

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture

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July 18, 2023

Mr. Kurt Woolford
Lake County Stormwater Management Commission
500 W. Winchester Road
Suite 201
Libertyville, Illinois 60048

Project No.: 22-0093

Re: LCSMC General Services Agreement Service Request 7
Proposal for Engineering and Ecologic Services – Mill Creek Water Quality Enhancement
Village of Third Lake, Lake County, Illinois

Dear Mr. Woolford:

Thank you for this opportunity to assist with water quality and flood control assessment and design for this project. We understand that in cooperation with the Village of Third Lake (Village) and the Lake County Forest Preserves (LCFP) the Lake County Stormwater Management Commission (LCSMC) wishes to explore opportunities for water quality improvements, sediment load reduction to Third Lake, flood reduction benefits, and habitat improvements at the portion of the Rollins Savannah Forest Preserve where Mill Creek drains to Third Lake. We understand improvements may include sediment removal, marsh and stream restoration, vegetative enhancement, and conveyance improvements. This work will be performed as part of the General Engineering Services Agreement between Hey and Associates, Inc. (Hey) and the LCSMC. We propose the following scope of services.

DATA COLLECTION AND REVIEW

We will recover and review available existing data, including County spatial data, FEMA floodplain modeling and mapping roadway plans, watershed plan(s), and other pertinent information. We will create a base file for use in preparing the design information described below. We will complete a field reconnaissance of the project area, utilizing a canoe as needed to access the creek and internal marsh and basin area. We will collect data utilizing GPS technology for use in documenting current conditions and collecting relevant information, including limited survey data for use in design. This task also includes a wetland delineation and wetland delineation report for use in permitting tasks to be included in a future scope of work. It is assumed that work in the proposed project area will clearly be under the jurisdiction of the United States Army Corps of Engineers (USACE) and this a Preliminary Jurisdictional Determination is not included in this scope of work.

We understand that the LCSMC has recently purchased a LiDAR capable drone. Following the field reconnaissance, we will provide input on beneficial data to be collected by drone by LCSMC staff.

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We will complete this task for a lump sum value of \$9,000.

CONCEPT DESIGN

Following completion of the above task we will develop a concept design focused on reducing direct sediment load to Third Lake along with maximizing flood reduction, including provision of compensatory storage for proposed adjacent roadway improvements, and habitat restoration/creation benefits. Where applicable, we will develop multiple concept solutions for specific project areas. We will prepare plan-view concept plans, relevant concept details and cross sections, concept level opinions of probable cost, and a summary memorandum documenting the concept design. This task will also include a qualitative assessment of other potential watershed opportunities to limit sediment transport to Third Lake, as it is assumed that the majority of the sediment is being derived from outside of the proposed project parcel. Concept level opinions of probable cost will be provided along with a summary of anticipated regulatory requirements for proposed concepts.

As part of this task, we will meet with LCFP staff during development of concepts to ensure that their goals are represented in the developed concept plan. We understand that the LCFP will require approval of concepts to allow the project to proceed to later design tasks. Following completion of the concept plan we will meet with the full project team to present and review the Concept Design. This task also includes one (1) meeting with the full project team to review and discuss concepts.

We will complete the task for a lump sum fee of \$15,000.

PRELIMINARY ENGINEERING AND 65 PERCENT FINAL ENGINEERING

Following concurrence on a final Concept Design, we will prepare Preliminary Engineering plans to a level of completion of approximately 30 percent. In addition to preliminary engineering plans, we will provide an updated opinion of probable cost and regulatory summary. We will meet with the project team to review and discuss the preliminary engineering submittal.

Upon concurrence on Preliminary Engineering, we will develop a set of construction documents to an approximate level of completion of 65-percent. At a minimum these plans will include the following sheets:

1. Cover Sheet with Vicinity Map
2. General Project Notes and Specifications
3. Existing Conditions
4. Overall Plan
5. Grading and Drainage Plans
6. Soil Erosion and Sediment Control/Restoration Plans
7. Project Details and Cross Sections

The 65-percent Permit and Construction Documents will also include:

1. An Updated Opinion of Probable Cost and Summary of Project Quantities

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2. A Final Regulatory Summary
3. Draft Technical Specifications for the Proposed Work
4. A Draft Stormwater/Design Report
5. Updated Hydraulic Modeling as Determined to be Necessary during Preliminary Design
6. Preliminary State and Federal Threatened and Endangered Species Coordination
7. A Rendering of the Proposed Project Design for Use in Funding Discussions

This task includes three (3) project meetings in addition to a pre-application meeting with relevant regulatory agencies. We will prepare agendas and minutes for all noted project meetings.

We will complete this task for a lump sum fee of \$45,500. We understand that preparation of final Construction Documents and Permit Submittals, will be by separate contract pending confirmation of funding and bid approach.

We understand this work will be completed under the General Engineering Services agreement between LCSMC and Hey, and a Purchase Order will be issued by the SMC.

FEE SUMMARY

TASKS	FEE
Data Collection and Review	\$9,000 LS
Concept Design	\$15,000 LS
Preliminary Engineering and 65-Percent Final Engineering	\$45,500 LS
TOTAL	\$69,500

Thank you for this opportunity, please do not hesitate to contact us with any questions.

Sincerely,



David Kraft
Principal Civil Engineer