



MEMORANDUM

To: MCWD Board of Managers
From: Janna Jonely
Date: December 3, 2019
Re: Stormwater Pond Project Updates

Purpose:

To provide project updates for 2018-19 stormwater pond dredging maintenance and 2019 stormwater pond annual survey and maintenance.

2018-19 Stormwater Pond Maintenance

In accordance with the MCWD's annual stormwater infrastructure maintenance program, the MCWD surveyed 11 stormwater ponds in 2018 and found that two facilities required dredging. On October 25, 2018, the Board of Managers executed a contract for the 2018-19 Pamela Park Cell 1 and SW Bde Maka Ska Pond Dredging project to Sunram Construction, Inc.

Southwest Bde Maka Ska Cell 1:

The dredging maintenance of cell 1 began in December 2018, removed 2,000 cubic yards of unregulated sediment, and was finished in March 2019. The project was bid at \$113,300 and completed for \$110,990. Restoration of the pond buffer was completed late spring by the District's contractor, Landbridge Ecological, as part of the District's regular vegetation maintenance contract for the Southwest Bde Maka Ska pond buffer site.

Pamela Park Pond 1 and Outfall Repair:

At the October 25, 2018 meeting, the Board also approved a cooperative agreement with the City of Edina for the Pamela Park Maintenance Project (Project). The Project involved three separate components:

- 1) "Dredging" - dredging of Pamela Park Pond Cell 1; and
- 2) "Outfall Wall Repair" - repair of retaining wall adjacent to the stormwater outfall discharging to Pamela Park Pond Cell 1; and
- 3) "Vegetation Management Plan" - development of a vegetation management plan for Pamela Park.

Construction work for components 1 and 2 began in December of 2018 and reached substantial completion in June 2019. In summation, the Project resulted in the removal and disposal of 1,800 cubic yards of contaminated sediment and the rebuilding of the outfall wall along a private property line at the northwest end of the pond. The project was bid at \$164,625 and delivered under budget for \$160,250. The development of a vegetation management plan, component 3 of the cooperative agreement, is ongoing and part of Edina's overall vegetation plan for the entirety of Pamela Park.

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2019 Stormwater Pond Annual Survey and Maintenance

On September 12, 2019 the Board awarded Wenck the 2019 Stormwater Pond Annual Survey and Maintenance Project (Project) contract. The Project required, at a minimum, the consultant to perform sediment surveys, technical reporting, and maintenance recommendations for the six identified ponds. If sediment surveys from any pond indicated a loss of 50% wet volume, the contract scope then stipulated the consultant would perform sediment testing and analysis, draft construction and bidding documents, and conduct construction oversight.

In September 2019 Wenck performed sediment surveys for six stormwater ponds; the results are listed in Table 1 below.

Table 1: Stormwater Pond Sediment Survey Results

Stormwater Pond	Location	As-Built Design Volume (CY*)	Percent Full (%)
County Rd. 6	Long Lake	19,602	10
Excelsior	St. Louis Park	2,385	16
Gideon Glen	Shorewood	1,965	9
Nokomis: Amelia	Minneapolis	22,247	36
Nokomis: Gateway	Minneapolis	5,156	6
Nokomis: Knoll	Minneapolis	6,743	16

*cubic yards

As expected, none of the ponds surveyed accumulated enough sediment to result in a loss of 50% wet volume, which is the District's threshold for performing maintenance dredging. Based on these results, Wenck has made no maintenance recommendation for winter 2019-20.

As part of the technical report summarizing pond survey data, Wenck provided a new analysis of current data combined with past sediment survey data accumulated since 2011. For future planning and budgeting purposes, Wenck provided an estimated maintenance date for ponds surveyed this year. The pond survey for Amelia indicates a 36% wet volume loss, which shows that Amelia pond is accumulating sediment at a rate of approximately 5% per year. At this rate, Wenck anticipates dredging maintenance of this pond may need to occur no later than winter of 2022. All other ponds surveyed are accumulating sediment at a rate of 1.3% per year or less and thus are not likely candidates for dredging within the next several years. The ponds noted in Table 1 above are scheduled to be re-surveyed in 2022, with the exception of Amelia which will be surveyed in 2021 in anticipation of needed maintenance.

2020 Stormwater Pond Annual Survey and Maintenance

In the spring of 2020, staff will seek authorization to award a contract for 2020 stormwater pond annual survey and maintenance. Stormwater ponds to be investigated include the following: Cedar Meadows (Minneapolis), Southwest Bde Maka Ska - cell 2 (Minneapolis), Twin Lakes pond (St. Louis Park), Long Lake Park – north and south ponds (Long Lake), and Swan Lake pond (Orono).

If there are questions in advance of the meeting, please contact: Janna Jonely at (952) 641-4523 or jjonely@minnehahacreek.org.

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