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<b>Title:</b>	Authorization to Execute a Contract with Wenck for 2020 Stormwater Pond Annual Survey and Maintenance
<b>Resolution number:</b>	20-023
<b>Prepared by:</b>	Name: Janna Jonely Phone: 952.641.4523 jjonely@minnehahacreek.org
<b>Reviewed by:</b>	Name/Title: Michael Hayman, Project Planning Manager
<b>Recommended action:</b>	Authorization to enter into a contract with Wenck for engineering, design services, and construction oversight for stormwater pond annual survey and maintenance. The contract costs reflect the high end of a pricing range dependent on services needed. The low end of the range is \$13,450 for pond survey and reporting for seven facilities, and increases up to 40,650 in the event that a single pond requires maintenance. If more than one pond is found to require maintenance, additional action will be requested of the Board of Managers.
<b>Schedule:</b>	Spring 2020 – Sediment surveys and sampling if applicable June 2020 – Technical report complete Fall 2020-Winter 2021 – Design, bid, and construction oversight if maintenance required
<b>Budget considerations:</b>	Fund name and code: 200-2003 – Project Maintenance and Land Management Fund budget: \$854,762 Expenditures to date: \$7,294 Requested amount of funding: \$44,715 (\$40,650 + 10% contingency)
<b>Past Board action:</b>	Res #: 19-078 Authorization to Award Contract for 2019 Stormwater Pond Annual Survey and Maintenance Res #: 18-111 Authorization to maintain Bde Maka Ska and Pamela Park Res #: 18-023 Authorization of Design for Pond Maintenance Res #: 17-018 Authorization of Design for Pond Maintenance

**Summary:**

The District is responsible for the inspection and/or maintenance of 28 stormwater ponds through ownership or cooperative agreement with its partner communities. Inspection and maintenance of these facilities is necessary to ensure that the ponds function as designed. The MCWD Board of Managers has an established policy that dictates cyclical investigation and maintenance of its stormwater management infrastructure to ensure the long term function of the systems.

In 2011, the Project Maintenance and Land Management Program (PMLM) recommended pond sediment surveys of six to eleven ponds each year on a three-year rotation in order to adhere to the policy established by the Board. To conduct this work, the PMLM Program budgets approximately \$250,000 for annual investigation and maintenance of stormwater facilities. This effort is guided by the PMLM Maintenance Plan, which identifies a maintenance interval and estimated cost for all MCWD infrastructure and facilities.

There are seven ponds recommended for pond survey and maintenance in 2020 – Twin Lake Park Pond, Cedar Meadows Pond, SW Bde Maka Ska-Cell 2, Long Lake Pond North, Long Lake Pond South, Swan Lake Pond and Painter Marsh Pond (attachment A). The majority of these ponds were last surveyed in 2017, with the exception of SW Bde Maka Ska-Cell 2 (2011) and Painter Marsh Pond (2015) (attachment B). Based on previous survey data the MCWD does not expect any of the seven ponds to require maintenance this winter.

#### Stormwater Pond Annual Survey and Maintenance 2020-2021

The annual pond survey and maintenance project requires, at a minimum, the consultant to perform sediment surveys, technical reporting, and maintenance recommendations for the seven identified ponds. If sediment surveys from any pond indicate a loss of 50% wet volume, the contract scope then stipulates the consultant will perform sediment testing and analysis, design of construction and bidding documents, and conduct construction oversight.

As noted earlier, it is not anticipated that the MCWD will conduct maintenance on any of the identified facilities. To facilitate clear cost estimation, the District requested pricing on a per task basis. Therefore, Wenck has provided the cost for design, bid and construction oversight on a per pond basis, resulting in a price range that includes the cost for baseline pond survey and reporting for seven facilities, and increases upward to account for sampling and analysis, design, bid and oversight if a single pond requires maintenance (attachment C).

The contract cost reflects the high end of a pricing range dependent on services needed. The low end of said range is \$13,450 for pond survey and reporting for seven facilities, and increases up to \$40,650 in the event that a single pond requires maintenance. If more than one pond is found to require maintenance, additional action will be required by the Board of Managers.

