to the additional water volume that goes into the District System from the Southern Regional Treatment System. If a Party receives any credits, it may utilize the credits as it determines is appropriate.
- 12.2 Reuse Water. The parties agree MWMO will own the treated stormwater discharged from the Southern Regional Treatment System to the District System and MWMO will use such to support Habitat Restoration and the Ephemeral Stream consistent with Sections 15.9 and 16 of the REOA. If MWMO determines the amount of discharged water exceeds the amount needed to support Habitat Restoration and the Ephemeral Stream, it may transfer the excess capacity to others.

SECTION 13. INSURANCE

- 13.1 Construction Phase Insurance. MWMO will cause the contractor or contractors that constructs the Southern Regional Treatment System to obtain and maintain at all times during the process of constructing the Southern Regional Treatment System the following insurance policies:
- a. An All Risk Broad Form Basis Insurance Policy covering the following: builder's risk insurance, written on the so-called "Builder's Risk – Completed Value Basis," in an amount equal to one hundred percent (100%) of the insurable value of the Southern Regional Treatment System at the date of completion with a "no co-insurance" clause, and with coverage available in nonreporting form on the so-called "all risk" form of policy; the interest of City shall be protected as a loss-payee in accordance with a clause in form and content satisfactory to City; and
 - b. Comprehensive general liability insurance (including operations, contingent liability, operations of subcontractors, completed operations and contractual liability insurance) together with a Protective Liability Policy with limits against bodily injury and property damage of not less than \$2,000,000 for each occurrence (to accomplish the above-required limits, an umbrella excess liability policy may be used); City shall be listed as an additional insured on the policy; and
 - c. Workers' compensation insurance, with statutory coverage; and
 - d. Automobile liability coverage in an amount not less than \$1,000,000 (combined single limit) for owned, hired and non-owned automobiles; and
 - e. Payment and performance bonds as required by the Uniform Municipal Contracting Law, Minn. Stat. § 471.345.

- 13.2 City Provided Coverage. Pursuant to authority granted in Minn. Stat. §471.981, City of Minneapolis is a self-insured municipality. Minn. Stat. § 466.04 (2014) limits liability of a municipality on any claim within the scope of Minn. Stat. §§ 466.01 to 466.15 (2014) to \$500,000 to any claimant on or after July 1, 2009; and \$1,500,000 for all claims arising out of a single occurrence for claims arising on or after July 1, 2009. City also is self-insured under the State of Minnesota's workers compensation laws.
- 13.3 Insurance Policies. All insurance required in this Section 13 shall be taken out and maintained with responsible insurance companies which are authorized under the laws of the State of Minnesota to assume the risks covered thereby. If requested by any Party, the other Parties will provide evidence of insurance.
- 13.4 Waiver of Subrogation. MWMO hereby waives and releases the other parties to the REOA (the "Released Parties") from any liability for any loss or damage to all property within the Easement Area, which loss or damage is of the type covered by the insurance required to be maintained under Section 13.1, regardless either of any negligence (but not intentional acts) on the part of any Released Party, which may have contributed to or caused such loss, or of the amount of such insurance required or actually carried, including any deductible, retention or self-insurance reserve.

SECTION 14. LIABILITY; INDEMNIFICATION

- 14.1 Each Party Responsible for Own Acts. Except as provided below, each Party is responsible for its own acts and the results thereof to the extent authorized by law and a Party is not responsible for the acts of the other Party or the results thereof. Nothing in this Agreement shall constitute a waiver of any limits on or exclusions from liability available to City and MWMO under Minnesota Statutes, Chapter 466 or other laws. Furthermore, notwithstanding anything herein to the contrary, each Party shall only be liable for default of its obligations or violation of the terms of this Agreement. No Party shall be personally liable to any other Party or any person, or any successor in interest thereto, in the event of any default or breach under this Agreement or for any amount of money that may be due and payable hereunder.
- 14.2 Indemnification of other Party. Each Party shall indemnify, defend, and hold harmless the other Party from and against any and all liability, damage, expense, cause of action, suit, claim, or judgment (including without limitation reasonable attorneys' fees) arising from personal injury, death, or property damage if caused by the negligence or wrongful, fraudulent or criminal act or wrongful omission or act of the indemnifying owner, its employees, agents or contractors occurring during the term of this Agreement relating to any of the easements, breach of this Agreement, and/or the exercise of any rights under this Agreement, except to the extent occasioned by the indemnified Party, or its employee's, agent's or contractor's own negligent or wrongful, fraudulent or criminal act or wrongful omission to act.
- 14.3 Survival. The provisions of this Section 14 shall survive termination of this Agreement.

SECTION 15. EVENT OF DEFAULT

If any Party defaults under this Agreement (the "Defaulting Party"), and such default continues for thirty (30) days after written notice thereof in the event of a failure to pay money, or for sixty (60) days after written notice thereof in the event of a non-monetary default (provided that in the case of a non-monetary default, if the default cannot reasonably be cured within sixty (60) days, then such additional time as shall be reasonably necessary), then the non-defaulting Party giving notice of such default (the "Non-Defaulting

Party”) shall be entitled to seek, as its sole remedies, damages for non-performance or specific performance of this Agreement; provided, however, that after the time for curing of such default has expired, the Non-Defaulting Party may cure such default (but shall not be obligated to do so) and shall, to the extent permitted by law, have a claim against the Defaulting Party in the amount of any out-of-pocket costs and expenses incurred and damages suffered as a result of such default and the cure of such default, including any reasonable costs and expenses incurred and damage suffered as a result of maintenance and repair (in the event of a non-monetary default), and including any out-of-pocket costs and expenses of collection thereof (the “Cure Expenses

SECTION 16. NOTICES

Except as otherwise expressly provided in this Agreement, a notice, demand, or other communication under this Agreement by any Party will be sufficiently given or delivered if it is dispatched by delivery service (such as FedEx), registered or certified mail, postage prepaid, return receipt requested, or delivered personally to the corresponding Party at the following addresses or at such other address(es) with respect to any such Party as that Party may, from time to time, designate in writing and forward to the other, as provided in this Section 16:

For MWMO:	Executive Director Mississippi Watershed Management Organization 2522 Marshall Street NE Minneapolis, MN 55418 Telephone: 612-746-4971 Email: kreich@mwmo.org
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For City:	Jeremy Strehlo City of Minneapolis Department of Public Works Room 300, Public Service Center Minneapolis, MN 55415 Email: jeremy.strehlo@minneapolismn.gov
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A notice or other communication shall be deemed to have been given to a Party, and shall be effective, (i) if delivered by hand, when physically received by an officer of such Party, or other person authorized by the Party to receive notice, (ii) if delivered by an overnight delivery service, on the next business day following the business day such notice or other communication is timely delivered to the overnight service, or (iii) if delivered by mail, on the third business day following the date such notice or other communication is deposited in the U.S. mail postage prepaid addressed to the other Party, whichever occurs earliest.

Each Party shall promptly notify the other Party if they change their contact person.

SECTION 17. AMENDMENTS TO AGREEMENT

This Agreement may be amended only by written agreement of the Parties.

SECTION 18. MISCELLANEOUS

18.1 Nondiscrimination. The Parties agree to abide by the requirements and regulations of the Americans with Disabilities Act of 1990 (ADA), the Minnesota Human Rights Act (Minnesota Statutes, Chapter

363), and Title VII of the Civil Rights Act of 1964. These laws deal with discrimination based on race, gender, disability, and religion, and with sexual harassment.

- 18.2 Audit. All Parties agree that any Party, the Minnesota State Auditor, or any of their duly authorized representatives, at any time during normal business hours and as often as they may reasonably deem necessary, shall have access to and the right to examine, audit, excerpt and transcribe any books, documents, papers, and records that are relevant and involve transactions relating to this Agreement.
- 18.3 Applicable Law. The law of the State of Minnesota shall govern all interpretations of this Agreement, and the appropriate venue and jurisdiction for any litigation that may arise under this Agreement will be in and under those courts located within the County of Hennepin, State of Minnesota.
- 18.4 Attorney Fees and Expenses. All Parties shall pay their own attorney fees and expenses.
- 18.5 Waiver. Failure to enforce any provision of this Agreement upon a violation of it will not be deemed a waiver of the right to do so as to that or any subsequent violation.
- 18.6 Severability. If any provision of this Agreement is held invalid, illegal, or unenforceable, the remaining provisions will not be affected.
- 18.7 Counterparts and Signature Pages. This Agreement may be executed in any number of counterparts, each of which will constitute one and the same instrument. The signatures to this Agreement may be executed on separate pages, and when attached to this Agreement, shall constitute one complete document.
- 18.8 Entire Agreement. This Agreement, including the recitals and the exhibits, which are incorporated in and made part hereof, represent the entire agreement between the Parties concerning the subject matter hereof.

(The remainder of this page is intentionally left blank.)

IN WITNESS WHEREOF, the Parties to this Agreement have executed this Southern Regional Treatment System Agreement on the dates written below.

MISSISSIPPI WATERSHED
MANAGEMENT ORGANIZATION

By: _____
Stephen Eggert
Its: Chair

By: _____
Randy Stille
Its: Vice Chair

STATE OF MINNESOTA)
) SS.
COUNTY OF HENNEPIN)

The foregoing instrument was acknowledged before me on _____, 2024, by Stephen Eggert, the Chair of the Mississippi Watershed Management Organization, a joint powers watershed pursuant to Minnesota Statutes, Sections 103B.201-103B.251, and organized under the laws of the State of Minnesota, on behalf of Mississippi Watershed Management Organization.

Notary Public

STATE OF MINNESOTA)
) SS.
COUNTY OF HENNEPIN)

The foregoing instrument was acknowledged before me on _____, 2024, by Kevin Reich, the Executive Director of the Mississippi Watershed Management Organization, a joint powers watershed pursuant to Minnesota Statutes, Sections 103B.201-103B.251, and organized under the laws of the State of Minnesota, on behalf of Mississippi Watershed Management Organization.

