

Title:	Authorization to Release RFP for Watershed-wide Model Input Refinement				
Resolution number:	23-038				
Prepared by:	Name: Kailey Cermak Phone: 952-641-4501				
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Reviewed by:	Name/Title: Brian Beck/Research and Monitoring Program Manager				
Recommended action:	Authorize the release of a request for proposals (RFP) for consultant services for watershed-wide model input refinement				
Schedule:	7/14/23: RFP release 8/7/23: Proposal submissions due 9/14/23: Recommendation and selection of consultant				
Budget considerations:	Fund name and code: Research and Monitoring-Contracted Services 5-5001-4320 Fund budget: \$679,730 Expenditures to date: 103.300				
	Requested amount of funding: N/A				
Past Board action:	Res # 22-076	Title: Authorization to Award Contract for Stormwater Infrastructure Data Standardization			
	Res # 22-038	Title: Authorization to Submit Proposal to LCCMR for Development of 2D Watershed Model			
	Res # 21-091	Title: Authorization to Execute Contract for 2D Pilot Model			
	Res # 21-051	Title: Authorization to Execute Memorandum of Understanding (MOU) with the City of Edina			
	Res # 21-024	Title: Authorization to Submit Proposal to LCCMR for Development of a 2D Watershed Model			

#### **Background:**

Climate change is measurably changing the distribution, frequency and intensity of rainfall in Minnesota. The Minnehaha Creek Watershed has experienced the wettest seven years ever recorded. Over the past 10 years, Minnesota has experienced both record flood conditions and statewide drought that has negatively impacted aquatic ecology, stressed stormwater infrastructure and created billions in property damage. To successfully adapt to the increasingly volatile extremes in weather, Minnehaha Creek Watershed District (MCWD or District) and communities must be able to identify what landscape interventions are needed, where they are needed, and how much investment is needed.

The first stage of the MCWD's Climate Action Framework is to "Understand and Predict" the impacts of climate change using new data sets and modeling to forecast scenarios, evaluate vulnerabilities, and make decisions about adaptation options. A key tool identified within Understand and Predict pillar is the development of a high-resolution watershedwide 2D model. To fund this work, the District applied for and successfully secured a grant of \$738,000 from the Legislative-Citizen Commission on Minnesota Resources (LCCMR).

To evaluate and manage for technical risk, the District chose to pursue a pilot model build, designed to provide early learnings that can support the effort to build at a watershed wide scale. In December, 2021, the Board of Managers approved a contract with Kimley-Horn for \$240,000 dollars to carry out the pilot model's scope of work. This work was done in partnership with the City of Edina, which was memorialized through a memorandum of understanding that the Board approved in August of 2021.

The pilot model project had two distinct phases, both centered around areas of technical risk. The first, data processing, looked to develop an overarching automated framework for processing and modifying model input datasets while also flagging data gaps recommended for filling prior to the watershed-wide build. The second phase of the pilot project was centered around evaluating two H&H models, ICM and ICPR, to identify which will better meet the District's climate planning needs.

Phase 1 of the pilot model was completed in the fall of 2022. Phase 2 work is nearing completion with staff and the consultant working to develop the final project report, anticipated to be completed in summer 2023. Staff will be bringing the project report to the Board of Managers for formal acceptance this fall.

# Pilot Model Phase 1 Work and Learnings:

Each city/agency maintains its stormwater infrastructure in its own unique schema, posing a unique challenge for regional agencies like the District. Incorporating all these disparate datasets into one model hinges on the idea that a repeatable automated process can be established. Phase 1 work within the pilot model established an automated workflow to process required model input datasets, including stormwater infrastructure datasets. A key component of the automated workflow is the utilization of a standard geodatabase; the MetroGIS draft stormwater geodata transfer standard (MGIS) was selected since it has been designed and vetted by industry experts and includes thorough documentation. Within the overarching automated workflow, there are two distinct areas of scripting that stormwater datasets pass through to become model ready, which are referred to as the following:

- **Raw to MGIS**: These automated functions reference mapping tables, specific to the corresponding dataset owner (i.e. municipal, regional, or state agency), to translate the raw infrastructure dataset into the MGIS standard. No new data are added.
- **MGIS to Modified MGIS**: These automated functions are focused on correcting abnormalities and filling data gaps within fields that are critical to building an H&H model.

The technical work for phase 1 has been completed and learnings have been identified and documented. While staff are still actively working to close out phase 2 of the pilot model project (model evaluation), learnings from Phase 1 have been and can continue to be utilized to drive forward on watershed-wide model development. Three important tasks were identified as prerequisites for initiating the construction of the watershed-wide model, aiming to equip the District with the necessary foundation to utilize the automated framework and successfully construct the model. These tasks include:

- **Standardize Stormwater Infrastructure Data**: Standardizing all municipal/agency stormwater infrastructure datasets into the MGIS format will require an understanding of each dataset's structure and nomenclature, through coordination with each public entity, and the creation of field mapping tables.
- **Refine Automated Processes**: The MGIS to Modified MGIS automated process must be adapted to account for the range of gaps, values, and issues present across the 27-stormwater infrastructure. This will be important to ensure that the processes are comprehensive and able to generate a watershed-wide model-ready dataset for the District to utilize in upcoming and future model builds.
- **Collect Data Gaps:** Additional data collection efforts are needed to accurately portray overland and channel flow within the watershed-wide model:
  - **Channel cross-sections:** channel storage and key hydrologic areas need to be defined through cross-sectional data since current LiDAR data are insufficient.

• **Culverts**: Culverts that are responsible for routing water under roads are not always represented in stormwater infrastructure datasets, which can lead to inaccurate ponding and flows.