#### **Supporting documents (list attachments):**

- Attachment A: Stormwater Pond Map
- Attachment B: Inventory / Database
- Attachment C: Wenck Proposal



**RESOLUTION**

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**Resolution number: 20-023**

**Title: Authorization to Execute a Contract with Wenck for 2020 Stormwater Pond Annual Survey and Maintenance**

- WHEREAS the Minnehaha Creek Watershed District (MCWD) engages in regional capital improvement projects as described in its Water Resources Management Plan;
- WHEREAS the MCWD has a policy that dictates cyclical investigation and maintenance of its stormwater management infrastructure and conducts pond sediment surveys of six to eleven ponds each year on a three-year rotation to ensure that regional ponds function as designed;
- WHEREAS the Project Maintenance and Land Management Program (PMLM) annually budgets for this effort in accordance with the PMLM Maintenance Plan;
- WHEREAS the seven ponds recommended for pond survey and maintenance in 2020 – SW Bde Maka Ska - Cell 2 was last surveyed in 2011, Painter Marsh Pond was last surveyed in 2015, and Twin Lake Park Pond, Cedar Meadows Pond, Long Lake Pond North, Long Lake Pond South, and Swan Lake Pond were last surveyed in 2017 – are due for updated survey information;
- WHEREAS Wenck Associates, Inc. has surveyed the above ponds in the past and has specific knowledge of the ponds and their past maintenance; and
- WHEREAS internal Governance Policy #6 provides for a competitive process when purchasing any professional service in excess of \$25,000, but staff recommends, and the Board finds, that it is appropriate to deviate from that policy in light of Wenck’s unique knowledge of the hydrologic and hydraulic behavior of the Minnehaha Creek watershed and the organizational goals of the District, as well as its work to date in monitoring stormwater ponds in the District, which together make Wenck uniquely qualified to develop a sound and cost effective product.

NOW, THEREFORE, BE IT RESOLVED that the Minnehaha Creek Watershed District Board of Managers authorizes the District Administrator, on advice of counsel, to execute a contract with Wenck for the annual survey, technical memo, and maintenance recommendation of seven ponds, and sediment sampling and analysis, design and bid documents, and construction oversight for the maintenance of one pond for 40,650, and authorizes the Administrator to execute change orders as necessary in the not-to-exceed amount of \$44,715.

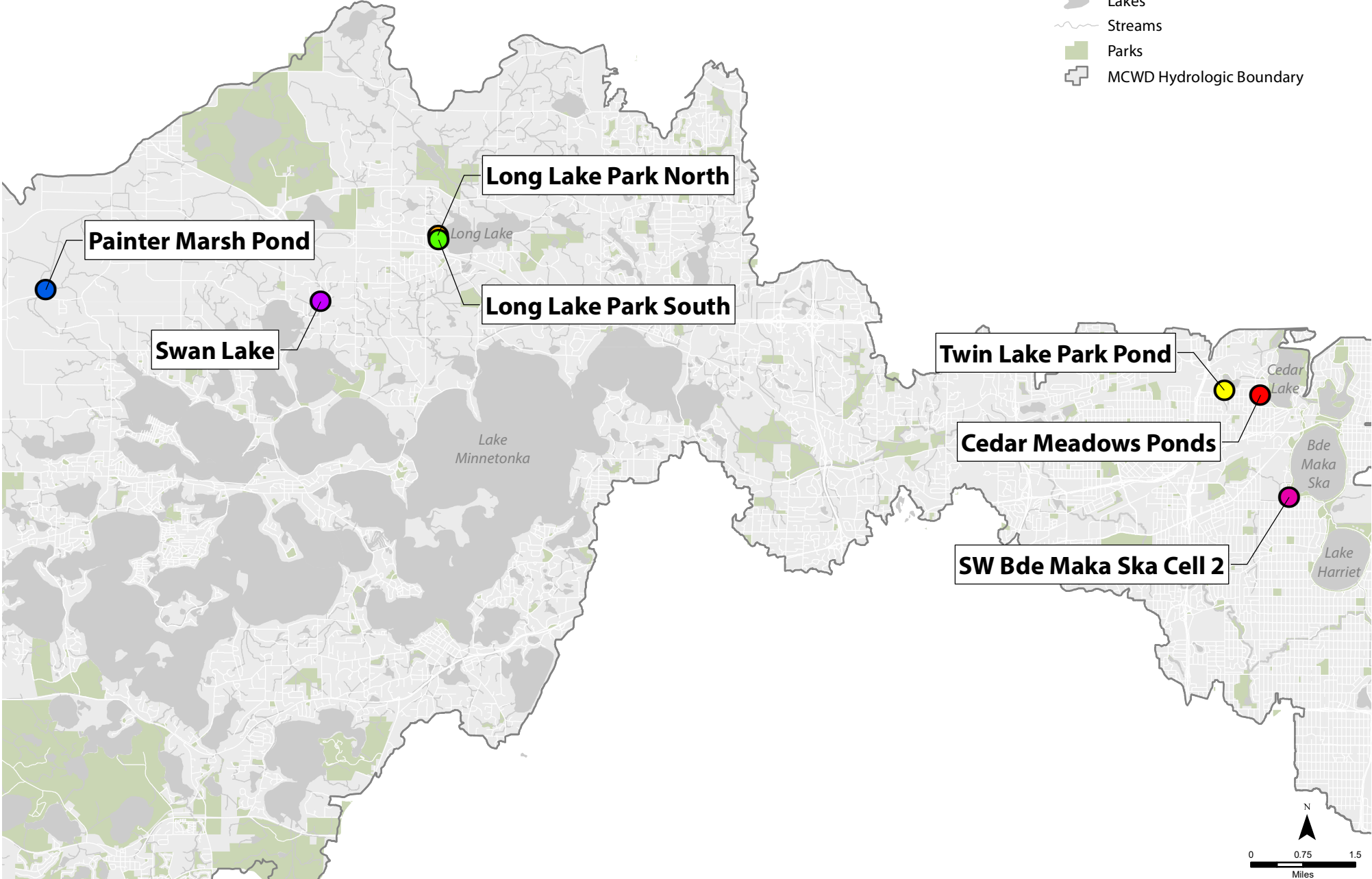
Resolution Number 20- 023 was moved by Manager \_\_\_\_\_, seconded by Manager \_\_\_\_\_. Motion to adopt the resolution \_\_\_ ayes, \_\_\_ nays, \_\_\_ abstentions. Date: 4/9/2020

