

August 8, 2017

Request for Proposals for Engineering Service



Attached is a copy of the Request for Proposals (RFP) for professional engineering services to conduct investigation, prepare conceptual designs, and conduct terrain analysis of Douglas County Ditch #23, a Minnesota Department of Natural Resources AMA, and Lake Ida subwatershed. The submission requirements for this proposal are also included on the attached RFP. Firms and/or individuals should have past experience with water quality improvement projects. Please submit a proposal (project understanding and approach, scope of work, and schedule), statement of qualifications and detailed cost proposal to:

Danica Derks, Water Resources Technician
Douglas Soil and Water Conservation District
900 Robert St. - Suite 102
Alexandria, MN 56308

OR electronically at:
danica.mazurek@mn.nacdnet.net
Subject: Lake Ida Engineer Proposal

The deadline for submission of proposal is **September 1st, 2017 at 4:30pm.**

Sincerely,

Douglas Soil and Water Conservation District
900 Robert St. - Suite 102
Alexandria, MN 56308
320-763-3191 x3



Douglas Soil and Water Conservation District

Request for Proposal
Engineering Services – Lake Ida, County Ditch 23 & Contributing Lakeshed
Study

Abstract

Request for proposal for engineering services to conduct investigation, prepare conceptual designs, and conduct terrain analysis of County Ditch #23, a Minnesota Department of Natural Resources AMA, and Lake Ida lakeshed. Project to be funded in part by a CWF Accelerated Implementation Grant.

Proposals Due: September 1st, 2017

Douglas SWCD
900 Robert St. Suite 102
Alexandria, MN 56308

I. Introduction

The Lake Ida, Douglas County Ditch #23 and Minnesota Department of Natural Resources Aquatic Management Area (AMA) study will investigate, identify and review the phosphorus loading locations to Lake Ida located within the Long Prairie Watershed in Douglas County, Minnesota. County Ditch #23 drainage area covers 3,373 acres with an additional 1,667 acres that drain from the North. Established in 1921, it has approximately 8,500 feet of open ditch and 62,340 feet of tile system ranging in size from 5" to 30" (County Ditch No. 23 Engineer's Final Report, 1923). Currently, before entering Lake Ida, the ditch discharges into the DNR AMA. Lake Ida is considered a "high quality, unimpaired lake at the highest risk of becoming impaired" according to the Minnesota Pollution Control Agency's (MPCA) 'Lakes of Phosphorus Sensitivity Significance Index'.

This project seeks 3 distinct objectives in order to minimize the phosphorus impact to Lake Ida. The reduction goal of the study will be to propose a suite of projects to achieve at least 40% of the 300 pound phosphorus reduction goal by 2027 set by Minnesota Pollution Control Agency for Lake Ida ([Long Prairie River Watershed Restoration and Protection Strategies, Minnesota Pollution Control Agency, April 2017](#)).

Objective 1. A feasibility study of County Ditch #23 (see attached map) to determine a prioritized list of potential BMP areas including preliminary designs and estimated costs.

Objective 2. A comprehensive investigation of the DNR designated Aquatic Management Area (see attached map), including three alternative conceptual designs and estimated costs to reduce or eliminate the nutrient saturation conditions that may exist at the outlet of the complex, in collaboration with Minnesota Department of Natural Resources.

Objective 3. A desktop analysis of the Lake Ida lakeshed upland contributions and priority areas of concern, including at least 10 conceptual project designs and itemized project costs.

II. Scope of Services

Field Survey: AMA and County Ditch #23

- Identification of culvert and crossing location, sizes, materials, and elevations. Options and probable cost for any necessary repairs, resizing, relocation of culverts for hydrologic and hydraulic function.
- Assessment of channel profile, cross-sections, flow monitoring and soil borings.

- Identification of tile outlet/inlet locations and sizes. Options and probable cost for any necessary repairs, resizing, replacement of outfalls for water quality improvements.
- Identification of nutrient loading sources to Lake Ida.
- Identification of any areas in need of bank repair.
- Identification of areas suitable for water quality BMPs, prioritized for phosphorus reduction or protection measures.
- Coordinate tagged site photos for integrated reports.

