



MEMORANDUM

To: MCWD Board of Managers
From: Laura Domyancich, Planner - Project Manager
Date: September 12, 2019
Re: Item 9.1 – Arden Park Construction Update and Presentation

Purpose:

To provide the Board of Managers an update on construction for the Arden Park restoration project and projected timeline as Phase I of the project moves toward substantial completion and Phase II elements are under construction. A presentation will also be provided at the September 12 Board of Managers meeting.

Background:

Restoration of Arden Park in the City of Edina began in early January 2019 with demolition of aged park infrastructure and removal of a low-head dam and accumulated contaminated sediment, removal of ash trees and trees conflicting with the creek remeander and new trails, and clearing of invasive buckthorn. Rachel Contracting, the prime contractor for the project, moved next to excavate new reaches of Minnehaha Creek's stream channel returning sinuosity to the formerly ditched and straightened stream. Throughout February and March, Rachel Contracting worked with a subcontractor to build the new streambanks with fabric encapsulated soil (FES) lifts and re-used tree trunks which stabilize the banks and create habitat. Stream habitat was further improved by incorporating both riffles of small rock and large boulders in the bed of the stream creating pools for invertebrates and, in turn, food sources for larger aquatic species.

Following stream restoration work, grading of the open areas of the park was conducted to meet two key project objectives: to create positive drainage in the park green space so that lawn areas would drain and be usable throughout the year and to reconnect Minnehaha Creek to its floodplain and create flood storage in the park during high flows. The floodplain areas also feature anchored piles of re-used tree trunks engineered to slow water and catch debris when creek flows enter the floodplain.

Helical piers were then set for a new boardwalk in the northern floodplain of the park and concrete abutments were poured to support new pedestrian bridges: one connecting the floodplain boardwalk across the creek to the eastern areas of the park and a second that can also support maintenance vehicles and connects the west side of the park and the refurbished hockey rink with the new shelter building on the east side of the park.

More recently, the two-stage stormwater system was constructed at the northeast corner of the park where an 80-acre drainage area is first treated by an underground chamber which filters out floatable materials and

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sediment. Pre-treated stormwater then flows through a series of six stormwater swales vegetated with plants native to Minnesota. Stormwater then filters through an engineered soil mix down to a drain tile system in the bottom of these basins before outletting to the creek. The stormwater swales will be kept offline while vegetation establishes over the next one to two years and will eventually remove approximately 30 pounds of phosphorus annually.

Trail construction is being phased to accommodate construction of the new park shelter building and a concurrent city of Edina sanitary sewer lining project. Currently, new concrete sidewalk on Brookview Avenue leads to steps down the wooded slope on the west side of the park. Bituminous trails will be built to connect the Brookview sidewalk to the hockey rink and another bituminous trail will connect the shelter building to the new playground. A new crushed granite trail winds through the floodplain in the southeastern end of the park to provide tubers the opportunity of making a loop in Arden Park. Three new creek accesses at the north end of the park, near the new shelter building, and at the south end of the park provide creek access for paddlers and anglers under varying creek flows. A larger fishing access south of 54th Street has been built adjacent to the large pool in the creek that has long been a popular fishing location.

Current Status

2019 has proven to be a challenging construction year with spring snowmelt exacerbated by heavy spring rains and a very wet summer leading to the second wettest year on record. The construction team has diligently worked through a number of weather-related delays and creek flows that have remained above 125 cubic feet per second throughout 2019. These conditions have delayed substantial completion of the project by two months and extended the obligations of the entire project team, however, vegetation installation in the upland areas of the park should be complete by September 20, 2019. Streambank plantings will be completed this fall once creek flows subside.

As of the end of August, construction is approximately 78% complete with about half of the remaining work in plant installation and ongoing vegetation maintenance and half in final trail and shelter building terrace construction. The project has expended approximately 2.5% of the authorized contingency primarily related to additional work to remove the dam and associated contaminated sediment and revisions to the stormwater system design. Due to the extended construction period, it is anticipated that authorized contingency for construction oversight will be expended.

In contrast to the high degree of community opposition to the project during the design and early construction phases, as work has progressed, both City and MCWD staff have received overwhelmingly positive feedback from the public. The remainder of the creek and restoration of the streambanks, the new trails, the vistas of the creek, the location of new trails, and the diligence of the crews working through a challenging construction season have all been commended. Staff have also fielded concerns and questions regarding the function and appearance of the stormwater swales, and staff have responded by explaining how the swales work and that patience will be needed as the plantings establish, fill in, and begin taking up water in the swales. However, the majority of the public comments have expressed excitement to be in the park again and enjoying the new amenities.

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Next Steps

As a second phase and separate element of the park restoration, the city of Edina is constructing a new playground and park shelter building. The playground is now finished, and the shelter building will be completed in October. Final landscaping and trails will be installed once these structures are completed. The City plans to host a small event to re-open the park to the public this fall with a ribbon-cutting planned for early summer of 2020.

If there are questions in advance of the meeting, please contact Laura Domyancich at ldomyancich@minnehahacreek.org or 952.641.4582

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