### Watershed-Wide Model Build:

In December 2022, the Board of Managers approved a contract with Bolton & Menk for \$34,785 to standardize stormwater infrastructure datasets, which represents preliminary steps to prepare all stormwater infrastructure datasets for the Watershed-Wide Model Build. Carrying out this work has allowed the District to make continued progress toward the watershed-wide build, ahead of LCCMR funds being available in July of 2023.

Table 1 provides an overview of the Pilot Model Build and Watershed-Wide Model build, which also includes the status of each project phase and funding source since the staff are simultaneously closing out the Pilot Model Build and beginning the Watershed-Wide Model Build.

Table 1. C	Overview	of past	and future	2D	model	related	work
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Project	Project Phase	Status	Funding Source	
Pilot Model Build	Phase 1: Developing Data Processing Automation System	Done	District \$258,700	
	Phase 2: Model Evaluation	Closing Out		
Watershed Wide Model	Prerequisite: Watershed Wide Stormwater Data Standardization	Closing Out	District \$34,785	
	Phase 1: Watershed-Wide Model Input Refinement	RFP Process	District and LCCMR funds	
	Phase 2: Watershed-wide Model Build and Calibration	Start January 2024	LCCMR funds	

MCWD staff are applying insights gained from the completed portion of the Pilot Model Build (Phase 1) to begin Phase 1 of the Watershed-Wide Model Build, which is the subject of the Request for Proposals (RFP). This is an exciting milestone as LCCMR funding is now available and this scope of services begins to draw on those dollars.

### Summary:

The work outlined in this RFP will be funded through a combination of District ad valorem and LCCMR grant funds. The Research and Monitoring Department allocated levied funds in 2023 year for data collection efforts to support the model build. The remainder of the work will begin drawing on the awarded LCCMR funding. The bulk of the LCCMR funds will be utilized during the model build and calibration scope. Staff will bring the RFP for that work forward for Board consideration in fall 2023.

At the July 13, 2023 Board of Managers meeting, staff will provide an overview of the major elements of the Watershed-Wide Model Input Refinement scope and outline how the work prepares us for a subsequent scope to build the watershed-wide model. The three key project elements include:

1. Stream Channel Data Collection: One of the key findings from the pilot model was that channel morphometry data has a disproportionately large impact on the quality of modeling output relative to other easily accessible geographic datasets. The District is looking to accurately characterize channel storage via cross-section data collection within Minnehaha Creek and three of the primary tributaries to Lake Minnetonka. The overall collection strategy will be guided by industry best practices and existing datasets but primarily driven by the end goal of building an accurate H&H model. This work will result in a database of georeferenced data (x,y,z elevations and pictures) pertaining to each cross-section location.

- 2. Gap Analysis and Automated Process Refinement: It's understood that each stormwater infrastructure dataset has unique data gaps and a number of inaccuracies/abnormalities. This task is centered around automated process development to identify and address the range of issues present within the watershedwide dataset to support future model builds. Work will include understanding the range of issues and gaps that exist within the watershed-wide stormwater infrastructure dataset and reviewing the existing MGIS to Modified MGIS automated process package for areas of refinement or improvement. The bulk of this task will be working to implement the identified areas improvement to process and provide the District with a model ready stormwater infrastructure dataset.
- 3. **Culvert Gap Assessment:** This work is intended to establish awareness of where the District has gaps in the watershed-wide culvert dataset and prioritize locations for gap filling that will yield the biggest impact on modeling results. This work requires spatial analysis methods, such has DEM hydrologic conditioning, to identify gaps followed by documentation to describe how data gaps should be prioritized during future data collection efforts.

The RFP is intended to attract a consultant firm with a strong background with stormwater infrastructure datasets and scripting, and that also understands how the data generated through this scope will be utilized in the upcoming model build. The RFP comprises four main sections:

- <u>Background and Project Overview</u>: Includes context for the project and an overview of each project element.
- <u>Scope of Services</u>: An overview of required tasks and deliverables.
- <u>Instructions to Proposers</u>: An overview of submittal requirements, timeline, and evaluation and selection criteria.
- <u>Disclosures</u>: Documentation of the District's rights and proposer's liabilities in the preparation of responses to the RFP.

Following the presentation at the July 13, 2023 Board of Managers meeting, staff will answer questions regarding the RFP process and strategy. It is staff's recommendation that the Board of Managers approve resolution 23-038, authorizing release of the RFP for consulting services for Watershed-Wide Model Input Refinement.

If approved, the RFP will be posted to the District website and also distributed via email to consultants on Friday, July 14, 2023. There will be approximately a three-week submittal period, after which staff will review proposals, conduct interviews, and bring forward a recommendation for contract for the Board to consider in September.