Feasibility Report

- Options and probable costs of water quality BMPs related to the drainage system that may be implemented in conjunction with future repairs and maintenance in a written report format.
- Proposal shall include costs for field survey report and preliminary design considerations including any possible options to incorporate water quality measures with the drainage system, AMA, and surrounding lakeshed.
- Identify future permit concerns for any proposed work (public system, potential PWW/PWI concerns, shoreland zoning regulations, floodplain, ACOE, etc.)

Desktop Terrain Analysis

- Hydrological conditioned Digital Elevation Model
- Lake Ida lakeshed (minor watershed) (see attached map) Scale: Land use, drainage, relief, public waters, pollutant loading, impaired waters, etc.
- Resource Concerns: Impaired waters, floodplain, high-valued resources (creeks, lakes, critical habitats, etc.) areas of special concern.

Project Identification/ Preliminary Designs

- Minimum of 3 conceptual designs for addressing the AMA, potential phosphorus sink/source issue based on study results and MN DNR concepts based on water quality, flow monitoring, and load analysis.
- Prepare conceptual designs for phosphorus reduction projects for future implementation.
- Designs should use NRCS FOTG standards, MN Stormwater Manual.
- Prioritized lists of projects, nutrient/phosphorus reductions quantities, and line item estimated costs. Prioritization methods will be defined by SWCD staff based on consultant recommendations.
- Identify potential sources of project funding.

Meetings and Coordination

- Consultant coordination will include no less than 7 (a minimum of 4 in-person) meetings with Douglas SWCD staff, Minnesota DNR, Douglas County, and Ida

Lake Association. Consultant will provide a cost for any additional meetings that may be requested.

- Consultant will thoroughly discuss the AMA complex past, present, and future with the MN DNR in order to fully encompass situation before investigation and design.
- Consultant will communicate with Douglas County Ditch Authority staff to determine existing data and/or surveys. Additionally, consultant will develop work plan with Ditch Authority to delegate Field Survey.
- Costs for attending at least three public meetings.

III. Proposal Format

Proposals are to be submitted in separate envelopes clearly marked with the consultants name, address, and phone number. Only one proposal per consultant will be considered.


Proposal packages are to be submitted to the SWCD on/or before **Friday, September 1st, 2017**, at/or before 4:30 p.m. Proposals received after the stated deadline shall not be accepted. Proposal packages are to be delivered to:

Danica Derks, Water Resources Technician
Douglas Soil and Water Conservation District
900 Robert St. - Suite 102
Alexandria, MN 56308

OR electronically at:
danica.mazurek@mn.nacdnet.net
Subject: Lake Ida Engineer Proposal

Consultants are encouraged to keep their proposals brief and relevant to the specific work required. Proposals shall include the following items:

1. Proposal – submit 7 copies
 - a. Cover Letter
 - i. The name, address, and phone number of the consultants' contact person for the remainder of the selection process.
 - ii. Any qualifying statements or comments regarding the consultant's proposal, the information provided in the RFP or the proposed contract.
 - iii. Identification of sub-consultants and their responsibilities.
 - b. Statement of Qualifications
 - i. Identification of the primary personnel in charge. Consultant must have a licensed professional engineer on staff to review plans, designs, and reports.
 - ii. A listing of proposed project personnel, including personal

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- experiences and individual resumes for prime and sub-consultants.
 - iii. Consultant's and sub-consultant experience with similar water quality improvement work, including names and current phone numbers of reference for listed projects.
 - c. Project Understanding and Approach
 - i. A description of your project understanding, and how you will approach the project.
 - d. Scope of Work Program
 - i. A description of the tasks, sub-tasks, and deliverables that will be provided.
 - e. Project Schedule
 - i. A comprehensive Critical Path Method (CPM) schedule is to be submitted describing the scheduling of proposed tasks and reflecting **September 12st, 2017** as the start date. Expected timeline approximately one year. The Clean Water Fund grant monies appropriated to this project expire December 31, 2019.
2. Cost Proposal – submit 2 copies
- a. The consultants is to submit a detailed cost proposal for all services and materials anticipated in completing the project. Man-hours and extended billing rates per classification of personnel will be indicated for each defined task and/or sub-task. Optional Tasks shall be prepared separately from the main cost proposal and may or may not be awarded at the SWCD's discretion.