Notary Public

CITY OF MINNEAPOLIS

By: _____

Dushani Dye

Its: Finance Officer

Responsible Department Head:

Angella M. Craft,
Director of Surface Water and Sewers
Approved as to Form:

By Assistant City Attorney

STATE OF MINNESOTA)
) SS.
COUNTY OF HENNEPIN)

The foregoing instrument was acknowledged before me on _____, 2024, by Dushani Dye, the Finance Officer of City of Minneapolis, a home rule charter city, on behalf of City of Minneapolis.

Notary Public

EXHIBIT A

PARTNERS' AND DISTRICT SYSTEM RESPONSIBILITIES SOUTHERN REGIONAL TREATMENT SYSTEM COMPONENTS

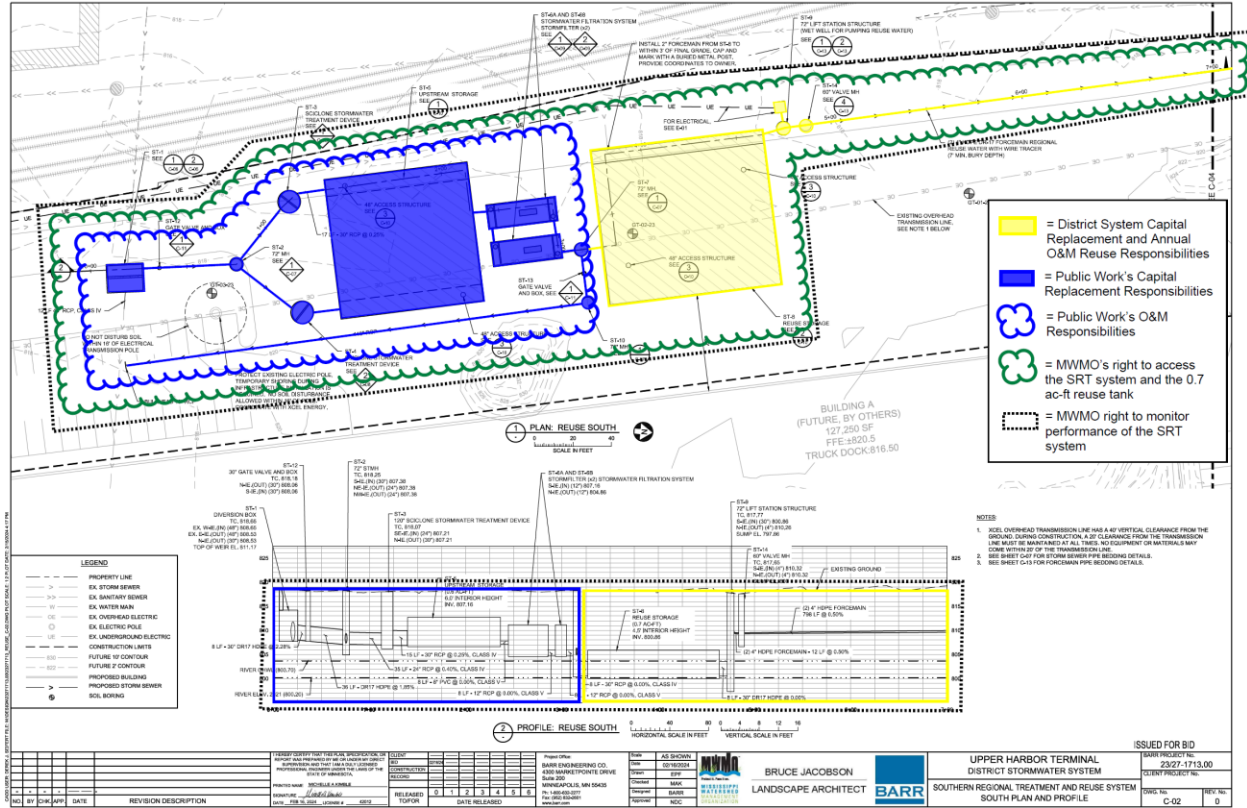


EXHIBIT B

FINAL DESIGN PACKAGE

FOR THE SOUTHERN REGIONAL TREATMENT SYSTEM

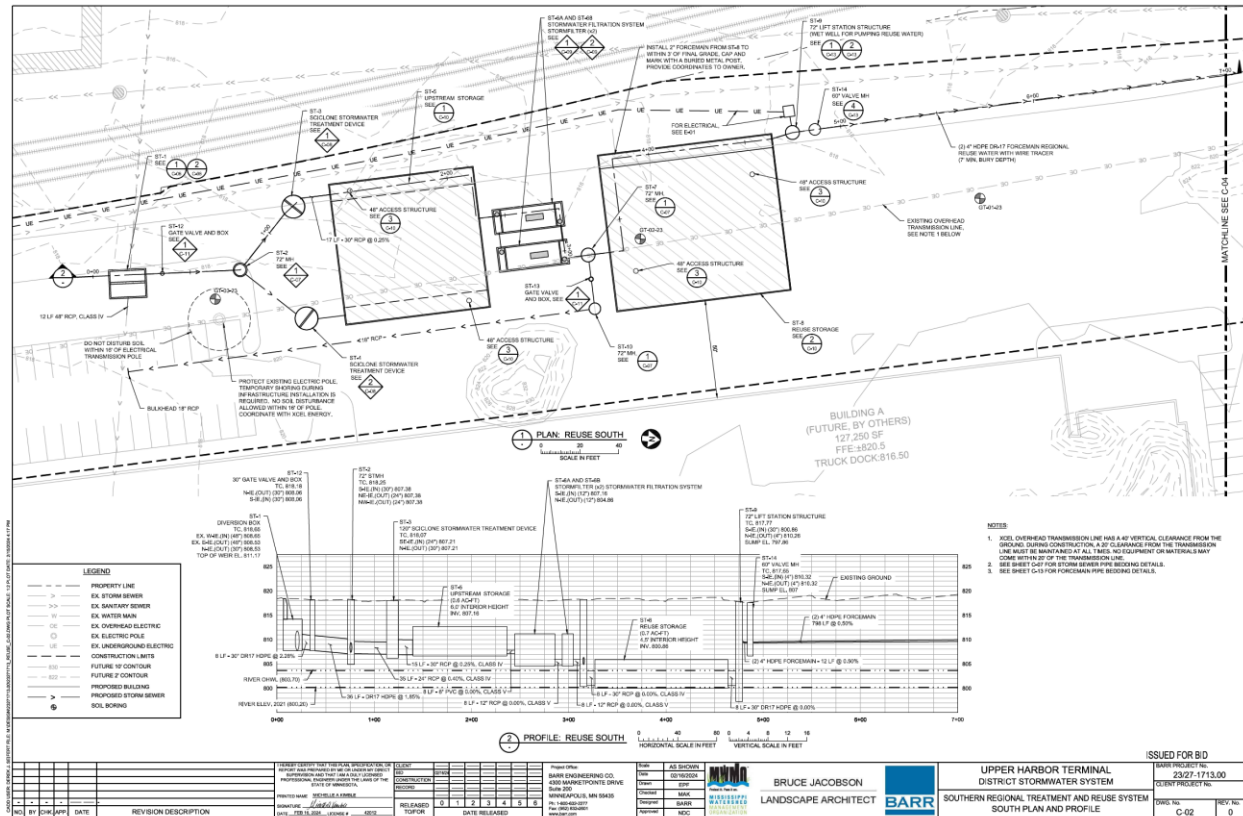


EXHIBIT C

ESTIMATED TREATMENT AND COST PERFORMANCE MEMO

resourceful. naturally.
engineering and environmental consultants



Technical Memorandum

To: Jeremy Strehlo, City of Minneapolis
From: Barr Engineering Co. and Mississippi Watershed Management Organization
Subject: UHT Southern Regional Treatment Performance
Date: January 5, 2024
Project: 23/27-1713

1 Introduction

This memorandum summarizes the water quality performance of the Upper Harbor Terminal (UHT) Southern Regional Treatment system (SRT) as it relates to the City of Minneapolis' (City) Chapter 54 stormwater regulations. Barr Engineering Co. (Barr) prepared this memo on behalf of the Mississippi Watershed Management Organization (MWMO). This memorandum also summarizes Barr's review of third party data regarding total suspended solids (TSS) removal efficiencies for Manufactured Treatment Devices, specifically the StormFilter system. Additionally, a comparison of the MWMO's St. Anthony Village Filter (SAVF) and SRT is included for the City's review.

2 Manufactured Treatment Device TSS Removal Efficiency

Barr reviewed industry documentation on Manufactured Treatment Devices (MTD), such as the StormFilter, to better understand the potential TSS removal efficiency of the SRT.

The primary source Barr reviewed was the MPCA's "TP and TSS credits and guidance for manufactured treatment devices" that was published by the MPCA based on research and technical review from stormwater professionals in Minnesota. The MPCA review covers a wide variety of MTDs, including the Contech StormFilter cartridges. To derive credits for the MTDs the MPCA reviewed, data were compiled from the Technical Evaluation Reports (TERs) for Washington State's Technology Assessment Program (TAPE). They analyzed data for all storm events for each device, and developed removal efficiencies from statistical analysis of the data. The MPCA also reviewed particle distributions of sediment across the different geographies where data is collected, and found that the reviewed data falls within an acceptable range for the Midwest. The median TSS removal efficiency for the StormFilter for runoff that flows through the cartridges is reported as 89%. The lower 95th percent confidence limit is reported as 85%, which is the maximum TSS credit that the MPCA gives for an MTD.

Barr also reviewed a technical summary published by the Capitol Region Watershed District (CRWD), where the watershed reviewed crediting for several MTDs to incorporate into its stormwater rules. The CRWD also reviewed the Washington TAPE data, as well as the New Jersey Corporation for Advanced Technology (NJCAT)'s review of filtration MTDs and pretreatment devices. Aside from the TAPE efficiencies mentioned above, the NJCAT credits hydrodynamic separators with a 50% TSS removal

To: Jeremy Strehlo, City of Minneapolis
From: Barr Engineering Co. and Mississippi Watershed Management Organization
Subject: UHT Southern Regional Treatment Performance
Date: January 5, 2024
Page: 2

efficiency, and StormFilters with an 80% TSS removal efficiency. The CRWD accepts TSS credits from both TAPE and/or NJCAT.