### Supporting documents (list attachments):

Draft RFP



### RESOLUTION

Resolution number: 23-038

Title: Authorization to Release RFP for Watershed-wide Model Input Refinement

- WHEREAS, climate change is measurably changing the distribution, frequency and intensity of rainfall in Minnesota; WHEREAS, a key pillar in Minnehaha Creek Watershed District's (District) climate action framework is to understand and predict the impacts of climate change using new data analytical and planning tools; to support this strategy, the District has identified the need to develop a watershed-wide two-WHEREAS, dimensional (2D) model that incorporates high resolution stormwater infrastructure and land surface data to improve our ability to inform current and future water resource management decisions in the face of climate change; WHEREAS, in June 2022, the Board of Managers authorized staff to submit a proposal for \$738,000 to the Legislative-Citizen Commission on Minnesota Resources to develop a watershed-wide model; WHEREAS, in advance of the watershed-wide build, the District chose to pursue a pilot 2D model build to constrain the technical and relational risk associated with a large scale, high-resolution model build; WHEREAS, one of the technical challenges that the pilot model was designed to address was to identify a method to assemble, process, and incorporate unique stormwater infrastructure datasets from the multiple public agencies within the District; WHEREAS, in December, 2021, the Board of Managers authorized a contract with Kimley-Horn to deliver on the pilot model's scope of work that would result in an automated and repeatable process for transforming model input datasets, including stormwater infrastructure datasets (phase 1) and the evaluation of two different models, ICM and ICPR (phase 2); WHEREAS, phase one of the pilot model has been completed and three key next steps were identified to position the District to utilize the automated framework and effectively construct the model: (1) standardize all of the stormwater infrastructure datasets within the District into the MetroGIS draft geodatabase transfer standard (MGIS), (2) refine the automated processes to account for issues and gaps within the watershed-wide stormwater infrastructure dataset, and (3) fill data gaps critical for the model build, such as channel cross-sections and culverts: based on learnings from the pilot model and to advance work for the watershed-wide build, in WHEREAS, December, 2022, the Board of Managers authorized a contract with Bolton & Menk to standardize all the watershed-wide stormwater infrastructure datasets into the MGIS standard; WHEREAS, the watershed-wide model input refinement scope tackles the remaining next steps identified during phase 1 of the pilot model build;
- WHEREAS, the watershed-wide model input refinement scope has three key elements: (1) acquiring stream channel cross-sections, (2) automated process refinement, and (3) culvert gap assessment;

WHEREAS, the RFP for watershed-wide model input refinement seeks a consultant team with a strong understanding of stormwater infrastructure datasets and experience with ArcGIS and scripting;

NOW, THEREFORE, BE IT RESOLVED that the Minnehaha Creek Watershed District Board of Managers authorizes the District administrator to release the request for proposals for watershed-wide model input refinement, with any final edits on advice of counsel.

<b>Resolution Number 23</b>	-038 was r	noved by	Manager	, seconded by Manage	r Motion to
adopt the resolution _	ayes,	nays,	abstentions.	Date: 7/13/2023	

Secretary
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Date:



# **REQUEST FOR PROPOSALS**

**Consulting Services for Watershed-wide Model Input Refinement** 

# PART 1: BACKGROUND AND PROJECT OVERVIEW

# General

The Minnehaha Creek Watershed District (MCWD or District) is seeking a qualified consultant team to (1) collect channel cross-section data, (2) refine the District's package of scripts to establish a model ready stormwater infrastructure dataset, and (3) identify gaps within the watershed-wide culvert dataset. This work will directly support upcoming efforts to build a watershed-wide 2D surface water model that represents the first phase of the District's Climate Adaptation Framework.

The work described in this request for proposals (RFP) will build upon findings and processes that were developed through the District's Pilot 2D Model project ("Pilot Model") and Data Standardization project. Both projects have been centered around mitigating technical risks associated with building a large-scale high-resolution hydrology and hydraulic (H&H) model. One of the technical challenges the District has worked to address is finding a more streamlined way to process and incorporate unique stormwater infrastructure datasets from the multiple cities and agencies within the District. Through these two aforementioned projects, the District has produced an automated framework and baseline scripts to process stormwater infrastructure datasets, and has standardized each municipal/agency dataset within the watershed into standardized format.

Project success will require a strong background working with stormwater infrastructure datasets and python scripting. It's also important that the project team understands the needs of surface water models so the work carried out in this scope will yield the right level and quality of information to carry into the watershed-wide model build.

# Project Background

The District pursued its pilot model project to mitigate the technical risks associated with building a large-scale high-resolution model. The pilot model project has two distinct phases; the first, data processing, looked to develop an overarching automated framework for processing and modifying model input datasets while also flagging data gaps recommended for filling prior to the watershed-wide build. The second phase of the pilot project, presently underway, is centered around evaluating two H&H models, ICM and ICPR, to inform selection for the watershed-wide model used to support climate planning.

Each city/agency maintains its stormwater infrastructure in its own unique schema, posing a unique challenge for regional agencies like the District. Incorporating these disparate datasets into one model hinges on the idea that a repeatable automated process can be established. Phase 1 work within the pilot model established an automated workflow to process required model input datasets, including stormwater infrastructure datasets. A key element to the

automated process is the use of a standard geodatabase. The District selected the <u>MetroGIS</u> <u>draft stormwater geodata transfer standard (MGIS)</u> since it has been vetted by industry experts and includes thorough documentation. The diagram below outlines the key stages through which stormwater datasets pass to become model ready. Scripting occurs in two key areas. These areas, referred to as script packages, are grouped as follows:

- <u>Raw to MGIS</u>: these functions reference mapping tables, specific to the corresponding dataset owner, to translate the raw infrastructure dataset into the MGIS standard. No new data are added.
- <u>MGIS to Modified MGIS</u>: These functions are focused on (1) correcting abnormalities and filling data gaps within critical model build fields and (2) generating model parameter values needed to produce a model ready dataset
  - This package of scripts and associated documentation can be found within the supplemental materials



These packages use a combination of python and ArcPy geoprocessing tools, within an ArcToolbox. Phase 1 of the pilot model identified three critical next steps to accomplish ahead of model construction to position the District to use the automated framework and effectively build a model at watershed-wide scale:

- 1. **Standardize Stormwater Infrastructure Data**: Standardizing all municipal/agency stormwater infrastructure datasets into the MGIS format will require an understanding of each dataset's schema, through coordination with each entity and the creation of field mapping tables.
- 2. **Refine Scripts**: The MGIS to Modified MGIS Python script package will need to be adapted to capture the range of gaps, values and issues that are present within the watershed-wide stormwater infrastructure dataset. This will be important to ensure that the processes are comprehensive and able to generate a watershed-wide model-ready dataset for the District to utilize in upcoming and future model builds.
- 3. **Collect Missing Data**: Additional data collection is needed to accurately portray overland and channel flow within the watershed-wide model:
  - a. **Channel cross-sections:** channel storage and key hydrologic areas need to be defined through cross-sectional data since current LiDAR data are insufficient.

b. **Culverts**: Culverts responsible for routing water under roads are not always represented in stormwater infrastructure datasets, which can lead to inaccurate ponding and flows.