\_\_\_\_\_  
 Secretary Date: April 9, 2020

# MINNEHAHA CREEK WATERSHED DISTRICT STORMWATER PONDS

## LEGEND

- Lakes
- Streams
- Parks
- MCWD Hydrologic Boundary



Attachment B: Pond Inventory/Database

Ponds to survey in 2020

Subwatershed & Pond	Installed	Last Surveyed	Survey Results	Year Dredged	Cost	Amt. Removed	Maintenance Responsibility
<b>Minnehaha Creek</b>							
60th and 1st Pond	2000	2013	*				Minneapolis
Cedar Meadows-Basin 1	1996	2017	0%	2004	\$41,574	2750 CY	MCWD
Excelsior Pond	2013	2016	14%				MCWD
Nokomis-Amelia	2001	2016	21%	2011	\$48,175	2147 CY	MCWD
Nokomis-Gateway	2001	2016	4%				MCWD
Nokomis-Knoll	2001	2016	16%				MCWD
SW Bde Maka Ska-Cell 1	1999			2004	\$57,417	3120 CY	MCWD
(SW Calhoun)				2011	\$116,039	2024 CY	
		2018	44%	2018/19	\$57,500	2000 CY	
SW Bde Maka Ska-Cell 2	1999	2011	*	2004			MCWD
Pamela Park Pond 1	2001	2018	59%	2018/19	\$82,175	1900 CY	Edina first dredging and MCWD subsequent dredging
Pamela Park Pond 2	2001	2018	38%				
Pamela Park Pond 3	2001	2018	18%				
Twin Lakes Pond	1996	2017	14%	2004	\$19,945	3403 CY	MCWD
				2012	\$99,359	2080 CY	
<b>Long Lake Creek</b>							
County Road 6 Pond	1998	2016	12%				MCWD
Deer Hill Pond-North	1996	2018	5%				MCWD
Deer Hill Pond-South	1996	2018	*				MCWD
Long Lake Park North	1996	2017	10%	2004	\$16,578	2410 CY	MCWD
Long Lake Park South	1996	2017	21%	2006			MCWD
<b>Gleason Lake Creek</b>							
Gleason Lake North 1	1995	2018	37%	2012	\$62,995	900 CY	MCWD
Gleason Lake North 2	2008	2018	19%	2016	\$45,064	892 CY	MCWD
Gleason Lake North 3	2008	2018	12%	2016			
Glenbrook Pond	1994	2016	44%	2017/18		16,000 CY	Wayzata
<b>Lake Minnetonka</b>							
Lakeside Pond	1994	2014	42%				Wayzata
Gideon Glen	2006	2016	8%				Shorewood
Swan Lake	2008	2017	7%				MCWD
<b>Painter Creek</b>							
Johnson/ Rolling Hills	2008	2018	26%				MCWD
Painter Marsh	1985*	2015	23%				MCWD
South Katrina Pond	1985*	2018	17%				MCWD
<b>Six Mile Creek</b>							
Steiger Wetland	1988	2015	75%+				MCWD

\*insignificant amount



March 6, 2020

**Janna Jonely**

Project & Land Management Technician  
Minnehaha Creek Watershed District  
15320 Minnetonka Boulevard  
Minnetonka, MN 55345

RE: 2020 Stormwater Pond Annual Survey and Maintenance

**Dear Ms. Jonely:**

We appreciate the opportunity to present Minnehaha Creek Watershed District our qualifications to provide pond survey and design services for the District. We are committed to providing MCWD with the highest level of quality and service, driving maximum value into your projects and conducting business with your best interests in mind - all at a very competitive price.

