

September 4, 2015

Bassett Creek Watershed Management Commission
Laura Jester, Administrator
Via email: laura.jester@keystonewaters.com

SUBJECT: Proposal for Feasibility Study for CIP Project 2017 CR-M –
Bassett Creek Main Stem Downstream of Wirth Park

Dear Ms. Jester:

Attached please find the Barr Engineering Proposal for CIP Project 2017 CR-M, dated September 4, 2015. I am requesting authorization to move forward with the Feasibility Study, with payment by the BCWMC .

The Cost Estimate is broken down into three areas:

1)	<u>Cedar Lake Road to Irving Avenue</u> This is the reach specifically named on the 10-year Table of CIP Projects.	(Base Price)	\$72,800
2)	<u>Irving Avenue to the entrance to the Old Bassett Creek Tunnel</u> This is the remaining extent of the creek channel before entrances to either of the Bassett Creek Tunnels (Old and New).	(Additional cost)	\$ 9,500
3)	<u>Fruen's Mill Reach</u> This is the portion of the previous project, CIP Project 2012 CR, which could not be completed due to access and floodplain elevation issues.	(Additional cost)	\$ <u>4,500</u>
		TOTAL	\$86,800

The City of Minneapolis is recommending acceptance of the full scope at the cost of \$86,800 because it is the most cost-effective approach to determining condition and restoration needs of the entire portion of the creek lying within Minneapolis.

Thank you for your consideration of this proposal.

Sincerely,



Lois Eberhart
City of Minneapolis Water Resources Regulatory Administrator, and
Minneapolis Representative to Bassett Creek Technical Advisory Committee

Cc: Michael Welch and Lisa Goddard, BCWMC (via email)



September 4, 2015

Ms. Lois Eberhart
City of Minneapolis
Public Works Department
309 2nd Avenue South
Minneapolis, MN 55401

Re: Bassett Creek Feasibility Study – Cedar Lake Road to Old Bassett Creek Tunnel

Dear Ms. Eberhart:

On behalf of Barr Engineering, we are pleased to provide this scope of work to complete a feasibility study for the Main Stem of Bassett Creek downstream of the project currently nearing completion that ends at Wirth Park. This study would examine methods to stabilize and restore areas of within this corridor. This project is currently included in the current CIP for construction in 2017; however it is not in the Resources Management Plan (RMP).

This project is consistent with the goals (Section 4.1) and policies (Section 4.2.5) for stream restoration and protection in the (draft) 2015 – 2025 BCWMC Watershed Management Plan. The City of Minneapolis requested the project be completed in 2017; the project would address the issues identified in past erosion inventories completed by the Minneapolis Park and Recreation Board (MPRB), as well as any new sites discovered during the study.

As is required for BCWMC CIP Projects, a feasibility study must be completed that includes a preliminary analysis and design for the project, including preliminary construction cost estimates. The feasibility study must be completed prior to BCWMC holding a hearing as preface to ordering the projects. It is expected that the USACE will require this feasibility study to meet the pre-application protocols laid out for the RMP restoration projects. The protocols include review of cultural resources, wetland delineations, wetland functional assessment, and wetland impacts which are beyond typical feasibility studies.

Due to the high risk of contamination along this reach, it is also important to scope soil contamination issues in this feasibility study to accurately estimate the total project costs. To address this, a Phase I and Phase II level environmental study of contamination issues is included as part of the feasibility study scope.

Content and Scope of Feasibility Study for 2017 Stream Restoration Project

Through the BCWMC's RMP process, the Corps of Engineers (USACE) and the BCWMC agreed on a series of steps, work items, deliverables (called "protocols") that must be accomplished and submitted to complete the RMP process and USACE review/approval process. Most of the protocols must be addressed as part of the feasibility study, in addition to the usual tasks that would be performed as part of a feasibility study. The feasibility study will incorporate the unbuilt sites examined in the Golden Valley to Cedar Lake Road feasibility study, in the Fruen's mill area, as well. We have not included the Irving to Dupont reach in the base price of this work scope because the BCWMC 2017-CR-M CIP line item currently identifies the project as only between Cedar Lake Road and Irving Avenue, but we can include the reach to the entrance of the Old Bassett Creek Tunnel at the intersection of Dupont Avenue and Second Avenue (the downstream end of the BCWMC jurisdiction for Bassett Creek), if BCWMC is willing to add that reach to the study limits. Additionally, we have included as an add alternate the Furen's Mill reach for inclusion in the study.

The stream restoration project will include excavation and grading activities which may have the potential to encounter legacy contamination issues associated with historical land uses at properties adjoining the creek. Environmental investigations should be conducted to further address that concern. The proposed work scope for the study would include a limited Phase I Environmental Site Assessment (Phase I) to review available records for properties in the project area (regulatory databases, historical air photos, interviews with people knowledgeable about the historical land use, etc.). The Phase I review would focus on summarizing soil contamination data already compiled in the Hennepin County Bassett Creek Areawide Groundwater Study Environmental Data Access Tool, which covers the proposed stream restoration area. If potential concerns or data gaps regarding the extent of contamination are identified during the Phase I, then a Phase II field investigation would be completed. The Phase II investigation would include collection of environmental samples from the project area for laboratory analyses to determine if contamination is present. The cost and scope of the Phase II investigation would be guided by the results of the Phase I. In general, the Phase II would focus on areas where historical contamination is suspected and where data is not already available, with emphasis on locations where excavation is planned for the stream restoration project.

