

# Memorandum

**To:** Bassett Creek Watershed Management Commission (BCWMC)  
**From:** Barr Engineering Co. (Jim Herbert, PE; Gabby Campagnola)  
**Subject:** Item 4E: MnDOT Pond Maintenance Project; Sites #10, #14, #15 – Multiple Cities  
BCWMC January 16, 2025 Meeting Agenda  
**Date:** January 9, 2025  
**Project:** 23270051.62 1020 2419

## **4E MnDOT Pond Maintenance Project, Sites #10, #14, #15 Multiple Cities BCWMC 2024-19**

### **Summary:**

**Proposed Work:** Dredging and pond improvements

**Project Proposer:** MnDOT

**Project Schedule:** Construction May 2025 to April 2026

**Basis for Review at Commission Meeting:** Work in the floodplain

**Impervious Surface Area:** No change

**Recommendations for Commission Action:** Approval

## **General Project Information**

The proposed project includes improvements to five ponds in three locations within the Bassett Creek watershed:

- Site #10 – Crystal: North of 29<sup>th</sup> Avenue North and West of Highway 100; proposed work includes dredging and installing a sediment forebay.
- Site #14 – Minnetonka: East and west side of Crane Lake between Ridgedale Drive and County Road 73/Hopkins Crossroad, and south of Highway 394; proposed work includes dredging, installing a sump and SAFL baffle for the east pond, and installing a sediment forebay for the west pond.
- Site #15 – Golden Valley: Northwest corner and southeast corner of the intersection of General Mills Boulevard South and Highway 394; proposed work includes dredging and increasing the depth of the two ponds.

The initial submittal was received on November 18, 2024. The BCWMC engineer reviewed the submittal and provided comments to MnDOT and respective cities on December 3, 2024. Revised plans were received on January 3, 2025.

### **Site #10 (City of Crystal)**

**Background:** The Site #10 pond is located immediately east of Bassett Creek Park Pond. The portion of the pond above the normal water level (838.58 ft. NAVD88) provides floodplain storage and is part of the BCWMC Flood Control Project (due to floodplain storage). The portion of the pond below the normal water level was constructed as a “betterment” for water quality improvements and is not part of the Flood

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Control Project. The pond, noted as Detention Pond on the Flood Control Project drawings was constructed between May 1995 – July 1996. The dead storage (water quality) portion of the pond was not eligible for federal funding (which was used for the BCWMC Flood Control Project) and was funded with local dollars.

The pond receives flows from the Lilac Drive storm sewer in Golden Valley that was diverted by MnDOT following the construction of the pond to provide “first flush” water quality benefits as part of the Highway 100 reconstruction. High flows bypass the water quality pond and discharge directly to Bassett Creek. The 2023 BCWMC Flood Control Project inspection report recommended a bathymetric survey of the water quality pond to determine if the pond has accumulated sediment; the BCWMC engineer appreciates that MnDOT is targeting this pond for sediment removal.

**Floodplain Storage Modification:** The BCWMC 100-year (i.e., 1% annual-chance of occurrence) floodplain elevation of Site #10 is 850.9 feet NAVD88. The January 2023 BCWMC Requirements for Improvements and Development Proposals (Requirements Document) states that projects within the floodplain must maintain no net loss in floodplain storage and no increase in flood level at any point along the trunk system (managed to at least a precision of 0.00 feet). The proposed project will include 421 cubic yards of fill to install a berm to create the sediment forebay. The proposed project will include 423 cubic yards of excavation between the normal water level and the 100-year floodplain elevation along the northwest side of the pond. Therefore, the proposed project will result in a net gain of approximately 2 cubic yards of floodplain storage, meeting the BCWMC requirements. The BCWMC engineer requested that the applicant confirm the flood storage calculations.

**Water Quality:** The proposed project does not create one or more acres of new and/or fully reconstructed impervious surfaces; therefore, BCWMC water quality review is not required. However, since the pond was constructed to provide water quality benefits (below the normal water level), the project was reviewed to maintain the original water quality volume. The proposed project will increase the water quality volume by 23 cubic yards.

**Wetlands:** The City of Crystal is the local government unit (LGU) responsible for administering the Wetland Conservation Act; therefore, BCWMC wetland review is not required for this project.

**Rate Control:** The proposed project does not create one or more acres of new and/or fully reconstructed impervious surfaces; therefore, BCWMC rate control review is not required.

**Erosion Control:** The proposed project results in more than 10,000 square feet of land disturbance; therefore, the proposed project must meet the BCWMC erosion and sediment control requirements. Proposed temporary erosion and sediment control features include rock construction entrances, silt fence, bioroll logs, and storm drain inlet protection. Permanent erosion and sediment control features include stabilization with seed.

#### **Site #14 (City of Minnetonka)**

**Background:** The City of Minnetonka and BCWMC are performing chloride monitoring on the west pond of Site #14 pond through approximately June/July 2025 (Crane Lake Chloride Reduction Demonstration Project feasibility study). As part of the project, the BCWMC engineer placed chloride sensors near the pond outlet within one of the proposed excavation areas shown on the plans. Excavation/dredging activities at the outlet could damage the chloride monitoring equipment and excavation/dredging in other parts of the pond could impact monitoring results.

**Floodplain Storage Modification:** The proposed pond is not in the BCWMC 100-year floodplain; therefore, BCWMC floodplain review is not required.

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**Water Quality:** The proposed project does not create one or more acres of new and/or fully reconstructed impervious surfaces; therefore, BCWMC water quality review is not required.

**Wetlands:** The City of Minnetonka is the local government unit (LGU) responsible for administering the Wetland Conservation Act; therefore, BCWMC wetland review is not required for this project.