The enclosed Proposal provides an overview of our extensive experience, expertise, and summary of our approach. We can provide the following unique qualifications to the District:

- **Long History Serving the District** – Wenck has partnered with MCWD over the last 30-years; together we have successfully implemented more than one hundred projects.
- **Striving for Improvement** – we are always learning and developing new techniques, identifying new areas of improvement that provide our clients with additional value. We look forward to continuing to refine our approach to provide MCWD with greater “bang for the buck”.
- **Wholistic Approach** – we approach this project understanding that this is not “just” a pond survey project. We understand how the ponds are connected to the Creek itself, and how this study relates to other District objectives, such as the Long Lake Study and Minnehaha Creek Greenway. Our institutional knowledge will help us go the extra mile to provide the District with a deliverable that does not “just” check a box but will be a planning document to direct future District funding and actions.

## **Project Understanding**

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Wenck understands this is simply not a pond survey and dredging project, it is part of a wholistic approach to water resources management. Through a comprehensive assessment of these pond systems, the District may improve operation of these current assets while also better understanding how future ponds will function. Our vision for this scope of work is to evaluate current pond performance, and identify potential ways to optimize the systems, whether it be improving maintenance protocol, design improvements, or otherwise.

We recognize stormwater ponds are a tactic to manage an entire ecosystem. If managed properly stormwater ponds protect, improve and maintain the health of Minnehaha Creek. Studies have shown that neglected ponds can become phosphorus sources. As a partner with the District for over 30-years, Wenck continues to collaboratively partner with the District to



further understand these systems to optimize future operations. We propose a collaborative approach with the District Project Maintenance and Land management along with Research and Monitoring (R&M) departments to better diagnose what is working in the existing ponds and what can be improved. Questions like:

- How are existing forebays functioning? Are they too big, too small, or, just right?
- How do pond functionality and maintenance requirements compare in single-celled versus multi-celled ponds?
- Do we need to be more proactive in pond management as they are now becoming a source of nutrients?
- Are undersized ponds even worth constructing in the future?

These are a sampling of questions we believe we can help the District answer through implementation of this project. We see potential improvements to the plan including looking at delaying the survey of certain ponds after they have been surveyed two to three times and are demonstrating low sediment accumulation rates. Conversely, if they have not accumulated sediment at a rate typical in ponds, filling in 7-12 years, there may be a need to review if they are truly as effective as originally designed. Much like managing any ecosystem there needs to be continuous review and adjustment to a system.

This approach will build on the District’s reputation as a value-add partner and may assist many of the District’s municipal partners who are truly just starting to understand the magnitude of effort required to maintain and successfully operate a stormwater management system. By being able to provide insight and assistance to partners through proven data and analysis, the District can prioritize their ponds in addition to helping partners identify key attributes to manage their systems with limited maintenance dollars. Additionally, taking a focus on continuous improvement will better inform how the design of new ponds may be developed to limit future expenditures. As the District continues to assume ownership of these practices, effective design, operation and maintenance of stormwater systems watershed wide is critical given the continual push to ensure diligent spending of every dollar.

As a long-term partner of the District, we have reviewed sediment accumulation trends in the ponds to be surveyed this year and are reasonably confident none of ponds will need to have sediment samples collected (with the exception of Southwest Bde Maka Ska – Cell 2, which has yet to be surveyed). However, if after the survey it is determined sampling is required, we are prepared to quickly collect samples if needed.

<b>Pond</b>	<b>2017 Percent Sediment Accumulation</b>	<b>2020 Percent Sediment Accumulation (Estimate)<sup>1</sup></b>
Twin Lake Park Pond	14%	20-26%
Cedar Meadows Pond	0%	6-12%
SW Bde Maka Ska – Cell 2	N/A <sup>2</sup>	Unknown
Long Lake Pond – North	10%	16-22%
Long Lake Pond – South	21%	27-33%
Swan Lake Pond	7%	13-19%
Painter Marsh Pond	23% <sup>3</sup>	33-43%

<sup>1</sup> Wenck’s and the District’s studies have shown average pond sediment accumulation rate is approximately two to four percent per year.

<sup>2</sup> Cell 2 has not been previously surveyed. Cell 1 was cleaned out as part of the 2018-19 Pond Survey and Maintenance Projects.

<sup>3</sup> From 2015 survey.