For the subsequent sections, Barr assumed that the StormFilter removal efficiency for the SRT is 80%, which is the lowest removal efficiency published by the data reviewed.

3 SRT Design

3.1 Comparison of Filtration Technology

Barr conducted an analysis comparing two different filtration technologies for a regional stormwater treatment system to decide which would be most appropriate for the SRT. The sections below outline important components of both technologies, including size, maintenance, cost, and pollutant removals.

3.1.1 StormFilter

A StormFilter is a proprietary filtration vault manufactured by Contech Inc. The vault contains dozens of cartridges that utilize a proprietary filtration media. Below are the advantages and disadvantages of using a StormFilter for the regional water quality treatment:

Advantages:

- Small footprint: because of the proprietary technology, the StormFilter takes up a much smaller footprint than a traditional water quality BMP. This allows for more space onsite to add underground storage volume. One StormFilter vault size that holds 52 cartridges is 10 ft by 24 ft. The vaults come in larger sizes if more cartridges are needed.
- Treatment: the filtration media has a high removal efficiency for TSS. The media removes 80-85% of TSS, which is similar to a traditional sand filter (Minnesota Stormwater Manual). Additionally, because the StormFilter has a higher filtration rate than a sand filter, it can treat more runoff volume and remove more TSS load.

Disadvantages:

- Maintenance: the cartridges require annual to biannual maintenance including media replacement and removing accumulated debris and solids within the vault. Because of the size of the vault, accumulation rates may be faster than traditional BMPs that are larger in size and the vault may need to be maintained more frequently.
- Cost: the StormFilter capital cost is higher than a traditional water quality BMP like a sand filter.

3.1.2 Iron-Enhanced Sand Filter

A sand filter is a common water quality BMP used to filter runoff of particulates. When an amendment is added to the sand filter, such as iron filings, the dissolved phosphorus treatment increases. Below are the advantages and disadvantages of using an iron-enhanced sand filter for the regional water quality treatment:

To: Jeremy Strehlo, City of Minneapolis
From: Barr Engineering Co. and Mississippi Watershed Management Organization
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Advantages:

- Cost: the sand filter construction cost is less expensive than a proprietary device manufacturing cost
- Treatment: the iron-enhanced sand filter treatment is slightly lower than the StormFilter, but still removes a significant amount of pollutants

Disadvantages:

- Large footprint: a sand filter requires a larger footprint than a StormFilter due to its lower conductance (i.e., filtration rate to meet drawdown requirements).
- Potential reduced effectiveness: Recent research and monitoring of iron-enhanced sand filtration suggests that filters that are not exposed to direct sunlight may not fully dry out and can become anoxic, reducing the dissolved phosphorus-removal effectiveness of the filter and potentially releasing previously captured dissolved phosphorus.
- Maintenance: underground sand filters present several maintenance challenges, including allowing the sand bed to dry out completely, preventing clogging of the surface and easy access to clean out clogs.

3.1.3 Sand Filter

Like an iron-enhanced sand filter, a regular sand filter is a common water quality BMP used to filter particulates from runoff. However, a sand filter without a chemical amendment does not have the capability to remove dissolved phosphorus. The TSS removals for a sand filter are similar to that of an iron-enhanced sand filter. Below are the advantages and disadvantages of using a sand filter for the regional water quality treatment:

Advantages:

- Cost: the sand filter construction cost is less expensive than a proprietary device manufacturing cost

Disadvantages:

- Treatment: the sand filter treatment is less effective than an iron-enhanced sand filter and the StormFilter, due to its inability to remove dissolved phosphorus
- Large footprint: a sand filter requires a larger footprint than a StormFilter due to its lower conductance (i.e., filtration rate to meet drawdown requirements).
- Maintenance: underground sand filters present several maintenance challenges, including allowing the sand bed to dry out completely, preventing clogging of the surface and easy access to clean out clogs.

3.2 SRT Components

The SRT is a regional stormwater filtration and storage system that treats stormwater runoff from approximately 73 acres of primarily residential land use in the City. The proposed location of the SRT is on the southern end of the UHT site (west side of Parcel 5).

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The SRT consists of the following components that work to divert stormwater flow, treat the stormwater, and either store it or send it back to the Mississippi River:

- Diversion structure along 48-inch existing trunkline
- Two 10-foot diameter pretreatment CDS (hydrodynamic separator units) in parallel
- Rate control storage (0.6 acre-ft)
- StormFilter vaults (2) with a total of 203 filtration cartridges
- Reuse water storage (2.5 acre-ft)
- Overflow 18-inch pipe to 48-inch storm sewer (outlet at Mississippi River)

4 SRT Performance

The following subsections describe the performance of the SRT for both total suspended solids (TSS) removal and volume abstraction. The City's Chapter 54 stormwater ordinance requires that at least 70% of TSS be removed from stormwater runoff for a 1.25 inch event, which is equivalent to approximately 80–90% TSS removed on an annual basis. Additionally, the stormwater ordinance requires 0.55 to 1.1 inches of runoff be abstracted depending on the project type (i.e. linear projects require 0.55 inches of runoff abstraction). While the SRT does not trigger Chapter 54 requirements because its performance is not being used to meet development requirements, the City has expressed interest in quantifying the performance of the SRT for creation of stormwater credits to be used on future City projects.

4.1 Pretreatment Performance

The CDS units that are a part of the SRT design remove TSS and floatable pollutants from the stormwater inflow. Pretreatment is a critical component of any stormwater treatment as it provides a centralized mechanism for treatment of larger pollutants and can be maintained in a cost effective manner.

Barr worked with the manufacturer Contech Engineering Solutions (Contech) to design the CDS units for the SRT. The two 10-foot diameter CDS units will work in parallel to treat the diverted stormwater runoff before it enters the rate control storage.

Using the City's water quality (P8) model of the watershed (Barr, 2018), the total influent volume to the diversion structure of the SRT is approximately 35.5 acre-ft per year. The total influent TSS load to the diversion structure of the SRT is approximately 11,100 lbs/yr. Approximately 26.5 acre-ft/yr and 8,290 lbs/yr of TSS are diverted to the treatment system, while 9 acre-ft/yr and 2,811 lbs/yr of TSS bypasses the system in larger storm events as untreated to the Mississippi River.

There are two methods that were used to quantify the TSS removal efficiency of the pretreatment structures. One method was the SHSAM model that predicts removals for various pretreatment devices, including CDS units. The other method was a proprietary model that Contech developed for its products. SHSAM predicted approximately 25% removal of TSS between the two pretreatment structures (assuming NURP50 particle distribution), while Contech's model predicted approximately 50% removal of TSS using a particle distribution of $d_{50} = 75 \mu\text{m}$. Using these two methods, Barr estimates that the pretreatment will remove a range of 2,073 to 4,145 lbs/yr of TSS. These removals represent 18.7% to 37.3% of the total TSS

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loading from the drainage area. Using a wet unit weight of approximately 150 lbs per cubic foot, this equates to a volume of 13.8 to 27.6 cubic feet of TSS removed per year. Pretreatment does not abstract any water volume. These results are also summarized in Table 1.

Table 1. Pretreatment Performance Summary

Pollutant Mass Balance Component	Value
Total TSS Inflow to Diversion Structure (lbs/yr)	11,100
Total Volume Inflow to Diversion Structure (ac-ft/yr)	35.5
Total TSS Inflow to Pretreatment (lbs/yr)	8,290
Total Volume Inflow to Pretreatment (ac-ft/yr)	26.5
Pretreatment Removal Efficiency of Treated Volume	25 - 50%
Pretreatment TSS Removal (lbs/yr)	2,073 - 4,145
Pretreatment Removal Efficiency of Total Runoff from Drainage Area	18.7 - 37.3%
Remaining TSS Load to Filtration (lbs/yr)	4,145 - 6,217

4.2 Filtration Performance

The filtration component of the SRT is designed to provide additional removal of finer particulate pollutants that are not removed by the pretreatment. The StormFilter, designed by Contech, utilizes cartridges filled with filtration media to remove pollutants.

Based on the range of performance of the pretreatment devices, the total TSS load to the filtration system is approximately 4,145 lbs/yr to 6,217 lbs/yr.

From Contech's modeling and technical specifications, as well as the data reviewed in Section 2, the StormFilter cartridges have a total TSS removal efficiency of at least approximately 80%. On an annual basis, this equates to approximately 3,316 to 4,974 lbs of TSS removed. When aggregated with the pretreatment removals, the total TSS removed on an annual basis ranges from 7,047 to 7,461 lbs. Compared to the influent TSS load from the watershed, these removals equate to 63.5% to 67.2%, which is lower than the City's stormwater requirements. The removals equate to 85% to 90% removal of the diverted/treated flow. Results are summarized in Table 2.

The filtration cartridges have an approximate capacity of 36 lbs TSS per cartridge. For a system with 203 cartridges, the total capacity is 7,308 lbs. This capacity shows that annual replacement of the cartridges would not be needed, but rather every two to three years the cartridges would need to be replaced. Filtration does not abstract any water volume.

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Table 2. Filtration Performance Summary

Pollutant Mass Balance Component	Value
Total TSS Inflow to Filtration (lbs/yr)	4,145 - 6,217
Filtration Removal Efficiency	80%
TSS Removed by Filtration (lbs/yr)	3,316 - 4,974
Total TSS Removed Pretreatment+Filtration (lbs/yr)	7,047 - 7,461
Pretreatment+Filtration Removal Efficiency of Total Runoff from Drainage Area	63.5% - 67.2%
TSS Load to Storage/UV Treatment (lbs/yr)	829 - 1,243

4.3 Storage and Volume Abstraction

The final component of the SRT is a large underground storage chamber that will be used to hold water for reuse in the ephemeral streams on the UHT site. The total storage volume is 2.5 acre-feet. Using the MWMO's stormwater reuse calculator, Barr estimated that approximately 15.8 acre-ft per year will be pumped through the ephemeral stream system, which is approximately 60% of the annual volume treated. Results are summarized in Table 3.