Step 1 is already underway under separate contract and will be completed prior to this scope of work commencing. The product of that Data Standardization project is a comprehensive watershed-wide database of stormwater infrastructure, all standardized into MGIS format.

The Model Input Refinement scope that is the subject of this RFP encompasses Steps 2 and 3.

# Project Description

The Model Input Refinement scope has three primary objectives:

- 1. Collect and develop stream channel morphology datasets to aid upcoming modeling efforts
- 2. Refine the District's existing automated processing framework to develop modelready stormwater infrastructure datasets watershed-wide
- 3. Identify, within the culvert dataset, data gaps critical to 2D surface water modeling

Each of these objectives is defined further, as follows:

# Stream Channel Data Collection

A key finding from the Pilot Model project is that channel morphometry data have a disproportionately large impact on the quality of modeling output relative to other easily accessible geographic datasets. The District seeks to accurately characterize channel storage and conveyance via cross-section surveying within Minnehaha Creek and three of the primary tributaries to Lake Minnetonka. The overall collection strategy should be guided by industry best practices and existing datasets but primarily driven by the end goal of building an accurate H&H model. This work includes a desktop review to identify priority locations, including critical hydrologic features within the four subwatersheds, and the data collection effort. This work will result in a database of georeferenced data (x,y,z elevations and pictures) pertaining to each cross-section location.

# Gap Analysis and Script Refinement

It's understood that each stormwater infrastructure dataset has unique data gaps and a number of inaccuracies/abnormalities. This task is centered around script development to identify and address the range of issues present within the watershed-wide dataset to support future model builds. Preparation work will include understanding the range of issues and gaps that exist within the watershed-wide stormwater infrastructure dataset and reviewing the existing script package for areas of refinement or improvement. The bulk of this task will be working to implement the identified areas of refinement and/or improvement to the scripting process that will generate a watershed-wide, model-ready stormwater infrastructure dataset. This work is expected to be highly iterative and result in a model-ready stormwater infrastructure dataset.

### Culvert Gap Assessment

This work is intended to establish awareness of District gaps in the watershed-wide culvert dataset and prioritize locations for gap filling that will yield the largest impact on modeling results. Only the District's upper watershed (i.e., upstream of Grays Bay Dam) needs to be

assessed since culverts are the primary stormwater infrastructure in this area. This work requires spatial analysis methods, such as DEM hydrologic conditioning, to identify gaps, followed by documentation to describe how data gaps should be prioritized during future data collection efforts. The District will consider the field collection of these identified culverts within a future competitive scope of work.

# Project Area

The project scope includes the entire Minnehaha Creek Watershed District, encompassing 178square miles and all or part of 27 cities and two townships in Hennepin and Carver counties. The District is shown in Exhibit 1. It is anticipated that the project will consider standardized stormwater infrastructure datasets from up to 27 public entities:

- 24 cities (five cities/townships within MCWD were confirmed to have no stormwater infrastructure datasets)
- 2 counties
- Minnesota Department of Transportation (MnDOT)

# **Project Team**

Kailey Cermak (Primary Contact) Hydrologist, MCWD kcermak@minnehahacreek.org 952-641-4501

Kailey Cermak (Secondary Contact) GIS Coordinator, MCWD asteele@minnehahacreek.org 952-641-4581 Brian Beck (Secondary Contact) Research & Monitoring Program Manager, MCWD bbeck@minnehahacreek.org 952-471-8306

# PART 2: SCOPE OF SERVICES

The consultant will work in coordination with the District to complete tasks 1-4, below. The expected completion date for the scope of services is February 28, 2024. The District estimates a project budget in the range of \$130,000 to \$170,000. However, a respondent is invited to advise the District if it believes the price of the work lies outside of this range.

For the purpose of the RFP, the scope of services is as follows:

### Task 1: Stream Data Collection

### Task 1a. Data Collection Planning

The District has identified the need to accurately portray channel storage through the watershed as a high priority data gap for the upcoming climate planning model. The CONSULTANT will be asked to focus its collection efforts along Minnehaha Creek and the three primary tributaries to Lake Minnetonka: Painter Creek, Six Mile Creek, and Long Lake Creek. In total, these systems encompass about 37 miles of stream channel. Each of these four systems is unique and will require different resolutions and approaches. The District is looking for a clear approach to distributing this work driven by the end goal, which is having accurate channel storage depicted in the District's upcoming model build. It's expected that approximately 300-400 total cross-sections will be collected, with the distribution across these four systems being guided by the consultant's approach outlined in their proposal. Exhibit XX contains existing datasets such as the District's current XP-SWMM model cross sections and areas where the District already has a high-level of channel morphology information to help inform the CONSULTANT's approach for distributing cross-sections throughout the four geographies.

The CONSULTANT will perform a desktop review to select exact locations based on the CONSULTANT's approach outlined in the proposal. The consultant will work with District staff to ensure all survey locations are accessible through public access or develop a plan for access through private property. The District will take a lead role if public notification is needed. The CONSULTANT will document the selected locations, collection methods, and unique property permissions required in a collection plan memo.

District Staff and the CONSULTANT will have one meeting to discuss and agree upon the final collection plan before field work begins.