If contamination is identified during the Phase I/II process, then a Response Action Plan (RAP) would be prepared as part of the restoration project. This would outline the measures that will be taken to address the contamination as part of the stream restoration project itself. Grant reimbursement programs are also available that may assist in off-setting the cost of environmental investigation and cleanup. Specific grant programs that might be available to off-set the cost of cleanup could be investigated as part of the project design.

Below is a summary of the required feasibility study content for of this project:

Discuss project requirements

- Project kick off conference call with City of Minneapolis Public Works and MPRB staff.

- Hold two meetings with USACE and MN DNR; one to discuss initial concept alternatives and review permit requirements and a second meeting to discuss refined concept alternatives and review permit requirements for project. Barr will obtain written confirmation of discussion results.

Reach Evaluation and Concept Plans

- Field work and site visits of the reach – review previously identified in 2011 study, 2005 MPRB erosion survey and additional new erosion/sedimentation sites.
- Review WSB plans for Fruen’s Mill reach.
- Review available hydraulic modeling for this reach.
- Review and summarize background information related to this reach.
- Develop concept plans and cost estimates for stream restoration for this reach.

Wetland Impacts Evaluation

- Collect base data (GIS air photos, soil survey, NWI maps, etc.) for field wetland assessments. Based on past work, it is assumed that no wetlands are present within this reach except for Bassett Creek itself. If wetlands are found on site, full delineation and assessment will occur during design phase.

Archeological Evaluation

- Document cultural resource reconnaissance surveys that will scope potential issues that may factor into the USCOE permit conditions and cost estimate.

Soil conditions survey

- Perform Phase I/II environmental study to identify soil contamination issues (need for and cost of Phase II dependent upon Phase I results).

Feasibility Report

- Draft report for review.
- Attendance at a Minneapolis public meeting/open house
- Final report for project hearing

Cost Estimate

We have prepared the following cost estimate for the scope of work outlined above into 1) A base cost for the Cedar Lake Road to Irving Avenue CIP reach, 2) additional cost for inclusion of the Irving Avenue to

2nd Avenue North/Dupont Avenue North, and 3) additional cost to include bank stabilization measures at the Fruen's Mill area.

Cedar Lake Road to Irving Avenue CIP Reach

Task	Estimated Cost
Initial meetings with USACE and MN DNR	\$2,500
Information review, reach evaluation and development of concept alternatives and cost estimates	\$17,700
Wetland assessment	\$2,600
Archeological evaluation	\$600
Phase I soil contamination investigation	\$10,000
<i>Phase II soil contamination investigation (scope dependent on Phase I results)</i>	\$20,500
Feasibility Report	\$18,900
Total	\$72,800

Irving Avenue to 2nd Avenue North/Dupont Avenue North Reach

Additional cost items:

Task	Estimated Cost
Information review, reach evaluation and development of concept alternatives and cost estimates	\$4,500
Wetland assessment	\$2,000
Feasibility Report	\$3,000
<i>Total for additional scope 2</i>	<i>\$9,500</i>
Total Feasibility Study Cost w/ additional scope 2	\$82,300

Fruen's Mill Reach

Additional cost items:

Task	Estimated Cost
Information review, reach evaluation and development of concept alternatives and cost estimates	\$2,500
Feasibility Report	\$2,000
<i>Total for additional scope 3</i>	<i>\$4,500</i>
Total Feasibility Study Cost w/ additional scope 3	\$86,800

Schedule

We will be able to complete the tasks and milestones outlined in the scope of work on the following schedule.

Tasks and milestones	Estimated Completion Date
Kick-off meeting with City of Minneapolis and MPRB	September 21, 2015
Information review and reach evaluation	October 4, 2015
Hold initial meeting with City, MPRB, USACOE, and MN DNR	October 12, 2015
Complete wetland assessment	October 18, 2015
Complete archeological investigation	October 18, 2015
Phase I soil contamination investigation	November 2, 2015
Develop initial concept alternatives; develop preliminary cost estimates	September 25 2015
Hold second meeting with City, MPRB, USACOE, and MN DNR	November 12, 2015
Revise and refine concept alternatives and cost estimates	November 23, 2015
Phase II soil contamination investigation (scope dependent on Phase I results)	November 23, 2015
Draft Feasibility Report for City and MPRB review	December 7, 2015
Draft Feasibility Report - BCWMC review	January 21, 2016
Final Feasibility Report – BCWMC Approval	March 17, 2016

Please feel free to contact Jeff Lee at 218-529-7168 or jefflee@barr.com or Jeff Weiss at 952-832-2706 or jweiss@barr.com with any comments or questions about this scope of work and cost estimate.

Sincerely,



Jeffrey T. Lee
Senior Ecologist, Vice President



Jeff Weiss, P.E.
Senior Water Resources Engineer