Again, our understanding of this scope of work is that it is not simply a routine check and dredge exercise, it is taking review of a system to understand and communicate how it is currently operating and identifying how to continually improve its health.

## Project Approach

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**Task 1 – Sediment Survey.** Due to the timing this year’s surveys, Wenck understands scheduling is somewhat flexible to achieve the District’s goal of winter construction of any identified pond cleanout projects. Therefore, we anticipate waiting until the spring melt occurs and peak water levels have receded prior to conducting the surveys. In the interim, we will stay in communication with the District to ensure we all are on the same page regarding timing. Based on this year’s number and location of ponds, we expect our survey will take approximately three days, where we will survey two ponds per day. Listed below are our expected groupings.

- Day 1: Twin Lake Park and Cedar Meadows Ponds;
- Day 2: Bde Maka Ska Cell 2 and Painter Marsh Ponds; and
- Day 3: Long Lake and Swan Lake Ponds.

The survey will utilize GPS and survey rod readings to record depth of water and depth to refusal measurements. This method yields approximately 150 data points/acre in a pond. The high density of point collection enables a better understanding of pond geometry.

Through the survey we will collect the below information as requested in the request for proposal (RFP). Additional, “upland” topographic information will be collected under a separate task if necessary, to facilitate a pond cleanout project.

- Water surface elevation;
- Top of sediment elevation;
- Depth to refusal;
- Above water level inlet and outlet structures; and
- Visible and accessible subsurface structures.

Though not explicitly included in the RFP, we will also profile dissolved oxygen concentrations and conductivity measurements throughout the ponds to evaluate potential anoxic conditions (not likely given the time of the year) and chloride accumulation in the ponds (likely elevated given the time of the year). If the District is not interested in including these additional water quality measurements in our scope of work, we would be happy to adjust our scope and budget for Task 1 accordingly.

Included in Task 1 is a kickoff meeting, held at District offices. Two Wenck staff will prepare agenda for, attend, and provide the District our minutes from the meeting. It is anticipated that the Wenck project manager and District Engineer will attend the kickoff meeting, and topics of discussion will include reviewing existing information, scheduling and any other relevant District initiatives.

Other than meeting minutes, no specific deliverables are included as part of Task 1. Data generated as part of Task 1 will be processed and shared as deliverables in separate Tasks.

**Task 2 – Technical Report.** Wenck will consolidate information obtained in the pond surveys along with sediment analysis in one concise report that documents the status of the surveyed ponds. Per District protocol, ponds that have lost greater than 50-percent of their permanent pool volume to accumulated sediment will be recommended for cleanout projects.



The report will include the methods and approach to collecting the data, including any unique observations noted during the survey. As with our past reports we will look to provide documentation of as-built volume and compare results to the surveyed remaining volume. This will lead to the calculation of the accumulated sediment in the pond. Succinctly in table format will be a summary of the remaining capacity of the pond determining if it has passed the 50-percent capacity threshold.

The technical report will recommend ponds which should be dredged in addition to ponds which could have future surveys delayed due to low sediment accumulation rates. If sediment accumulation rates are unusually low, we will recommend potential next steps for a performance evaluation.

**Task 3 – Sediment Sampling and Testing.** Wenck will remobilize to the site to collect sediment samples for ponds that are identified as requiring maintenance. If a pond is deemed close to the 50-percent, we may recommend sample collection to allow for understanding of future dredging costs associated with the collected sediment as there is significant variability in cost per cubic yard for contaminated sediments.

We will collect the sample at the site, and subcontract with a testing laboratory to evaluate sediments for pollutants. We will follow protocols described in MPCA’s 2017 *Managing Stormwater Sediment Best Management Practices Guidance*. Specifically, sediments collected will be analyzed for cPAHs, PAHs, arsenic, copper and total phosphorus. Based on our understanding of the area and District history, no additional pollutants are proposed to be tested for at this point in time. However, we would be happy to amend our scope and budget if additional pollutants are identified throughout the course of the project.

Our estimate for sampling ponds includes sample collection, transport and lab analysis. Through the analysis we will summarize sediment characteristics and disposal requirements (i.e. Level 1, 2, 3).

Pond	Area (ac)	Number of Samples
Cedar Meadows – West	1.4	2
Cedar Meadows – East	3.5	4
Twin Lakes Park	1.5	2
Bde Mka Ska – Cell 2	2.1	3
Long Lake – North	0.4	2
Long Lake – South	0.3	2
Swan Lake	2.3	3
Painters Marsh	1.9	2
TOTAL		20

Deliverables for Task 3 include sediment pollutant test results. This data will be processed, analyzed and shared with the District as a deliverable under a separate task.