### Task 1b. Channel Cross-section Collection and Processing

The CONSULTANT will work with District staff to notify private property owners for access to the stream channel, as-needed, prior to field work based on the collection plan developed in Task 1a. The CONSULTANT will then commence field work and collect data outlined within the collection plan. CONSULTANT will prioritize and schedule this data collection effort to avoid snowfall conditions. CONSULTANT will also document cross-sections by photography.

Following data collection, the CONSULTANT will process and organize the data collected within a geodatabase format. Data should utilize NAD 1983 UTM Zone 15N as the horizontal spatial reference and NAVD88 as the vertical coordinate system.

Task 1 Deliverables:

- Collection plan technical memorandum that outlines number of cross-sections per system, selected locations for cross-section collection, property access for each cross section, and collection methods.
- One meeting, led by the CONSULTANT, to finalize collection plan
- Geodatabase populated with the cross-sectional x,y,z coordinates
- Geotagged photographs of each cross-sectional area.

# Task 2: Script Refinement

# Task 2a. Existing Stormwater Infrastructure Script Review

It's important that the CONSULTANT first develops an understanding of the overarching framework and the associated MGIS to Modified MGIS package of scripts that were developed through the pilot model. District Staff will provide all the scripts and associated documentation to the CONSULTANT for its review to serve as the baseline for subsequent tasks.

# Task 2b. Script Gap Assessment

Some manual analysis and modification of stormwater infrastructure datasets is necessary, as it is implausible to develop scripts to catch and correct every abnormality. The pilot model's MGIS to Modified MGIS script package was developed with only three of the 27 stormwater infrastructure datasets considered. A wider range of values and issues exists within the full watershed-wide stormwater infrastructure dataset.

The District will provide the CONSULTANT with the watershed-wide standardized stormwater infrastructure dataset. CONSULTANT will review the dataset to understand the variety of issues and range of values present and compare that against the existing MGIS to Modified MGIS script package. The CONSULTANT will be asked to define a list of revisions and/or new scripts that will need to be made to process the watershed-wide dataset into model-ready format. The CONSULTANT will document these findings and recommendations within a technical memorandum. Anticipated issues include, but are not limited to:

- Gaps: critical fields needed for functional model runs are blank. Values must be filled using engineering assumptions or a function using present data. The strategy to fill gaps will differ depending on the field.
- Erroneous spatial data: critical fields needed for functional model runs contain erroneous values. (ex: length of line geometry does not equal length field or elevation is significantly above/below ground surface)
- Topological errors: critical fields needed for functional model runs contain connectivity issues that would cause model build/run errors. (ex: pipes don't connect or pipes are not snapped to manholes/catch basins/outlets)

The CONSULTANT will lead a meeting with District Staff to walk through the memorandum's content and raise key questions and decisions that will need to be made through the scripted process. This meeting will also address questions of refining vs. recreating scripts.

# Task 2c. Script Development and Refinement

The CONSULTANT will work to refine the scripts and/or establish new python scripts to establish a model-ready stormwater infrastructure dataset, as agreed upon within task 2b. This set of scripts will address issues and gaps within fields deemed necessary to a 1D-2D model build. A list of expected necessary fields is provided in exhibit 3. It's expected that this process

will be highly iterative; the CONSULTANT will utilize spatial analysis methods to continually assess the impact script revisions are having on the dataset quality and identify additional functions to incorporate into the script package. It's expected that this work will require the use of other spatial datasets, such as LiDAR, to address dataset issues and fill gaps. It's critical that assumed values are flagged through the process so the future modeler can reference known vs assumed values. The goal is to establish a model-ready dataset to be used in the District's upcoming model development for climate planning.

### Task 2d. Script Documentation and Training

Once scripts are finalized in task 2b and a model-ready dataset has been generated, the CONSULTANT will thoroughly document each script that outlines the purpose, required setup and source datasets, and pseudo code descriptions. Documentation must clearly identify where gaps are being filled or assumptions are being made and the decision tree that has been utilized. Decision trees will be based on the premise that this dataset is to be utilized within an integrated 1D-2D surface water model. Assumptions and gap filling will reference best engineering practices.

The CONSULTANT will lead staff through a 4-hour workshop to train on how best to organize, maintain, and operationalize the various scripts.

#### Task 2 Deliverables:

-Script gap assessment technical memorandum that includes:

- Range of gaps and abnormalities across watershed-wide datasets
- Suggested refinements to current package of scripts
- o Additional new scripts needed to deliver model-ready dataset

-One CONSULTANT-led meeting to discuss script gap assessment findings

-Revised package of stormwater infrastructure scripts with associated documentation

-Geodatabase(s) of watershed-wide model-ready stormwater infrastructure data

-4-hour training workshop

# Task 3: Culvert Gap Assessment

The CONSULTANT will review elevation, imagery and stomwater infrastructure datasets and conduct spatial analysis, such as hydrologic DEM conditioning, to identify areas of surface ponding/pooling and compare those with documented infrastructure data to identify gaps within the culvert dataset.

The CONSULTANT will document its approach in a technical memorandum and outline a collection plan for the District to use in future data collection. This work also will include a geodatabase of the identified locations, classified into tiers based on their level of influence within a 2D H&H model.

### Task 3 Deliverables:

-Geodatabase depicting locations with missing culvert information

-Technical memorandum outlining analysis methods and rationale behind recommended prioritization tiers

# Task 4: Project Coordination

### Task 4a: Project Meetings

The CONSULTANT will host up to three (3) remote or in-person team meetings with the District. This is in addition to meetings specifically outlined within task areas above. These will include 1 project kick-off meeting to clarify roles and expectations, and 3 additional meetings to cover the following topics, and related matters as appropriate:

- Pilot model MGIS to Modified MGIS script package
- Script Development and output
- Gap Assessment approach and/or findings

In addition, The CONSULTANT will have bi-weekly 30-minute check-ins with the project manager to report progress and timelines and review any questions or upcoming decisions.