Prior to being pumped to the ephemeral streams, the reuse water will be treated through a filter and UV treatment system to further clean the water. It is important that the majority of the TSS load be removed prior to this step in the reuse water treatment, as maintenance and replacement of the filter is expensive and would be more frequent than the pretreatment or StormFilter cartridges. Because the ephemeral stream system is vegetated and connected to bioinfiltration basins onsite, it is assumed that this volume would be abstracted through infiltration or evapotranspiration. If this volume is abstracted, 100% of the remaining TSS (and other pollutants such as phosphorus) of the reused stormwater would be removed.

Table 3. Storage/Reuse Performance Summary

Pollutant Mass Balance Component	Value
% Treated Water Reused	60%
Volume of Water Reused (ac-ft/yr)	15.8
TSS Load Removed by Reuse (lbs/yr)	497 - 746

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4.4 Overall Performance

The entire treatment system from pretreatment to filtration to stream reuse (Common Reuse) is expected to remove, on average, over 80% of the runoff volume, TSS, and phosphorus from the tributary 73-acre watershed. The overall performance of the SRT and stream reuse is summarized in Table 4.

Table 4. Overall Performance Summary

Pollutant Mass Balance Component	Value
Total TSS Inflow to Diversion Structure (lbs/yr)	11,100
Total Volume Inflow to Diversion Structure (ac-ft/yr)	35.5
Total TSS Inflow to Pretreatment (lbs/yr)	8,290
Total Volume Inflow to Pretreatment (ac-ft/yr)	26.5
Total Volume Abstracted (ac-ft/yr)	15.8
Total TP Removal (lbs/yr) ¹	27.2
Total TSS Removal (lbs/yr) ²	7,544 – 8,207

¹TP removal estimates are from P8 modeling of filtration system (17 lbs/yr) assuming no dissolved phosphorus removal and infiltration of remaining untreated TP (10.2 lbs/yr).

²Includes TSS removal via filtration/infiltration in the recirculating streams/basins in the park and on Parcel 5. See Table 2 for the total removals of the SRTS only.

4.5 Capital Cost, O&M Cost, and Cost-Benefit of SRT System

The total approximate capital cost of the SRT system based on Barr's 90% design plans dated December 2023 is outlined in Table 5 below.

Table 5. SRT Capital Cost

Component	Cost	% of Total Cost
Mobilization, Construction Layout/Staking, Erosion Control, Removals	\$342,000	10%
Pretreatment Capital Cost	\$375,000	11%
StormFilter Capital Cost	\$716,000	22%
Structures and Piping	\$273,000	8%
Upstream Storage Cost	\$629,000	19%
Reuse Storage Cost ¹	\$676,000	20%
Contingency (10%)	\$301,000	9%
Total (-10% to 20%)	\$3,312,000 (\$2,981,000 to \$3,975,000)	100%

¹Reuse storage cost is not part of the water quality treatment performance of the SRT

Additionally, the estimated annual operations and maintenance costs are listed below in Table 6 by activity for the SRT system based on Barr's 90% design plans dated December 2023.

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Table 6. SRT O&M Cost

O&M Activity	Cost
Filter Cartridge Replacement	\$71,450
Pretreatment Vacuuming and Cleaning	\$2,200
Inspection of System	\$1,200
Administrative and Contingency Cost	\$14,970
Total	\$89,820

To understand the water quality benefit for each component of the SRT, Barr calculated an approximate annualized cost for each component to calculate the annual cost per pound of TSS removed. The annualized costs were calculated using a lifecycle of 30 years and an interest rate of 4%. The results are listed in Table 7 for a range of removals outlined in Section 4. Overall, the cost benefit for the SRT system components ranges from \$6 to \$12 for pretreatment and \$23 to \$34 for the StormFilter. These ranges are typical for stormwater treatment practices.

Table 7. SRT Annualized Cost Benefit for TSS Removal

SRT System	Component	Value
Pretreatment System	<i>Capital Cost</i>	\$375,000
	<i>O&M Cost</i>	\$3,400
	<i>TSS Removal (lbs/yr)</i>	2,073 - 4,145
	<i>Cost Benefit (\$/lb TSS)</i>	\$6 - \$12
StormFilter System	<i>Capital Cost</i>	\$716,000
	<i>O&M Cost</i>	\$71,450
	<i>TSS Removal (lbs/yr)</i>	3,316 - 4,974
	<i>Cost Benefit (\$/lb TSS)</i>	\$23 - \$34

5 Comparison of SRT and SAVF

Barr used the St. Anthony Regional Stormwater Treatment and Research Facility Report provided by the MWMO to conduct a comparison between the SRT and SAVF to better understand how the two systems perform against each other. This comparison is helpful in the design stage of the SRT project to get a better understanding of how well the SRT will perform once constructed.

Overall, the SAVF treats a much larger watershed and the total inflow volume to the system is about 15 times greater than the inflow volume to the SRT. However, the way the SAVF is configured, only about 19% of the inflow volume is treated by the StormFilter cartridges, compared to 100% of the SRT inflow volume being treated by the StormFilter cartridges. Therefore, the total treatment volumes passing through the cartridges at both sites are closer – about 3 times more volume at the SAVF.

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Based on MWMO's monitoring report, the SAVF pretreatment swirl chamber achieves approximately 59% removal of TSS from the inflow volume and the StormFilter cartridges achieve approximately 55% removal of TSS of the inflow volume to the cartridges. In a recent meeting with MWMO, Barr, and Public Works, it was noted that the SAVF cartridges only removed 160 pounds of TSS; however, this number in the report represents the total amount of sediment that settled on the floor of the cartridge vault, not the amount of sediment captured by the cartridges themselves.

The MPCA and other sources credit approximately 80-85% removal of TSS using StormFilter cartridges based on monitoring data. Barr suspects that the SAVF treatment capacity is lower than the SRT, and is therefore not removing as much TSS. The treatment capacity of each cartridge is approximately 36 pounds of TSS per cartridge. The SAVF has 40 cartridges, giving it a capacity of 1,440 lbs TSS, whereas the SRT has 203 cartridges, with a total capacity of 7,308 lbs TSS. For similar inflow volumes, the SRT would be able to capture approximately 2.8 times more TSS load.

While the monitoring data reported in the SAVF report is not a direct comparison of the removals listed in Table 4 for the SRT, a high level comparison of the two systems show that the pretreatment systems may perform similarly, while the StormFilter cartridges may perform better at the SRT given the greater number of cartridges and lower treatment volume.

FIRST AMENDMENT TO THE UPPER HARBOR DISTRICT SYSTEM RECIPROCAL EASEMENT AND OPERATING AGREEMENT

This First Amendment (“**Amendment**”) to the Upper Harbor District System Reciprocal Easement and Operating Agreement (“**REOA**”) is made and entered into by and among the Mississippi Watershed Management Organization, a joint powers watershed pursuant to Minnesota Statutes, Sections 103B.201-103B.251, and organized under the laws of the State of Minnesota (“**MWMO**”), the City of Minneapolis, a municipal corporation, home rule city, and political subdivision of the State of Minnesota (“**City**”), and the City of Minneapolis, acting by and through its Park and Recreation Board (“**Park Board**”) (collectively, the “**Parties**”), and is consented to by United Properties Development, LLC, a Minnesota limited liability company, and the Port of Minneapolis, LLC, a Minnesota limited liability company (collectively, the “**Consenting Parties**”).

RECITALS

- A. Section 5.2 of the REOA provides for MWMO to construct the Southern Regional Treatment System and for City to own, operate, and maintain it.
- B. MWMO and City have negotiated a Southern Regional Treatment System Agreement to provide for the construction of the Southern Regional Treatment System and for the installation of a reuse tank to serve as the entry point for the treated stormwater into the District System (as defined in the REOA).
- C. The Southern Regional Treatment System is to be owned, operated and maintained by the City as described in the Southern Regional Treatment System Agreement.
- D. The reuse tank is to be owned, operated, and maintained as part of the District System as contemplated in the REOA.
- E. The Parties agree to amend the REOA to allow MWMO to start construction on the Southern Regional Treatment System earlier than original contemplated.

AMENDMENT

The Parties hereby agree to the amend the REOA as follows:

1. Construction of SRTS Project. The Parties hereby agree to amend Section 5.2 of the REOA by deleting the ~~stricken~~ matter and adding the double underlined material as follows:

Section 5.2. Southern Regional Treatment System. ~~If development on Parcel 5 has not commenced by June 1, 2025,~~ MWMO shall have the right to proceed with building the Southern Regional Treatment System on Parcel 5 starting in 2024 and continuing until _____, provided that MWMO and the City have an agreed-upon design for the Southern Regional Treatment System and both MWMO and the City have agreed upon a schedule, design, capital funding, and annual operations and maintenance responsibility for

the Southern Regional Treatment System. MWMO will pay the capital costs of the Southern Regional Treatment System, including without limitation (a) all costs of cleaning up any brownfield contamination or correcting other poor soil conditions which are related to installing or constructing the Southern Regional Treatment System and which such costs are above and beyond Regulatory Minimum Costs and (b) the cost of repairing or replacing any Permitted Permanent Owner Easement Improvements or other improvements that are damaged in connection with the construction of the Southern Regional Treatment System. The City's public works department will pay for all operating and maintenance costs of the Southern Regional Treatment System. If constructed, the Southern Regional Treatment System will be built consistent with the 60% Designs within the Permanent Easements Areas. The Master Developer and Port of Minneapolis, and any other Parcel Developers for Parcels 3, 4, and/or 5, will be included in the discussions related to construction sequencing and scheduling related to the construction and ongoing operations and maintenance of the Southern Regional Treatment System with MWMO and the City to work in good faith to minimize interference with the operation of the improvements and activities on Parcels 3, 4, and/or 5, as applicable, including but not limited to minimizing interference with the Shared Access Drive to the extent then constructed, for preparation for performances, and performances on Parcel 3 by Port of Minneapolis. A reuse tank, force main, and related piping (collectively, the "Reuse Tank Component") will be installed as part of constructing the Southern Regional Treatment System and is part of the Southern Regional Common Reuse System as defined in this Agreement which is part of the District System designed to receive stormwater from the Southern Regional Treatment System. City will not own the Reuse Tank Component. The Reuse Tank Component, once constructed, will become part of the District System, and will be operated, maintained, and replaced in accordance with Section 13 of this Agreement.