IV. Addendums

Please be advised that any and all addendums to this RFP will be sent directly to the contact person listed on the proposal via email or other means specified for contact within the proposal.

V. Selection Process

Proposals will be reviewed by the Douglas SWCD staff, Board and partners. The Committee will rank the consultants for contract negotiations based upon the materials submitted within the Proposal and Cost Estimate. The Committee may or may not choose to interview two or more closely-rated firms, but will not expect or schedule time for elaborate presentations. Cost proposals will be opened only after the ranking process is complete. If interviews are held they will be conducted **Thursday, September 7th, 2017**.

Douglas SWCD will open contract negotiations with the top-ranked firm. The successful consultant will be expected to enter into the attached Professional Services Agreement (PSA). Any consultant with issues or challenges pertaining to the SWCD's standard PSA must advise the SWCD as part of the consultant's proposal. Otherwise, the SWCD will assume that the consultant is able to enter into the PSA and fulfill all terms and requirements set therein.



DOUGLAS SWCD COST PROPOSAL SHEET

Engineering Services in Lake Ida, County Ditch 23 & Contributing Lakeshed Study

The following is a summary of costs to provide the services outlined in the Request for Proposals for professional engineering consultant services in preparation of engineer report for drainage repair proceedings and will be used as the basis for negotiating a Professional Services Agreement:

Work Objectives	Proposed Cost
1.Data Review and Analysis	
2.Field Survey	
3.Feasibility Report	
4.Project Identification and Preliminary Designs	
5.Staff Meetings	
6.Public Presentations	
7.Desktop Terrain Analysis	
8.	
9.	
10.	
TOTAL LUMP SUM FIXED FEE:	\$

Consultant may include as many, or as few, work objectives it believes are necessary to complete the project.

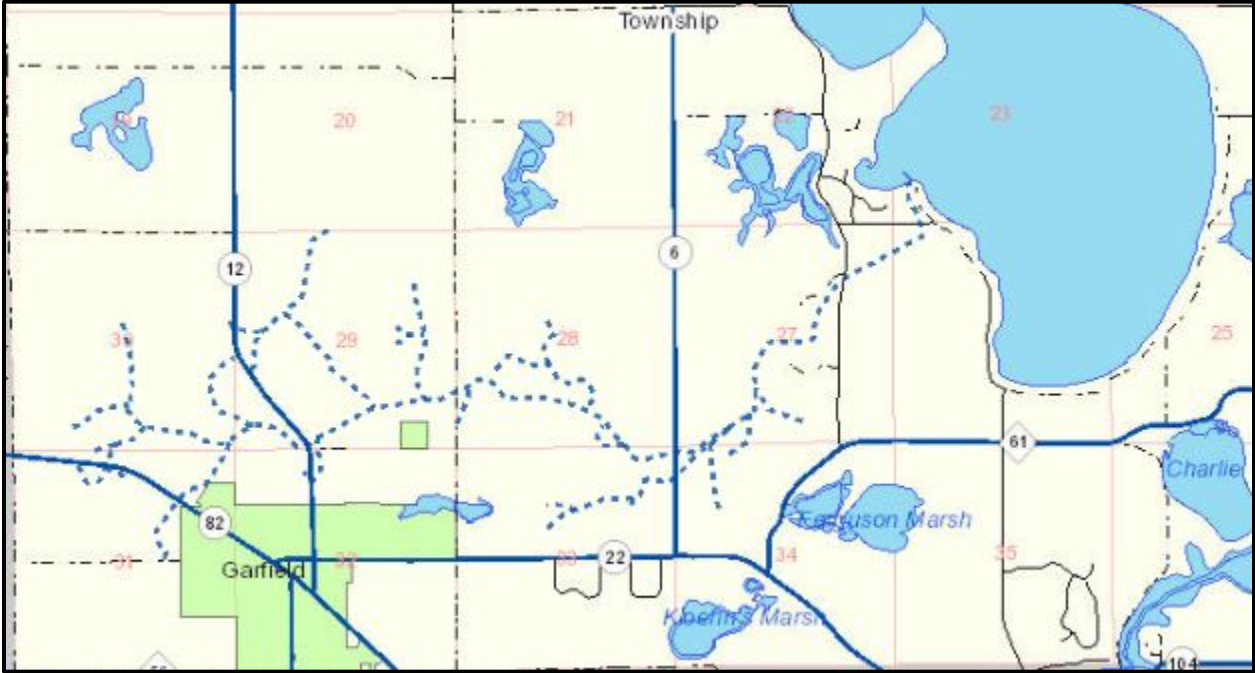
Attached herein is a detailed man-hour and fee breakdown for the tasks and sub-tasks defined in the proposal.