#### Task 4 Deliverables:

- Up to three (3) in-person or remote meetings
- Bi-weekly check-ins through life of project

# PART 3: INSTRUCTION TO PROPOSERS

# Submittal Requirements

Responses to the RFP should be submitted to Kailey Cermak via email (kcermak@minnehahacreek.org) no later than 4:00 pm on Monday, August 7, 2023.

<u>Please visit the RFP webpage for project updates, located on the District's website:</u> <u>https://www.minnehahacreek.org/</u>

No page limit is imposed, however respondents will be evaluated on clarity and conciseness. Each proposal is to include the following items:

- <u>Cover Letter</u> Please include a primary point of contact.
- <u>Project understanding</u> Describe your understanding of the scope of work, the approach to be taken, and your vision for the project. Identify any additional information the District will need to supply or obtain to enhance your understanding of the project, your ability to successfully complete the work, and/or any issues you might anticipate in performing the work.
- <u>Approach and methodology</u> Describe in detail your approach to the scope of work, including methods you will use to:
  - Prioritize and distribute channel-cross section collection efforts across the four listed systems and the rationale for the selected methods.
    - Please provide your rational and approach for cross-section spacing and distribution for each of the four subwatersheds. Please provide support for approach by referecing technical guidance documents, specific experience in these DISTRICT geographies, past modeling experience incorporating channel cross sections into H&H models, or existing datasets provided by the District.
    - Please explain how the new LiDAR dataset for the watershed area (if available) could be used to guide collection strategy
  - Assess the data gaps/issues present within the datasets.
  - Iterate through script revisions
    - What spatial analysis methods will you utilize?
  - Spatially analyze missing culverts
    - Describe your approach for identifying areas where a culvert is likely located

Describe all anticipated tasks and deliverables, including any tasks not described in the RFP that you believe important and necessary to achieve the project goals. Identify the greatest open questions and risk points based on the proposer's project understanding; are there functional deviations from the outlined scope of work that would better accomplish the District's objectives? The proposal is to include a spreadsheet showing tasks, project team members, and associated estimated hours. The proposal also is to include a schedule of milestones identified in this RFP and by the proposer, and a cost proposal that is broken out by task areas. Include major assumptions impacting cost and time allocation with associated rates.

- <u>Qualifications and experience</u> – Provide an overview of the firm(s), proposed project team members, and their qualifications. Include descriptions of projects undertaken by

the firm(s) and team members that demonstrate a strong understanding of (1) municipal stormwater datasets, (2) experience with the MGIS standard, (3) scripting, and (4) data needs for 1D-2D surface water modeling. Speak to the team's ability to deliver the project on time and on budget.

- <u>References</u> Provide three recent references for your proposed firm or team, including names, addresses, and phone numbers, along with a description of the project and your role. References preferably pertain to work described in this project.
- <u>District Resources</u> Describe data, resources, and any other contributions that you expect from the District in order to complete the project as proposed.
- <u>Subcontracting</u> If you intend to use any subconsultant, identify the subconsultant; describe its intended scope and role, identify the proposed additional team members; and state their qualifications and experience.

# Request for Proposal Timeline

A review committee of select District staff, led by the project manager, MCWD Hydrologist Kailey Cermak, will evaluate proposals and identify follow-up questions. Interviews are planned as part of the process, but the District in its discretion may elect otherwise. The review committee will recommend a consultant to the MCWD Board of Managers. The Board will select the consultant for final negotiation of an agreement.

The anticipated timeline for the proposal review process is as follows; The District may adjust this timeline.

- **RFP issue date:** Friday July 14, 2023
- Submit RFP questions: Monday July 24, 2023 at 12:00 pm
- Answers posted: Wednesday July 19, 2023 by 4:00 pm (posted to RFP webpage)
- Deadline for receipt of proposals: Monday August 7, 2023 at 4:00pm
- Expected dates for Interviews: Monday August 21, 2023
- Expected dates for follow-up questions, as needed: August 28 to August 30, 2023
- Anticipated date for consultant selection: September 14, 2023 (District Board of Managers meeting)

# **Compensation Framework**

The District will compensate for services on an hourly basis, with a specified not-to-exceed for the entire project. The contract maximum, to be set after determination of the scope of work, is the cap for contractual services including professional fees, subconsultant fees and expenses.

# Addenda/Clarifications

Any changes to this RFP will be made by the District through a written addendum. No verbal modification will be binding.

# Contract Award

Issuance of this RFP and receipt of proposals do not commit the MCWD to the awarding of a contract. The MCWD reserves the right to postpone the evaluation schedule and consultant selection for its own convenience, to accept or reject any or all proposals received in response to this RFP, to negotiate with other than the selected consultant should negotiations with the

selected consultant be terminated, to negotiate with more than one consultant simultaneously, or to cancel all or part of this RFP.

# Joint Offers

Where two or more proposers desire to submit a single proposal in response to this RFP, they are to do so on a prime-subconsultant basis rather than as a joint venture. The MCWD intends to contract with a single firm and not with multiple firms doing business as a joint venture.

# **Proposal Evaluation**

Methodology

- *Project Understanding*: Does the proposal make it clear that the consultant fully understands the scope, goals, and technical requirements of the project?
- Defensible Methodology: Has the proposal given a technical defensible approach for data collection and data analysis by clearly referencing technical guidance documents and using existing data to inform approach?
- Completeness and Specificity: How fully does the proposal explain what the consultant will do to develop the required deliverables?
- *Identification of Needs*: Does the proposal carefully consider what resources will be required to complete the tasks, including staff time, additional technical information, etc.?