2. No Other Changes. The Parties agree that no other changes to the REOA are intended by this Amendment.
3. Consent. The Consenting Parties are providing their consent to this Amendment in accordance with Section 24.1 of the REOA by executing this Amendment.
4. Effective Date. This Amendment shall be effective as of the date of the last Party or Consenting Party to execute it.

IN WITNESS WHEREOF, the Parties to this Amendment have entered into, or consented to, this Amendment effective as indicated above.

[signature pages follow]

**MISSISSIPPI WATERSHED MANAGEMENT
ORGANIZATION**

By: _____
Stephen Eggert
Its: Chair

By: _____
Kevin Reich
Its: Executive Director

STATE OF MINNESOTA)
) SS.
COUNTY OF HENNEPIN)

The foregoing instrument was acknowledged before me on _____, 2024, by Stephen Eggert, the Chair of the Mississippi Watershed Management Organization, a joint powers watershed pursuant to Minnesota Statutes, Sections 103B.201-103B.251, and organized under the laws of the State of Minnesota, on behalf of Mississippi Watershed Management Organization.

Notary Public

STATE OF MINNESOTA)
) SS.
COUNTY OF HENNEPIN)

The foregoing instrument was acknowledged before me on _____, 2024, by Kevin Reich, the Executive Director of the Mississippi Watershed Management Organization, a joint powers watershed pursuant to Minnesota Statutes, Sections 103B.201-103B.251, and organized under the laws of the State of Minnesota, on behalf of Mississippi Watershed Management Organization.

Notary Public

CITY OF MINNEAPOLIS

By: _____
Dushani Dye
Its: Finance Officer

Responsible Department Head:

Erik Hansen, Director (CPED)

Approved as to Form:

By Assistant City Attorney

STATE OF MINNESOTA)
) SS.
COUNTY OF HENNEPIN)

The foregoing instrument was acknowledged before me on _____, 2024,
by Dushani Dye, the Finance Officer of the City of Minneapolis, a home rule charter city, on
behalf of the City of Minneapolis.

Notary Public

**CITY OF MINNEAPOLIS, a municipal
corporation acting by and through its
PARK AND RECREATION BOARD**

By: _____

Its: President

By: _____

Its: Secretary

Approved as to Form:

By: _____

Its: Attorney

STATE OF MINNESOTA)
) SS.
COUNTY OF HENNEPIN)

The foregoing instrument was acknowledged before me on _____, 2024, by _____, the President of the Park Board, a municipal corporation acting by and through its Park and Recreational Board of the City of Minneapolis, on behalf of the Minneapolis Park and Recreation Board.

Notary Public

STATE OF MINNESOTA)
) SS.
COUNTY OF HENNEPIN)

The foregoing instrument was acknowledged before me on _____, 2024, by _____, the Secretary of the Park Board, a municipal corporation acting by and through its Park and Recreational Board of the City of Minneapolis, on behalf of the Minneapolis Park and Recreation Board.

Notary Public

The undersigned, acting as Master Developer, hereby consents to this Amendment to the Upper Harbor District System Reciprocal Easement and Operating Agreement among the Mississippi Watershed Management Organization, a joint powers watershed pursuant to Minnesota Statutes, Sections 103B.201-103B.251, and organized under the laws of the State of Minnesota, the City of Minneapolis, a municipal corporation, home rule city, and political subdivision of the State of Minnesota, and the City of Minneapolis, acting by and through its Park and Recreation Board.

UNITED PROPERTIES DEVELOPMENT LLC

By: _____

Its: _____

By: _____

Its: _____

STATE OF MINNESOTA)
) SS.
COUNTY OF _____)

The foregoing instrument was acknowledged before me on _____, 2024, by _____, the _____ of United Properties Development LLC, a Minnesota limited liability company, on behalf of United Properties Development LLC.

Notary Public

STATE OF MINNESOTA)
) SS.
COUNTY OF _____)

The foregoing instrument was acknowledged before me on _____, 2024, by _____, the _____ of United Properties Development LLC, a Minnesota limited liability company, on behalf of United Properties Development LLC.

Notary Public

The undersigned, acting as the concert venue owner and operator Port of Minneapolis, hereby consents to this Amendment to the Upper Harbor District System Reciprocal Easement and Operating Agreement among the Mississippi Watershed Management Organization, a joint powers watershed pursuant to Minnesota Statutes, Sections 103B.201-103B.251, and organized under the laws of the State of Minnesota, the City of Minneapolis, a municipal corporation, home rule city, and political subdivision of the State of Minnesota, and the City of Minneapolis, acting by and through its Park and Recreation Board.

PORT OF MINNEAPOLIS, LLC

By: _____

Its: _____

STATE OF MINNESOTA)
) SS.
COUNTY OF HENNEPIN)

The foregoing instrument was acknowledged before me on _____, 2024, by _____, the _____ of Port of Minneapolis, LLC, a Minnesota limited liability company, on behalf of Port of Minneapolis, LLC.

Notary Public



Request for Board Action

Attachment 6.7

Agenda Item: Stewardship Fund — 2024 Action and Planning Grants

Presenter: E. Baskerville-Doeckel and A. Flett

Meeting Date: 12 March 2024

Flexibility: ☐ Yes ☒ No

Estimated Time: ☐ Consent Agenda ☒ 10 Min. ☐ 15 Min. ☐ 30 Min. ☐ 45 Min. ☐ 1 Hour

Action Request: ☐ Information/Review ☒ Motion to approve ☐ Budget Change ☐ Other

Board Action: ☐ Approved ☐ Denied ☐ Tabled ☐ Accepted Report ☐ Other

Date of Action: 12 March 2024

Background (Attach Supporting Documents as needed)

As directed by Stewardship Fund guidance, staff is presenting the Action and Planning Grant applications that have been reviewed and recommended by staff and the Citizen Advisory Committee (CAC).

Three Action Grant pre-applications were accepted and two were asked to complete a full application. Of the applicants, staff and CAC recommend two Action Grants be awarded. If approved, total Action Grant funding for 2024 will not exceed \$93,950. Additionally, eight Planning Grant pre-applications were accepted and eight were asked to complete a full application. Of the applicants, staff and CAC recommend eight Planning Grants be awarded. If approved, total Planning Grant funding for 2024 will not exceed \$146,090.75.

1. **Francis A. Gross National Golf Course Prairie Restoration — \$43,950 (Action)**
 - a. Grantee: Minneapolis Park and Recreation Board (MPRB)
 - b. Location: Francis A. Gross National Golf Course

- c. Partners: Walkabout Outdoors, Monarchs In the Rough, Audubon Cooperative Sanctuary Program for Golf Courses
- d. Summary: This project will restore native vegetation in two areas of the Gross National Golf Course. The first area will replace 1.28 acres of turfgrass with native pollinator habitat. The location is next to the cart path between holes 11 and 12 and adjacent to the Diagonal Trail, and it will allow for public access and public education. The second area, approximately 3,000 square feet, is at the front entrance and is currently planted with non-native Karl Foerster Grass. Removing the non-native vegetation and restoring this highly visible area with pollinator-friendly natives will provide a defining entrance to the golf shop. The native plants will be labeled and signage will educate patrons about the importance of pollinator habitat.

2. Talmadge Triangle Raingarden — \$50,000 (Action)

- a. Grantee: South East Como Improvement Association (SECIA)
- b. Location: 21st Avenue and Talmadge Ave SE, Minneapolis
- c. Partners: City of Minneapolis Public Works, Metro Blooms
- d. Summary: This project will remove the impervious asphalt on an abandoned city street to create a sustainable landscape including a raingarden, native perennials with high pollinator value, trees and shrubs with high wildlife value, and a gathering space for the community to use. This will result in the development of the Talmadge Triangle Raingarden space and connect it to Talmadge Crossing to create a larger community garden that demonstrates both raingarden functions and increased pollinator and wildlife habitat while providing a gathering space for the neighborhood.

3. St. Clement Parking Lot — \$10,650 (Planning)

- a. Grantee: Church of the Holy Cross — St. Clements
- b. Location: 901 24th St. NE, Minneapolis, MN 55413
- c. Partners: Rani Engineering, local businesses
- d. Summary: At the St. Clements Campus, located at 901 24th Street NE, Minneapolis, MN, there is a large parking lot that is subject to large amounts of stormwater runoff. This grant would allow for an analysis of the site and establish engineering plans to improve the stormwater management on their property. By transforming the existing green space in the parking lot and yard, the project aims for the site to help mitigate a large amount of runoff.

4. CLCLT and Metro Blooms Green Engagement — \$19,900 (Planning)

- a. Grantee: City of Lakes Community Land Trust (CLCLT)
- b. Location: Various

- c. Partners: Metro Blooms, local homeowners
- d. Summary: City of Lakes Community Land Trust (CLCLT) and Metro Blooms will partner to host multiple community focus groups to understand what homeowners want from the green spaces at their homes. Additionally, this funding would allow CLCLT to offer three educational workshops and three focus groups for residents on environmental topics. The funding will support understanding what CLCLT homeowners want and need in relation to green infrastructure, stormwater management, and climate resiliency. It will also create a menu of options for homeowners related to their green space, i.e., education opportunities, installation of BMPs, maintenance support, design of gardens, and more. Lastly, it will lead to commitments to further actions with homeowners towards habitat and water quality improvements in yards in the future.

5. Stormwater Irrigation Usage Feasibility and Design on Roof Depot Building — \$20,000 (Planning)

- a. Grantee: East Phillips Neighborhood Institute (EPNI)
- b. Location: Roof Depot Site (2717 Longfellow Ave.; 1860 28th St.; 2700 Hiawatha Ave. in Minneapolis)
- c. Partners: Pierce Pini & Associates; Broadview Collaborative; UMN Landscape Arboretum; UMN Extension; Little Earth Residents Association; Tamales y Bicicletas; Four Sisters Farm; DJR Architecture; Minnesota Pollution Control Agency
- d. Summary: The Roof Depot requires extensive planning to manage stormwater runoff best. The East Phillips Neighborhood Institute (EPNI) is interested in going above and beyond with stormwater management, and they seek to incorporate a filtration, cistern, and pump system to utilize rainwater for irrigation of outdoor farm beds, and safely discharge the excess in a series of rain gardens and restoration plots. Community engagement is an integral piece of the EPNI mission, and this feasibility and design project will engage community in making the management plan useful, safe, educational, and exciting.

