



Title:	Approval of Design Scope for West Auburn Barrier Design
Resolution number:	20-079
Prepared by:	Name: Anna Brown Phone: (952) 641-4522 abrown@minnehahacreek.org
Reviewed by:	Name/Title: Michael Hayman, Project Planning Manager
Recommended action:	Award a design scope to Wenck Associates for design, quote solicitation, and construction oversight of the West Auburn carp barrier
Schedule:	November 2020: Approval of barrier design and quote solicitation Jan 2021 – March 2021: Barrier construction window
Budget considerations:	Fund name and code: Six Mile Creek Halsted Bay Subwatershed Planning 2-2002 Fund budget: \$100,000 Expenditures to date: \$83,070 Requested amount of funding: \$9,445
Past Board action:	Res # 17-036 Title: Authorization to request funding from the Lessard Sams Outdoor Heritage Council Res # 18-021 Title: Contract award for carp barrier design Res # 19-102 Title: Approval of plans and authorization to solicit quotes for carp barrier construction

Summary:

In September of 2017, the Lessard Sams Outdoor Heritage Council recommended the Six Mile Creek-Halsted Bay (SMCHB) Habitat Restoration Project for \$567,000 to the Minnesota State Legislature. The funding bill was approved by the legislature and the grant period began on July 1, 2018.

The program takes a holistic and comprehensive approach to managing common carp in the SMCHB Subwatershed based on the University of Minnesota's SMCHB carp assessment (2014-2017), which developed a carp population census for each waterbody, identified migration patterns between waterbodies, and identified likely reproduction areas. To address the carp population holistically, the university researchers worked with Minnehaha Creek Watershed District (MCWD) staff to develop a management approach, consisting primarily of three management strategies:

- Adult biomass removal
- Aeration of shallow lakes to prevent successful carp reproduction
- Barriers to prevent carp movement between waterbodies and assist with removal

Consistent with the accomplishment plan approved by the Lessard Sams Outdoor Heritage Council, the grant funds will be used to pay for the capital cost of barrier installation, utility installation for aeration, and the fish removal contracts. MCWD match includes equipment for removal and monitoring, the aeration units, and design services.

In March of 2018, the MCWD Board of Managers awarded a contract with Wenck Associates to design barriers at four locations. The first three barriers – Wassermann, Crown College, and Highland Road – were designed in 2018 and constructed in the winter of 2019.

The design for the fourth barrier, at the outlet of West Auburn Lake, was completed in December 2019 and quotes were competitively solicited. The barrier location presented some construction challenges, including sediment accumulation requiring channel dredging and difficult construction access. Furthermore, the relatively warm weather and high water conditions during the 2019-2020 winter created further uncertainty for construction. As such, the quote submitted by Blackstone Contractors exceeded the project budget, and staff determined that evaluating relocation of the barrier was prudent.

After examining alternative barrier locations, staff is recommending moving the barrier upstream to co-locate it with a culvert under Carver Park Road. This location will require less material, will not necessitate sediment and debris removal, and will lower mobilization time and costs.

Because the barrier was designed in its entirety last fall, there are not sufficient design dollars remaining to perform the design tasks needed to modify design for this location, complete project permitting, and solicit quotes for the project. As such, staff are requesting the Board approve a design scope for the barrier redesign in an amount not to exceed \$9,445.

Supporting documents (list attachments):

- Proposal: West Auburn Lake Carp Barrier Installation



RESOLUTION

Resolution number: 20-079

Title: Approval of Design Scope for West Auburn Barrier Design

WHEREAS pursuant to Resolution 14-047 the Minnehaha Creek Watershed District (MCWD) Board of Managers has identified the Six Mile Creek-Halsted Bay (SMCHB) Subwatershed as a priority area for focusing MCWD planning activities and coordination efforts with subwatershed partners;

WHEREAS beginning in 2016, MCWD led in the development of a comprehensive restoration strategy for the SMCHB subwatershed to achieve MCWD’s goals of protecting and improving water quality, water quantity, ecological integrity, and thriving communities through land use and water integration, and includes rough fish management as a principle strategy for restoration;

WHEREAS in September 2017, the Lessard Sams Outdoor Heritage Council recommended the SMCHB Habitat Restoration project for \$567,000 in funding, and in May of 2018 the funding was approved by the Minnesota Legislature;

WHEREAS in March 2018, the MCWD Board of Managers approved a contract with Wenck Associates to complete barrier design, including the development of plans and specification, and facilitation of the quote process for construction services for four carp barriers;

WHEREAS in December 2019, the MCWD Board of Managers approved the plans and specifications for a carp barrier to be located between West Auburn and North Lundsten Lakes;

WHEREAS MCWD solicited quotes from three qualified contractors, and received one quote in response, which was not accepted due to the cost of construction exceeding the budgeted amount;

WHEREAS MCWD staff have evaluated the location constraints, and identified an alternative location within the same channel that will reduce construction costs while providing the same project effectiveness;

NOW, THEREFORE, BE IT RESOLVED that the Minnehaha Creek Watershed District Board of Managers authorizes the District Administer to execute a contract with Wenck Associates in an amount not to exceed \$9,445.00 for the design, quote solicitation, and construction oversight of the West Auburn carp barrier.