Prime Consultant

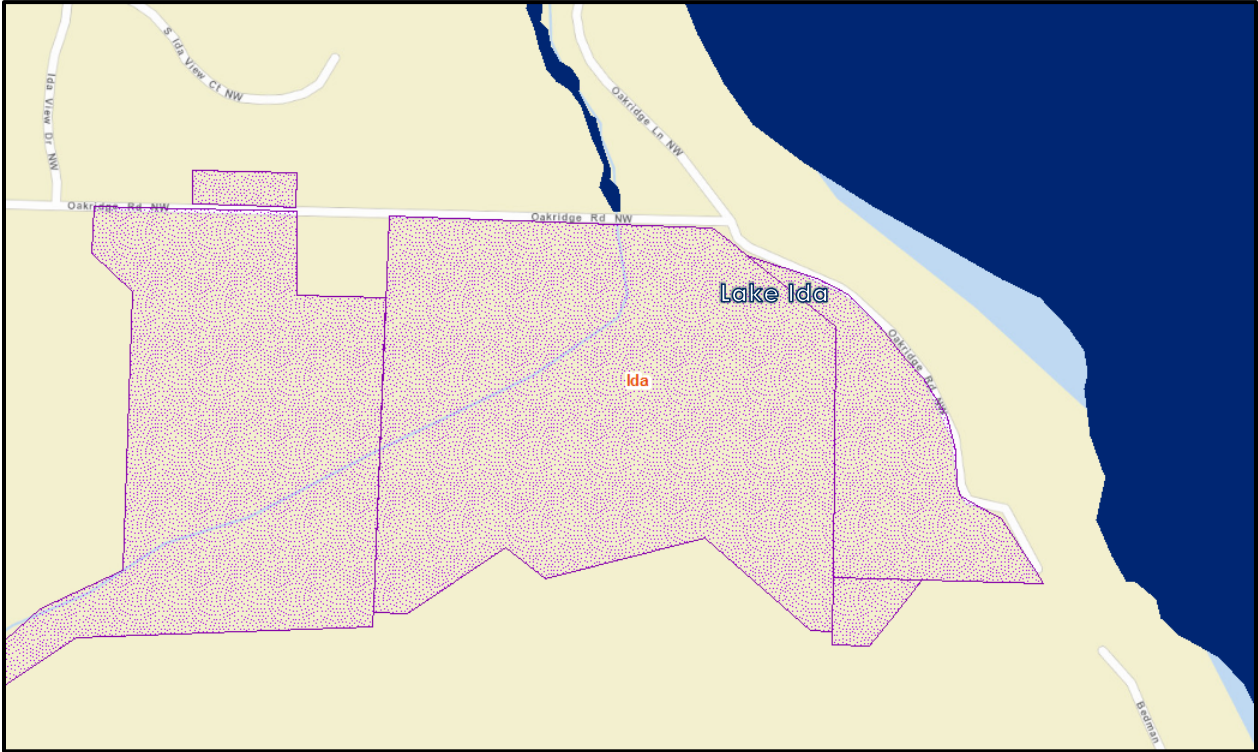
Date Signed

Map References:

County Ditch #23



Minnesota Department of Natural Resources – Aquatic Management Area



Lake Ida (HU_12: 070101080)