6. Metro Blooms & Urban Homeworks Resident Education and Engagement — \$19,950 (Planning)

- a. Grantee: Metro Blooms
- b. Location: Rental properties within six blocks of Fremont and Emerson Avenues off Broadway Avenue
- c. Partners: Urban Homeworks, local renters

- d. Summary: The goal of this project is to partner with residents of four to six Urban Homeworks rental units to redesign their outdoor spaces. Within a six-block radius along Fremont and Emerson Avenues off Broadway Avenue, this project will invest water quality funding with a neighborhood deeply impacted by environmental injustice. Practices considered for designs will include those that filter and infiltrate stormwater runoff, diminish localized flooding, and create pollinator habitat. Metro Blooms will prioritize sites based on opportunity for stormwater infiltration and resident engagement. This project will include community-led planning, implementation, and care of practices like raingardens and other stormwater best management practices, native plantings, and trees. Alongside environmental healing, there will be opportunities for training, employment, and leadership to meet the needs of the community.

7. East River Flats Park Access and Restoration — \$20,000 (Planning)

- a. Grantee: Minneapolis Park and Recreation Board (MPRB)
- b. Location: East River Flats Park — Minneapolis
- c. Partners: Various MPRB departments; UMN Claudia Kroll Boathouse; Friends of the Mississippi River; Wilderness Inquiry; City of Minneapolis
- d. Summary: MPRB is working to add a new public canoe and kayak launch within East River Flats along the Mississippi River. The usable areas of East River Flats Park are visually disconnected from the river due to a degraded bank condition that is overgrown with invasive species. The current bank degraded edge extends over 2,500 linear feet and varies in width between 40 and 100 feet. As an expanded scope of work for this park, MPRB is seeking funding to support ecological restoration and erosion control along the Mississippi River by controlling invasive species and installing a native plant buffer at the bank edge. MPRB will use grant funds to complete site analysis, public engagement, and planning work for East River Flats Park. The construction documents resulting from this planning effort will include plans, specs, and details required to construct the kayak/canoe launch and perform restoration of the bank condition along the Mississippi River.

8. Newgate School Green Infrastructure — \$20,000 (Planning)

- a. Grantee: Newgate School
- b. Location: 2900 E. Hennepin Ave., Minneapolis, MN 55413
- c. Partners: City of Minneapolis, Civil Site Group, Metro Blooms, local businesses
- d. Summary: Newgate School is one of the few sites on East Hennepin Avenue that has green space. Newgate would like to create green infrastructure that is beneficial to the community and the environment. This project will develop an actionable plan to

create more places for water to infiltrate and to add native plants for pollinator and wildlife habitat. There are opportunities for education around the project and site with the students, neighbors and community at-large, and plans will be designed with educational opportunities in mind.

9. Demonstration Site Water Improvements: Rainwater Irrigation, Permeable Pavers and Native Plants — \$19,400 (Planning)

- a. Grantee: Northside Residents Redevelopment Council (NRRC)
- b. Location: 1303 Golden Valley Road, Minneapolis, MN 55411
- c. Partners: TBD contractor, local residents and Minnesota Water Stewards
- d. Summary: The Northside Residents Redevelopment Council (NRRC) office site has a 750-gallon water cistern that is not being used to its full potential. NRRC seeks to maximize the cistern's capabilities while transforming the site's landscape. Planning for the cistern will include exploring reuse water for site irrigation for existing pollinator habitat, ground cover, and potentially food crops. Existing concrete walking paths and a driveway will be evaluated for conversion to permeable pavement. Plans for native plantings will be established, increasing pollinator habitat. These initiatives all seek to convey water movement through our site in a way that benefits water quality and inspires other residents to follow suit.

10. Community-led Restoration at Sheridan Memorial Park — \$16,100.75 (Planning)

- a. Grantee: Sheridan Neighborhood Organization (SNO)
- b. Location: Sheridan Memorial Park, 1300 Water St. NE, Minneapolis, MN 55413
- c. Partners: Friends of the Mississippi River, MPRB
- d. Summary: The Sheridan Neighborhood Organization (SNO) will use funds to support the development of a volunteer-centric Natural Resource Management Plan (NRMP) for 1.5 acres of riverside natural area at Sheridan Memorial Park in Northeast Minneapolis. Currently, much of this riverine landscape is degraded by buckthorn and other invasive plants on the state's high-priority noxious weed list. The result is a semi-natural community that provides very little habitat for pollinators, is susceptible to erosion, and is a barrier to human recreation and the river. Plans will focus on ways local volunteers and hired contractors can improve ecological functions on-site while coordinating with the landowner (MPRB).

Mississippi Watershed Management Organization

RESOLUTION 2024-014

A RESOLUTION APPROVING THE 2024 ACTION AND PLANNING GRANTS.

WHEREAS, The Mississippi Watershed Management Organization works to protect and improve water quality, habitat and natural resources in an urban watershed that drains directly into the Mississippi River; and

WHEREAS, The MWMO Board of Commissioners created the Stewardship Fund to engage the community in the protection of said resources; and

WHEREAS, Two final applications were submitted which meet the MWMO Board guidance of the Stewardship Fund Action Grant; and

WHEREAS, Staff and the Citizen Advisory Committee (CAC) have reviewed the applications; and

WHEREAS, Staff and the Citizen Advisory Committee recommend Action and Planning Grant funding to implement the two (2) Action Grants and eight (8) Planning Grants described above; and

WHEREAS, There is funding available in the Stewardship Fund for Community, Planning and Action grants in FY 2024.

NOW THEREFORE BE IT RESOLVED, the MWMO Board of Commissioners awards the 2024 Action and Planning Grants to the following applicants — Church of the Holy Cross—St. Clements, City of Lakes Community Land Trust, East Phillips Neighborhood Institute, Metro Blooms, Minneapolis Park and Recreation Board, Newgate School, Northside Residents Redevelopment Council, Sheridan Neighborhood Organization, and the South East Como Improvement Association — committing \$240,040.75 from the Stewardship Fund, authorizes MWMO staff to take all necessary administrative actions to implement the resolution, and authorizes the MWMO Executive Director to sign the Action and Planning Grant Agreements.

Adopted this the 12th day of March, 2024.

Review for the Board: _____

Randy Stille, Chair

Review for Administration: _____

Kevin Reich, Executive Director



Request for Board Action

Attachment 6.8

Agenda Item: MWMO Backyard Landscape Improvements

Presenter: N. Busse

Meeting Date: 12 March 2024

Flexibility: ☐ Yes ☒ No

Estimated Time: ☐ Consent Agenda ☒ 10 Min. ☐ 15 Min. ☐ 30 Min. ☐ 45 Min. ☐ 1 Hour

Action Request: ☐ Information/Review ☒ Motion to approve ☐ Budget Change ☐ Other

Board Action: ☐ Approved ☐ Denied ☐ Tabled ☐ Accepted Report ☐ Other

Date of Action: 12 March 2024

Background

The MWMO's backyard landscape was constructed in the fall of 2013. It was designed to serve as a model of sustainable riverfront development, showcase a variety of green infrastructure, and provide public access to the Mississippi River.

Since it was opened to the public a decade ago, the MWMO's backyard has seen countless visitors. Unfortunately, the site's growing popularity has led to a number of maintenance issues. Several foot paths have been worn into the slopes leading down from the parking lot area. These areas are now eroding, with the foot path nearest the river creating sedimentation issues whenever the river floods.

Additionally, some of the trees near the parking lot and amphitheater area have grown to the point where these areas are no longer visible to staff from the building. This has created an ongoing safety concern, as that location has become a popular spot for substance use as well as littering.

MWMO staff worked with Barr Engineering to design a series of proposed landscape updates that would fix the erosion issues, stabilize the slope, and facilitate safe access to the shoreline while accommodating visitors' desire for a quick walk down to the river.

Proposed Landscape Updates

1. Repair the eroded paths leading to the river, replant and stabilize with erosion blankets.
2. Install new stairways constructed of limestone steps and resin-bound aggregate that facilitate a direct path to the river and that match the current aesthetic of the backyard.
3. Move some of the limestone blocks from the amphitheater area to other locations in the backyard to create additional, more spread-out seating areas.
4. Repair a number of damaged gravel/aggregate areas along the main path.
5. Conduct tree pruning at various locations in the front and backyard to improve trees' appearance and facilitate improved sightlines.

Total Estimated Costs: \$79,200–\$101,200*

**Figures include 10 percent for construction administration fees.*

Mississippi Watershed Management Organization

RESOLUTION 2024-015

A RESOLUTION APPROVING CONSTRUCTION OF LANDSCAPE IMPROVEMENTS IN THE MWMO'S BACKYARD.

WHEREAS, The MWMO seeks to utilize its Stormwater Park and Learning Center to promote connection, understanding and care for water and natural resources in the watershed and beyond, as stated in its Watershed Management Plan;

WHEREAS, The MWMO's outdoor landscape provides a sustainable redevelopment model and learning laboratory for green infrastructure;

WHEREAS, More than a decade of use by the public has resulted in several maintenance issues in the MWMO's backyard, including erosion and overgrown trees;

WHEREAS, Barr Engineering has designed a number of landscape improvements to stop the erosion, stabilize the backyard, and create safe and stable stairways for visitors to reach the MWMO shoreline.

NOW THEREFORE BE IT RESOLVED, the MWMO Board of Commissioners approves up to \$101,200 for backyard landscape improvements at the MWMO and authorizes MWMO staff to take all necessary administrative actions to implement the resolution.

Adopted this the 12th day of March, 2024.