**Task 4 – Design and Construction Administration.** If a pond is determined to need maintenance Wenck will develop plans and specifications to accommodate bidding the project in late October or early November, such that the project will be bid during a favorable bidding timing as contractors look to fill their winter work schedule. Our unmatched experience

working the District's specifications ensures an efficient and clear bidding package will be developed.

The design process includes developing a technical report, construction documents, specifications, opinion of probable cost, assistance in obtaining permits from state and local entities, and construction observation.

We recognize as outlined in the project understanding section this portion of the scope has a low probability, but we are prepared to deliver the following tasks on-schedule and budget.

**Site Survey.** As described above, our initial site survey will focus on the evaluating ponds' permanent pools and immediately adjacent inlets and outlets. The remainder of the "upland" information will be collected by our registered land surveyors during this phase of the project. This may include additional tree data, or as was the case in Pamela Park, partner communities may find the need to perform additional enhancement in or adjacent to the pond. Prior to surveying, we expect to have open conversations with the District as to overall construction scope and to identify any potential pond improvement options. Our team is prepared to collect that data such that bidding documents are clear and concise for potential bidding contractors. Items completed as part of the survey include:

- Request Gopher State One Call private utility locate;
- Locate existing infrastructure within construction limits and adjacent areas;
- Locate and tag potential trees of interest;
- Confirm access road location and any potential conflicts;
- Locate public and private utility lines marked as a result of a Gopher One Call locate request and based on visible above ground evidence; and
- Install up to 3 durable on-site survey control points.

**Preliminary Engineering and Design Draft Report.** Upon District approval of the project, Wenck will quickly leverage our depth of experience completing projects for MCWD to assemble 60% Plans. As we go through the process, we will be aligning staff resources to quickly turn around plans. Our team has the existing formats for each of the 10 sheets which will need to be completed allowing our team to quickly pull in collected data and develop plans in a seamless integration. We understand the initially desired sheets are:

- Title Sheet with Location Map
- Topographic Survey
- Statement of Estimated Quantities
- Removal Plan
- Construction Notes
- Stormwater Pollution Prevention Plan
- Grading and Drainage Plan
- Erosion Control Plan & Details
- Site Details
- Restoration Planting Plan

Wenck's experience completing these projects for MCWD ensures review agency requirements are met on the first submittal, limiting resubmittal delays.

Using over 75 bid tabs Wenck has obtained the past year for similar projects, along with our depth of past experience completing dredging projects, an opinion of probable cost will be developed for bidding purposes. We expect this will be a refinement of the estimate provided

in our Technical Report with more specificity around project details defined by MCWD and partner communities.

We will also develop concurrently a technical report that lays out the objective, approach, and assumptions. A draft of this will accompany the 60-percent plans for MCWD team members to review.

Wenck will look to deliver 60-percent Plans and the draft technical report such that MCWD has adequate time to review and provide comments. After the District has had adequate time to review, Wenck staff will meet at District offices to review comments in person. It is anticipated that the Wenck project manager and District Engineer will attend the 60-percent design meeting.

**Final Engineering and Design Report.** Through the review process Wenck will incorporate identified edits by MCWD, partner City or review agency into our plans. We assume changes from the 60-percent design to the final design efforts will be minor changes. Our ongoing experience with the District will streamline the review process and limit rework delays.

The incorporation of these final edits will lead to a 100% Final Design and Report meeting where focus will turn to bidding and finalization of specification needs. It is anticipated that the Wenck project manager and District Engineer will attend the final design meeting at District offices.

**Permitting Assistance.** Wenck will work collaboratively with the District throughout the design process to develop materials necessary for permit submittals. As the District Engineer, we are very experienced assisting with submittal of District permits as well as necessary permits from MN DNR, Local Municipalities and MPRB. As a collaborative partner we look to review necessary permits ahead of time with staff along with going through submittal requirements such that each partner focuses on their expertise for timely submittal.

Our team will be prepared to assist staff with necessary permit submittals. We will also work with staff through the development of the bid package to ensure it is clear which permits are required by the contractor (SWPPP, dewatering, any necessary hauling permits).

**Design Meetings.** Open and continuous communication is critical for the success of any project and even though this could be seen as a simple "dredging project" it still requires the same approach. As such Wenck is prepared to maximize in person meetings to address perceived/current project hurdles, update on status. Our team will look to have the Project Manager and District Engineer present at all meetings. In addition to the Kickoff, 60-percent and final design meetings we assume there will be additional meetings leading up to construction:

- Up to two, one-hour in person meetings with MCWD, City, and/or MPRB Staff; and
- Up to eight, half hour check-in calls/updates with Janna.