Resolution Number 20-079 was moved by Manager _____, seconded by Manager _____. Motion to adopt the resolution ___ ayes, ___ nays, ___ abstentions. Date: 10/8/2020

 Secretary Date: _____

Proposal



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To: Anna Brown, *Planner & Project Manager*
Minnehaha Creek Watershed District

From: Chris Meehan P.E., Wenck Associates, Inc.

Date: September 30, 2020

Subject: West Auburn Lake Carp Barrier Installation

Scope of Work

Wenck Associates, Inc. (Wenck) is pleased to submit a scope of work and schedule to develop plans and implement a carp barrier to improve the quality of the Six Mile Creek watershed and West Auburn Lake.

The District is proposing a physical carp barrier at the outlet of West Auburn Lake. Wenck will look to provide design, bidding assistance and construction oversight to implement the carp barrier. A description of the scope of services is provided below. Deliverables are defined by (D) and Meetings are noted as an (M) in the scope.

SCOPE OF WORK – West Auburn Lake Carp Barrier

Implementing a carp barrier at the outlet of West Auburn Lake is one of the key strategies identified for improvement in the Six Mile Creek Watershed. Implementation of this barrier will look to install carp barrier guard on the upstream side of West Auburn Lake culvert which provides access to key carp breeding grounds.

Wenck's first task will be to conduct a site survey to collect data on the upstream side of the culvert and to document the culvert along with photographing site conditions. Secondly, Wenck will assist the District by quickly documenting accumulated downstream sediment in the channel using previous survey information for maintenance purposes.

Wenck will then develop shop drawings for the installation of these guards to facilitate obtaining quotes from fabricators and contractors for installation. Cost estimates will be developed prior to obtaining quotes for fabrication and installation and summarized as part of 60% design meeting with MCWD Staff. The 60% design will be discussed with MCWD staff and further defined in the review meeting. In addition to design, Wenck will provide technical assistance to MCWD for permitting which includes a no-rise certificate.

Wenck assumes minimal input during solicitation of quotes and that MCWD will reach out to contractors and review submittals.

It is assumed the carp barriers can be installed within a week. Upon completion of installation of the barriers Wenck will conduct a final inspection of the barriers, document conditions, punch list walk through and list, final payment, and project close-out documents. Wenck will then provide as-builts of the barrier for record purposes.

Prior to construction, Wenck will coordinate and conduct a field walkthrough with the MCWD Staff and collect a photo inventory of existing conditions.

Objectives:

- Document existing site features
- Prepare 60% shop drawing and cost estimate
- Make final revisions to shop drawing, and cost estimate
- Submit updated documents to permitting agencies as necessary
- Address bidding questions
- Provide construction observation

Deliverables and meetings:

- Electronic copy of draft design option figures and cost estimate(D)
- One (1) schematic design meeting (M)
- Final contract documents (D)
- Final supporting permit documents, as necessary (D)
- Coordinate and conduct field walkthrough and photo inventory (M)
- A final construction inspection and assist with punch list walk though and list (M)(D)
- As-built documentation of the barrier (D)

Proposal Assumptions:

- Wenck assumes MCWD will complete all necessary permitting applications and coordinate with each applicable agency.
- Wenck assumes MCWD will reach out to contractors to obtain quotes, tabulate submittals and make a recommendation.
- Wenck assumes no record drawings will be required for the Crown College and Wasserman Lake barriers
- Wenck assumes independent material testing will be paid for by MCWD

Anna Brown
Planner & Project Manager
MCWD



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COST ESTIMATE

Wenck will perform the work tasks described above at our most efficient discounted hourly rates that are currently used by MCWD. The scope above is not to exceed \$9,445.

On behalf of the 300+ employee-owners of Wenck, thank you for this opportunity to work with the Minnehaha Creek Watershed District. Should you have any questions, or need clarification, please do not hesitate to contact Chris Meehan at cmeehan@wenck.com or 612-210-2111.

Sincerely,

Wenck Associates, Inc.

A handwritten signature in blue ink, appearing to read 'CM', is positioned below the company name.

Chris Meehan, P.E., CFM
Principal