### Experience

- Company Experience: What other projects has the consultant performed that have developed, used and demonstrated the expertise and capacity required for the proposed work (evaluated via the proposer's submittal materials)?
- Staff Experience: What qualifications and work experience do the proposed staff members or sub-consultants bring to the project?
- Area Knowledge: Does the company or any of the project team have specific knowledge about the project area that would aid in the study?

### Cost

- Fee structure: The proposal must clearly outline the fees and costs to complete all aspects of this project. Include hourly rates for each project team member along with hours for each task and subtask. The final fee structure and contract price are subject to negotiation.

# Contract Form

Enclosed with this RFP is the form of contract that Consultant and the District will execute. The District may agree to non-substantive document revisions, but Consultant's proposal should be based on the contract form. The proposal should identify any terms of the form of contract that are unacceptable. The District will negotiate a term where it can preserve the substantive intent of the term, but reserves the right to reject a proposal that is conditioned on a material alteration of the contract form.

The proposal also is to indicate any data or methods of proposer that would be used in performing the work, and that proposer considers to be instruments of service that should be excepted from the intellectual property terms of the contract form.

Contact Any questions should be directed to Kailey Cermak at 952-641-4501 or <u>kcermak@minnehahacreek.org</u>.

# PART 4: DISCLOSURES

# Non-Binding

The District reserves the right to accept or reject any or all responses, in part or in whole, and to waive any minor informalities, as deemed in the District's best interests. In determining the most advantageous proposal, the District reserves the right to consider matters such as, but not limited to, consistency with the District's watershed management plan goals, and the quality and completeness of the consultant's completed projects similar to the proposed project.

This RFP does not obligate the respondent to enter into a contract with the District, nor does it obligate the District to enter into a relationship with any entity that responds, or limit the District's right to enter into a contract with any entity that does not respond, to this RFP. The District also reserves the right, in its sole discretion, to cancel this RFP at any time for any reason.

Each respondent is solely responsible for all costs that it incurs to respond to this RFP and, if selected, to engage in the process including, but not limited to, costs associated with preparing a response or participating in any interviews, presentations or negotiations related to this RFP.

# Right to Modify, Suspend, and Waive

The District reserves the right to:

- Modify and/or suspend any or all elements of this RFP;
- Request additional information or clarification from any or all respondents;
- Allow one or more respondents to correct errors or omissions or otherwise alter or supplement a proposal;
- Waive any unintentional defects as to form or content of the RFP or any response submitted.

Any substantial change in a requirement of the RFP will be disseminated in writing to all parties that have given written notice to the District of an interest in preparing a response.

# Disclosure and Disclaimer

This RFP is for informational purposes only. Any action taken by the District in response to proposals made pursuant to this RFP, or in making any selection or failing or refusing to make any selection, is without liability or obligation on the part of the District or any of its officers, employees or advisors. This RFP is being provided by the District without any warranty or representation, expressed or implied, as to its content, accuracy or completeness. Any reliance on the information contained in this RFP, or on any communications with District officials, employees or advisors, is at the consultant's own risk. Prospective consultants must rely exclusively on their own investigations, interpretations and analysis in connection with this matter. This RFP is made subject to correction of errors, omissions, or withdrawal without notice.

The District will handle proposals and related submittals in accordance with the Minnesota Data Practices Act, Minnesota Statutes §13.591, subdivision 3(b).

# Exhibits

- Exhibit 1: Map of Cities Within Minnehaha Creek Watershed District
- Exhibit 2: Map of Major Stream Sections
- Exhibit 3: Table of Anticipated Critical Stormwater Infrastructure Data Fields
- Exhibit 4: Diagram of MGIS to Modified MGIS Script Package Functionality
- Exhibit 5: Contract Template

# Supplemental Materials

Available via link: <u>https://mcwdistrict-</u> my.sharepoint.com/:f:/g/personal/asteele\_minnehahacreek\_org/EIPPi21XWbtOst0I1tB3bMUBE 9qvXDQeGH7uRBMQOIWWvQ?e=tjvXUt

- Pilot Model MGIS to Modified MGIS script package and associated documentation
- Blank MGIS standard geodatabase

Exhibit 1: Map of Cities within MCWD



Exhibit 2: Map of Major Stream Sections



Exhibit 3: Table of Anticipated Critical Stormwater Infrastructure Data Fields

Dataset/Parameter	Note	Notes/Assumptions		
Pipe		Overall Storm Sewer File (polyline shapefile or layer file)		
Pipe Global ID		If no, can be assigned		
Length	1	If no, can be spatially calculated		
Shape		Can be assumed as circular.		
Diameter (Size)	1	Can be assigned.		
Width		Only used for non-circular pipes		
Material		Parameter used to derive pipe roughness		
Upstream Invert	2	If no, can be derived from connected structure invert elevation		
Downstream Invert	2	If no, can be derived from connected structure invert elevation		
Slope		If no, can be derived from US Inv., DS Inv., Length		
Upstream Structure		If no, can be derived from Manhole/Catch Basin files		
Downstream Structure		If no, can be derived from Manhole/Catch Basin files		
Culvert		Culvert File (polyline shapefile or layer file)		
Included in Overall Pipe File		Are culverts included with overall storm sewer file?		
Pipe Global ID		If no, can be assigned		
Length	1	If no, can be spatially calculated		
Shape		Can be assumed as circular.		
Diameter	1	Can be assigned.		
Width		Only used for non-circular culverts		
Material		Parameter used to derive culvert roughness		
Upstream Invert		If no, can be derived from DEM surface		
Downstream Invert		If no, can be derived from DEM surface		
Slope		If no, can be derived from US Inv., DS Inv., Length		
Manhole	1	Overall Structure File (point shapefile or layer file)		
Structure Global ID		If no, can be assigned		
Rim Elevation		If no, can be derived from DEM surface		
Invert Elevation	2	If no, can be derived from connected pipe invert elevation		
Catch Basin	1	Overall Catch Basin File (point shapefile or layer file)		
Structure Global ID		If no, can be assigned		
Included in Overall Manhole File		Are catch basins included in overall manhole file?		
Rim Elevation		If no, can be derived from DEM surface		
Invert Elevation	2	If no, can be derived from connected pipe invert elevation		
Grate Length		Can be assumed.		
Grate Width		Can be assumed.		
Combination Style		Can be assigned.		