**Bid Documents.** Working collaboratively with the District, a specification package with signed plans will be assembled specifically for the unique project and site. Wenck will use our knowledge developing specifications for MCWD and in particular pond dredging projects to customize bid documents to ensure a successful project. Customization may include such items as haul routes, work hours, or dewatering requirements specific to the project.

Additionally, an engineer's cost estimate will be finalized for bidding purposes. Division 0 from MCWD will be combined with technical specifications from Wenck to produce a completed bid

package. Upon completion, Wenck will provide three hard copy versions for the District along with PDF and WORD versions.

During the bidding process Wenck will prepare the advertisement for bids along with posting the project documents to Quest CDN bidding system to maximize exposure. Wenck will develop pre-bid agenda, walkthrough the project with bidders at pre-bid meeting, and answer questions bidders may have. If necessary, addenda will be issued through Quest. Wenck assumes the project manager and District Engineer will attend the pre-bid meeting.

Upon receiving bids, Wenck will tabulate and provide a recommendation as to how to proceed. Wenck has a proven history of providing the tabulation and recommendation within four hours of receiving the bids for quick incorporation into the District's Board Packet. Wenck assumes the District Engineer will attend the bid opening.

**Construction Observation and Administration.** Once bidding is complete our team is prepared to provide assistance as necessary to the District to escort the project through construction. Our team will cover key components with the selected contractor at the pre-construction meeting with a targeted agenda which emphasizes critical components to the project along with a communication plan.

Through feedback at the meeting our team of surveyors will provide key construction staking needs in addition to benchmarks the contractor will need. We assume two visits from Wenck surveyors will be necessary to facilitate a successful construction project. We expect access route limits, construction and removal limits, up to five control points and pipe and structure offsets if feasible will be staked on the first visit. The second visit will involve staking pipe and structure offsets if infeasible to stake on the first visit, control point replacement if necessary, and to verify the contractor's stakes or grading.

Throughout the construction process, we assume the District will lead the day to day inspection tasks and contractor communication. We have budgeted eight, two-hour site visits throughout the duration of the project. A Wenck inspector will be available to mobilize to the site to offer insight at key construction junctures and to answer questions. Additionally, the inspector will attend up to four onsite progress meetings we expect will occur every other week.

At the conclusion of excavation, the Wenck inspector and District staff will conduct a walkthrough where a final punch list will be developed to ensure loose ends are tied up.

Finally, as-built plans will be completed to confirm excavation quantities and release final payment to the contractor.

Through the entire project our team will track quantities provided by the contractor in relation to estimates. We will also work the contractor to provide pay requests which time with MCWD Board meetings creating an efficient payment process limiting complaints from the contractor. Additionally, if there are field orders and change orders necessary Wenck will look to develop and process them. We have budgeted to handle one field order along with one change order. We do not expect any field orders or change orders will be required, but our goal is to ensure the District has an adequate budget number for moving forward with the project.

## Schedule

We assume our scope, schedule and budget will be approved at the Districts meeting on March 12<sup>th</sup>, 2020 and understand any pond cleanout projects will be constructed over the winter of 2020-21 as noted in the RFP. We believe our schedule below provides adequate time for thoroughly reviewing and assessing our findings, before moving onto future phases of the project. Several key check points are provided as well that offer the District opportunity to provide input to direct final study and design outcomes.

<b>Task</b>	<b>Start Date</b>	<b>Completion Date</b>
<i>MCWD Approves Scope, Schedule and Budget</i>	3/6/20	3/12/20
<i>Task 1 – Sediment Survey</i>	3/9/20	5/15/20
1.01 Kickoff Meeting	3/9/20	3/20/20
1.02 Sediment Surveys <sup>4</sup>	4/13/20	5/15/20
<i>Task 2 – Technical Report</i>	5/4/20	6/26/20
2.01 Draft Report and Supporting Documents	5/4/20	5/29/20
2.02 Final Report and Supporting Documents	6/1/20	6/26/20
<i>Task 3 – Environmental Tests for Sediment Samples</i>	5/18/20	6/26/20
3.01 Sample Sediment for Ponds Less than 1.0-ac	5/18/20	6/26/20
3.02 Sample Sediment for Ponds Between 1.0- and 4.0-ac	5/18/20	6/26/20
<i>MCWD Approves Technical Report Findings and Orders Design and Construction of Select Ponds</i>	6/26/20	7/9/20
<i>Task 4 – Site Design and Construction</i>	7/13/20	11/19/20
4.01 Site Survey	7/13/20	7/31/20
4.02 60% Design	8/3/20	8/28/20
4.03 60% Design Meeting	8/31/20	9/11/20
4.04 Final Design	9/14/20	10/9/20
4.05 Final Design Meeting	10/12/20	10/23/20
4.06 Permitting Assistance	7/13/20	11/19/20
4.07 Additional Design Meetings	7/13/20	11/19/20
4.08 Prepare and Administer Bid Documents	10/26/20	11/19/20
<i>Bid Project</i>	10/26/20	11/12/20
<i>Review Bids</i>	11/12/20	11/18/20
<i>Award Bid</i>	11/19/20	11/19/20
4.09 Construction Observation and Administration	11/30/20	6/30/21

<sup>4</sup> Timing for in pond surveys will be somewhat flexible, as Wenck will target surveying the ponds after the spring melt, but before significant in pond vegetation is established.