**Rate Control:** The proposed project does not create one or more acres of new and/or fully reconstructed impervious surfaces; therefore, BCWMC rate control review is not required.

**Erosion Control:** The proposed project results in more than 10,000 square feet of land disturbance; therefore, the proposed project must meet the BCWMC erosion and sediment control requirements. Proposed temporary erosion and sediment control features include rock construction entrances, silt fence, bioroll logs, and storm drain inlet protection. Permanent erosion and sediment control features includes stabilization with seed.

### **Site #15 (City of Golden Valley)**

**Floodplain Storage Modification:** The proposed pond is not in the BCWMC 100-year floodplain; therefore, BCWMC floodplain review is not required.

**Water Quality:** The proposed project does not create one or more acres of new and/or fully reconstructed impervious surfaces; therefore, BCWMC water quality review is not required.

**Wetlands:** The City of Golden Valley is the local government unit (LGU) responsible for administering the Wetland Conservation Act; therefore, BCWMC wetland review is not required for this project.

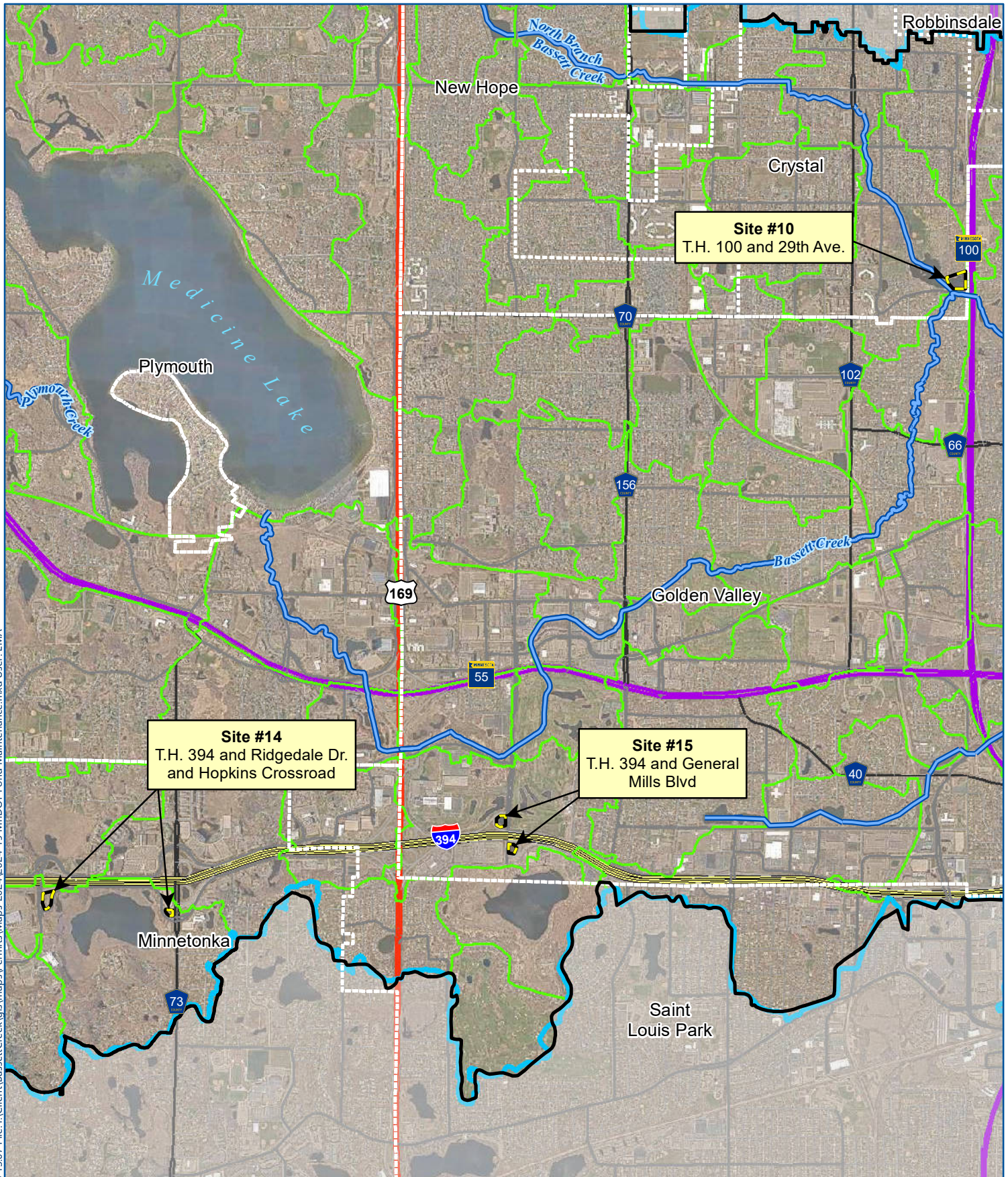
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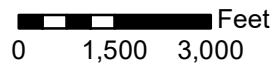
## **Recommendation for Commission Action**

Approval based on the following:

1. Site #10 (City of Crystal): MnDOT must confirm the flood storage computations.
2. Site #14 (City of Minnetonka): Coordinate with MnDOT and recommend MnDOT start construction after completion of the monitoring period (June/July 2025). If this is not feasible then we recommend MnDOT delay dredging at the outlet until completion of the monitoring and install a flotation silt curtain around the area.



-  Project Location
-  Municipality
-  BCWMC Legal Boundary
-  Major Subwatershed
-  BCWMC Hydrologic Boundary



BCWMC 2024-19  
MNDOT POND  
MAINTENANCE  
SITE #10, #14, #15

**LOCATION MAP**