Review for the Board: _____

Randy Stille, Chair

Review for Administration: _____

Kevin Reich, Executive Director

Interpretation of City of Minneapolis Zoning Code

Shoreland Overlay District:
300' from the river

Grading and filling: more than 10 CY needs an Erosion Control Permit

Removal of vegetation needs to be approved

Mississippi River Corridor Critical Area Overlay District:

Urban Mixed (UM) MRCCA District
UM has to have 10% protected open space or green infrastructure in place

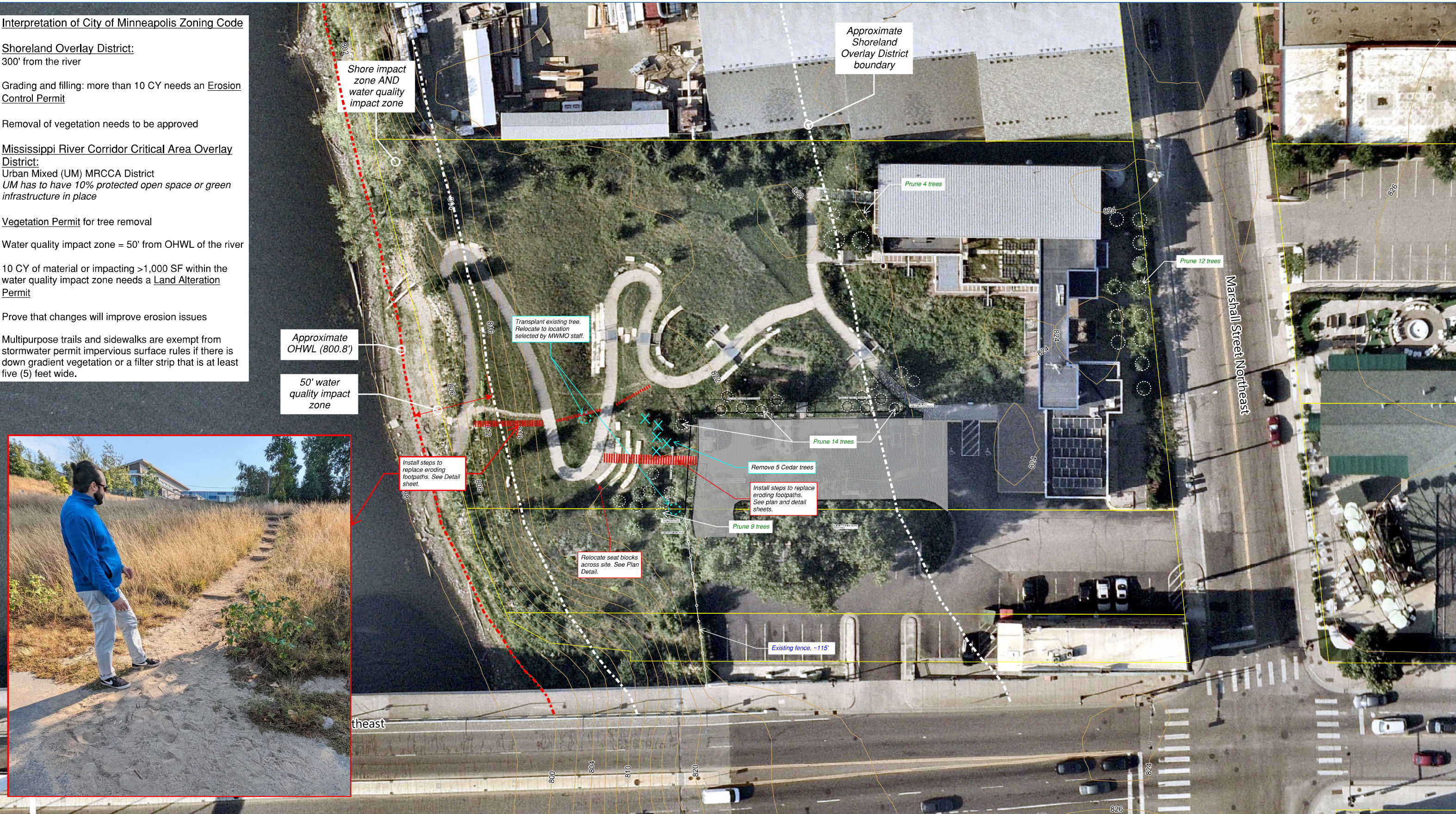
Vegetation Permit for tree removal

Water quality impact zone = 50' from OHWL of the river

10 CY of material or impacting >1,000 SF within the water quality impact zone needs a Land Alteration Permit

Prove that changes will improve erosion issues

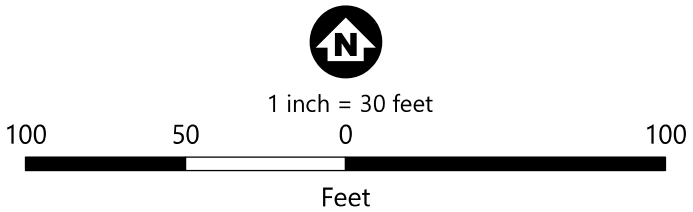
Multipurpose trails and sidewalks are exempt from stormwater permit impervious surface rules if there is down gradient vegetation or a filter strip that is at least five (5) feet wide.