## Budget

Wenck proposes the following budget, on a time and materials basis not to exceed the budget without written consent from the District.

Task	Proposed Budget
<b>Task 1 – Sediment Survey</b>	<b>\$10,650</b>
1.01 Kickoff Meeting	\$750
1.02 Sediment Surveys	\$9,900
<b>Task 2 – Technical Report</b>	<b>\$2,800</b>
2.01 Draft Report and Supporting Documents	\$2,400
2.02 Final Report and Supporting Documents	\$400
<b>Task 3 – Environmental Tests for Sediment Samples*</b>	<b>\$1,600-\$2,900</b>
3.01 Sample Sediment for Ponds Less than 1.0-ac	\$1,600
3.02 Sample Sediment for Ponds Between 1.0- and 4.0-ac	\$2,900
<b>Task 4 – Site Design and Construction*</b>	<b>\$24,300</b>
4.01 Site Survey	\$2,500
4.02 60% Design	\$4,100
4.03 60% Design Meeting	\$750
4.04 Final Design	\$2,400
4.05 Final Design Meeting	\$750
4.06 Permitting Assistance	\$600
4.07 Additional Design Meetings	\$1,800
4.08 Prepare and Administer Bid Documents	\$2,800
4.09 Construction Observation and Administration	\$8,600

\*Costs listed for Task 3 and Task 4 are on a per pond basis.

As Wenck’s final scope of work is a function of our findings in Task 1, the table below presents several scenarios ranging from what we believe is the most likely (none of the ponds require sediment samples or dredging) to the most unlikely (all of the ponds require sediment sampling and dredging). In the (extremely) unlikely event where all ponds require dredging, Wenck’s fees could exceed \$200,000 based on the way the RFP is structured. In the event multiple ponds are identified for cleanout projects, Wenck would be happy to discuss a revised scope, schedule and budget as it is expected significant economies of scale may be realized in Task 4 as the number of design projects increase (such as meetings to discuss multiple projects, shared specifications, etc.).

Furthermore, Task 4.09 Construction Observation and Administration is by far the largest single task (other than surveying all seven ponds). Based on our experience in working with pond dredging projects, we believe our assumed hours and tasks are adequate to be onsite to observe construction at critical junctures. However, in the event of differing site conditions, or a nonresponsive contractor, or other unexpected construction issues, we will alert the District immediately of the changed conditions, and once half of our budgeted hours have been consumed to determine a course of action. In the event of perfect construction conditions, the District will only be billed for budget consumed on a time and materials basis.

**Ms. Janna Jonely**  
 Project and Land Management Technician  
 Minnehaha Creek Watershed District  
 March 6, 2020



Scenario	Task 1 Costs	Task 2 Costs	Task 3 Costs	Task 4 Costs	Total Costs
A – Zero Ponds Require Sampling/Dredging	\$10,650	\$2,800	\$0	\$0	\$13,450
B – One Pond Requires Sampling/Dredging	\$10,650	\$2,800	\$1,600 - \$2,900	\$24,300	\$39,350 - \$40,650
C – Two Ponds Require Sampling/Dredging	\$10,650	\$2,800	\$3,200 - \$5,800	\$48,600	\$65,250 - \$67,850
D – All Ponds Require Sampling/Dredging	\$10,650	\$2,800	\$20,600	\$170,100	\$204,150

Wenck’s wholistic approach to project delivery by truly acting as partner through the process ensures the District’s risk is limited while ensuring resources are protected through successful maintenance and improvement of the existing stormwater management system.

On behalf of the 300+ employee-owners of Wenck, thank you for this opportunity to work with Minnehaha Creek Watershed District. Should you have any questions or need clarification of anything presented in the attached proposal, please do not hesitate to call Dan at 651-395-5225 or Chris at 763-252-6844.

Sincerely,

Daniel Elemen, PE  
 Wenck Associates, Inc.  
 Associate/Water Resources Engineer

Chris Meehan, PE, CFM  
 Wenck Associates, Inc.  
 Principal/Water Resources Engineer