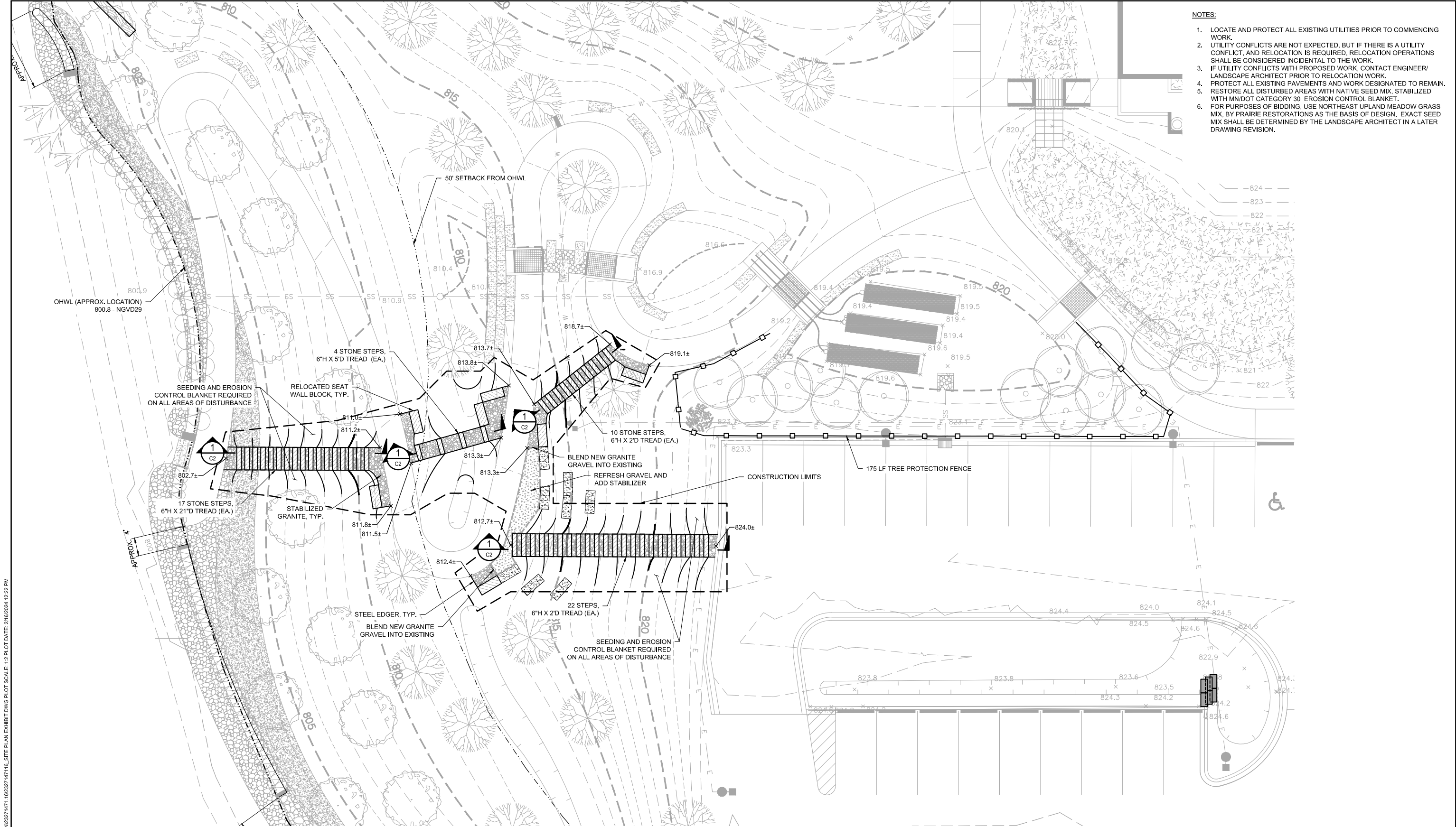


2 Foot Elevation Contours

Parcel Boundaries

Imagery: NearMap, 2023



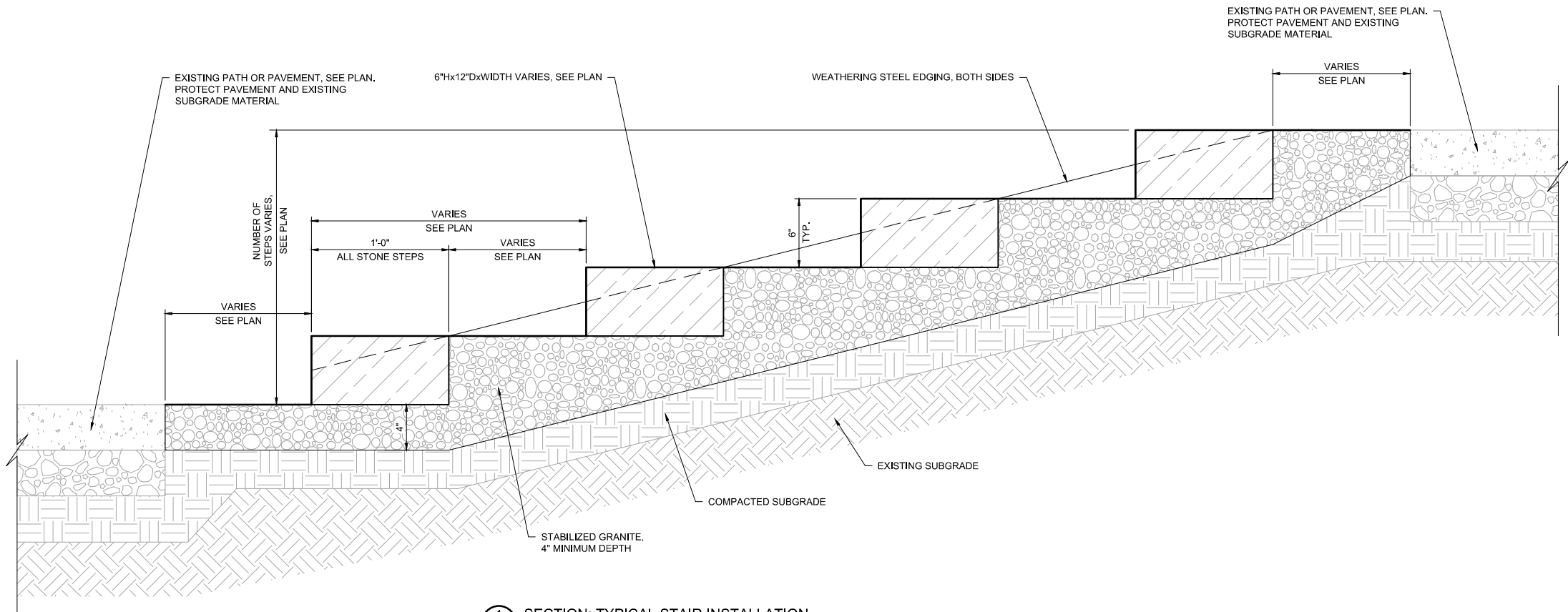


- NOTES:
1. LOCATE AND PROTECT ALL EXISTING UTILITIES PRIOR TO COMMENCING WORK.
 2. UTILITY CONFLICTS ARE NOT EXPECTED, BUT IF THERE IS A UTILITY CONFLICT, AND RELOCATION IS REQUIRED, RELOCATION OPERATIONS SHALL BE CONSIDERED INCIDENTAL TO THE WORK.
 3. IF UTILITY CONFLICTS WITH PROPOSED WORK, CONTACT ENGINEER/ LANDSCAPE ARCHITECT PRIOR TO RELOCATION WORK.
 4. PROTECT ALL EXISTING PAVEMENTS AND WORK DESIGNATED TO REMAIN.
 5. RESTORE ALL DISTURBED AREAS WITH NATIVE SEED MIX, STABILIZED WITH MN/DOT CATEGORY 30 EROSION CONTROL BLANKET.
 6. FOR PURPOSES OF BIDDING, USE NORTHEAST UPLAND MEADOW GRASS MIX, BY PRAIRIE RESTORATIONS AS THE BASIS OF DESIGN. EXACT SEED MIX SHALL BE DETERMINED BY THE LANDSCAPE ARCHITECT IN A LATER DRAWING REVISION.

CADD USER: DEREK J. SEIFERT FILE: M:\DESIGN\23271471_192327147116_SITE PLAN EXHIBIT.DWG PLOT SCALE: 1/2"=1'-0" DATE: 2/16/2024 12:22 PM

CADD USER: DEEKK L										I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.										<div>CLIENT</div> <div>PERMIT</div> <div>BID</div> <div>CONSTRUCTION</div> <div>RECORD</div>										<div><div><div>BARR</div><div>Corporate Headquarters: Minneapolis, Minnesota Ph: 1-800-632-2277 Fax: (952) 832-2601 www.barr.com</div></div><div>Project Office: BARR ENGINEERING CO. 4300 MARKETPOINTE DRIVE SUITE 200 MINNEAPOLIS, MN 55435 Ph: 1-800-632-2277 Fax: (952) 832-2601 www.barr.com</div></div>										<div>ScaleAS SHOWN</div> <div>Date02/06/2024</div> <div>DrawnDJS2</div> <div>Checked---</div> <div>DesignedBARR</div> <div>Approved---</div>										MISSISSIPPI WATERSHED MANAGEMENT ORGNIZATION MINNEAPOLIS, MN																				TRAIL & SITE IMPROVEMENTS MWMO HEADQUARTERS										BARR PROJECT No. 23/27-1471.17									
										PRINTED NAME _____																														CLIENT PROJECT No.																																																	
										SIGNATURE _____										RELEASED TO/ FOR										Corporate Headquarters: Minneapolis, Minnesota Ph: 1-800-632-2277 Fax: (952) 832-2601 www.barr.com																				SITE PLAN										DWG. No.										REV. No.																			
NO. BY CHK. APP. DATE										REVISION DESCRIPTION										DATE _____ LICENSE # _____										A B C 0 1 2 3										DATE RELEASED																														C1										-									

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1 SECTION: TYPICAL STAIR INSTALLATION
NOT TO SCALE

PRELIMINARY DRAFT
NOT FOR CONSTRUCTION

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<div><div></div><div>BARR</div></div> <div>PREPARED BY: BARR ENGINEERING COMPANY</div> <div>ENGINEER'S OPINION OF COST</div> <div>PROJECT: MWMO Stormwater Park Site Improvements</div> <div>LOCATION: Minneapolis, MN</div> <div>PROJECT #: 23271471 23 WO 03</div> <div>OPINION OF COST - SUMMARY</div>	SHEET: 1		OF 1	
	BY: MDB3		DATE: 2/14/2024	
	CHECKED BY: NDC		DATE: 2/16/2024	
	CHECKED/REVISED BY:		DATE:	
	CHECKED/REVISED BY:		DATE:	
	ISSUED:		DATE:	
	ISSUED:		DATE:	
	ISSUED:		DATE:	

Engineer's Opinion of Probable Cost

MWMO Stormwater Park & Learning Center - Site Improvements

ITEM	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	ITEM COST (ROUNDED)	NOTES
	GENERAL CONSTRUCTION					
	Mobilization (10%)	LS	1	\$6,500.00	\$6,500.00	1,2,3,4,5,6
	Construction Layout and Staking (1%)	LS	1	\$650.00	\$650.00	1,2,3,4,5,6,7,8
	Erosion and Sediment Control (2%)	LS	1	\$1,300.00	\$1,300.00	1,2,3,4,5,6,7,8
				SUBTOTAL	\$8,450.00	
	REMOVALS AND EROSION CONTROL					
	Construction Entrance	EA	1	\$2,500.00	\$2,500.00	1,2,3,4,5,6,7,8
	Tree Pruning	EA	39	\$300.00	\$11,700.00	1,2,3,4,5,6,7,8
	Tree Removal	EA	5	\$500.00	\$2,500.00	1,2,3,4,5,6,7,8
	Tree Protection Fencing	LF	170	\$5.00	\$900.00	1,2,3,4,5,6,7,8
				SUBTOTAL	\$16,700.00	
	CIVIL					
	Remove, Salvage, and Reinstall Seat Blocks	EA	18	\$250.00	\$4,500.00	1,2,3,4,5,6,7,8
	Remove, Salvage, and Reinstall 3.5' Wide Steps	EA	3	\$250.00	\$800.00	1,2,3,4,5,6,7,8
	Biesanz Stone Steps (3.5' wide)	EA	11	\$550.00	\$6,100.00	1,2,3,4,5,6,7,8
	Biesanz Stone Steps (5' wide)	EA	39	\$650.00	\$25,400.00	1,2,3,4,5,6,7,8
	Metal Landscape Edger	LF	255	\$20.00	\$5,100.00	1,2,3,4,5,6,7,8
	Stabilized Aggregate	TON	5	\$2,000.00	\$10,000.00	1,2,3,4,5,6,7,8
	Erosion Control Blanket	SY	175	\$3.50	\$600.00	1,2,3,4,5,6,7,8
				SUBTOTAL	\$48,000.00	
	PLANTINGS					
	Reseed all areas disturbed during construction	AC	0.068	\$4,000.00	\$300.00	1,2,3,4,5,6,7,8
				SUBTOTAL	\$300.00	
	CONSTRUCTION SUBTOTAL				\$73,450.00	1,2,3,4,5,6,7,8
	CONSTRUCTION CONTINGENCY (10%)				\$7,000.00	1,4,8
	ESTIMATED CONSTRUCTION COST				\$80,000.00	1,2,3,4,5,6,7,8
	CONSTRUCTION ADMINISTRATION (10%)				Not Included	1,2,3,4,5,6,7,8
	PERMITTING & REGULATORY APPROVALS				TBD	1,5,6
	ESTIMATED TOTAL PROJECT COST				\$80,000	1,2,3,4,5,6,7,8
	ESTIMATED ACCURACY RANGE	-10%			\$72,000	1,2,3,4,5,6,7,8
		15%			\$92,000	1,2,3,4,5,6,7,8

Notes

- ¹ Quantities based on Design Work Completed (90%).
- ² Unit Prices Based on Information Available at This Time.
- ³ Limited Soil Boring and Field Investigation Information Available.
- ⁴ This design level (Class 1, 70 - 100% design completion per ASTM E 2516-11) cost estimate is based on concept designs, alignments, quantities and unit prices. Costs will change with further design. Time value-of-money escalation costs are not included. A construction schedule is not available at this time. Contingency is an allowance for the net sum of costs that will be in the Final Total Project Cost at the time of the completion of design, but are not included at this level of project definition. The estimated accuracy range for the Total Project Cost as the project is defined is -10% to +15%. The accuracy range is based on professional judgement considering the level of design completed, the complexity of the project and the uncertainties in the project as scoped. The contingency and the accuracy range are not intended to include costs for future scope changes that are not part of the project as currently scoped or costs for risk contingency. Operation and Maintenance costs are not included.
- ⁵ Estimate assumes that projects will not be located on contaminated soil.
- ⁶ Estimate costs are to design, construct, and permit each alternative. The estimated costs do not include maintenance, monitoring or additional tasks following construction.
- ⁷ Furnish and Install pipe cost per linear foot includes all trenching, bedding, backfilling, compaction, and disposal of excess materials
- ⁸ Estimate costs are reported to nearest thousand dollars.