Items listed with 1 in the note column are the minimal basic data preferred to build a functional model. While a model can be built without these data by making assumptions, the reliability of the model may be significantly reduced. Manhole-catch basin refers to the structure being an inlet or not. Items with a 2 in the note column are also beneficial for basic model build, although are more easily assumed and still 1.

2. resulting in a fairly reliable 2D model.





Exhibit 5: Contract Template

#### AGREEMENT BETWEEN MINNEHAHA CREEK WATERSHED DISTRICT and [CONSULTANT]

### [<mark>Project Title</mark>]

This agreement is entered into by the Minnehaha Creek Watershed District, a public body with powers set forth at Minnesota Statutes chapters 103B and 103D (MCWD), and [CONSULTANT], a Minnesota corporation ("CONSULTANT"). In consideration of the terms and conditions set forth herein and the mutual exchange of consideration, the sufficiency of which hereby is acknowledged, MCWD and CONSULTANT agree as follows:

### 1. <u>Scope of Work</u>

CONSULTANT will perform the work described in the [DATE] Scope of Services attached as Exhibit A (the "Services"). Exhibit A is incorporated into this agreement and its terms and schedules are binding on CONSULTANT as a term hereof. MCWD, at its discretion, in writing may at any time suspend work or amend the Services to delete any task or portion thereof. Authorized work by CONSULTANT on a task deleted or modified by MCWD will be compensated in accordance with paragraphs 5 and 6. Time is of the essence in the performance of the Services.

#### 2. <u>Independent Contractor</u>

CONSULTANT is an independent contractor under this agreement. CONSULTANT will select the means, method and manner of performing the Services. Nothing herein contained is intended or is to be construed to constitute CONSULTANT as the agent, representative or employee of MCWD in any manner. Personnel performing the Services on behalf of CONSULTANT or a subcontractor will not be considered employees of MCWD and will not be entitled to any compensation, rights or benefits of any kind from MCWD.

### 3. <u>Subcontract and Assignment</u>

CONSULTANT will not assign, subcontract or transfer any obligation or interest in this agreement or any of the Services without the written consent of MCWD and pursuant to any conditions included in that consent. MCWD consent to any subcontracting does not relieve CONSULTANT of its responsibility to perform the Services or any part thereof, nor in any respect its duty of care, insurance obligations, or duty to hold harmless, defend and indemnify under this agreement.

### 4. <u>Duty of Care; Indemnification</u>

CONSULTANT will perform the Services with due care and in accordance with national standards of professional care. CONSULTANT will defend MCWD, its officers, board members, employees and agents from any and all actions, costs, damages and liabilities of any nature arising from; and hold each such party harmless, and indemnify it, to the extent due to: (a) CONSULTANT's negligent or otherwise wrongful act or omission, or breach of a specific contractual duty; or (b) a subcontractor's negligent or otherwise wrongful act or omission, or breach of a specific contractual duty owed by CONSULTANT to MCWD. For any claim subject to this paragraph by an employee of CONSULTANT or a subcontractor, the indemnification obligation is not limited by a limitation on the amount or type of damages, compensation or benefits payable by or for CONSULTANT or a subcontractor under workers' compensation acts, disability acts or other employee benefit acts.

### 5. <u>Compensation</u>

MCWD will compensate CONSULTANT for the Services on an hourly basis and reimburse for direct costs in accordance with Exhibit A. Invoices will be submitted monthly for work performed during the preceding month. Payment for undisputed work will be due within 30 days of receipt of invoice. Direct costs not specified in Exhibit A will not be reimbursed except with prior written approval of the MCWD administrator. Subcontractor fees and subcontractor direct costs, as incurred by CONSULTANT, will be reimbursed by MCWD at the rate specified in MCWD's written approval of the subcontract.

The total payment for the Services will not exceed [ $\_$ ]. Total payment in each respect means all sums to be paid whatsoever, including but not limited to fees and reimbursement of direct costs and subcontract costs, whether specified in this agreement or subsequently authorized by the administrator.

CONSULTANT will maintain all records pertaining to fees or costs incurred in connection with the Services for six years from the date of completion of the Services. CONSULTANT agrees that any authorized MCWD representative or the state auditor may have access to and the right to examine, audit and copy any such records during normal business hours.

#### 6. <u>Termination; Continuation of Obligations</u>

This agreement is effective when fully executed by the parties and will remain in force until [DATE] unless earlier terminated as set forth herein.

MCWD may terminate this agreement at its convenience, by a written termination notice stating specifically what prior authorized or additional tasks or services it requires CONSULTANT to complete. CONSULTANT will receive full compensation for all authorized work performed, except that CONSULTANT will not be compensated for any part performance of a specified task or service if termination is due to CONSULTANT's breach of this agreement.

Insurance obligations; duty of care; obligations to defend, indemnify and hold harmless; obligations to cooperate in the assignment of intellectual property; and document-retention requirements will survive the completion of the Services and the term of this agreement.

### 7. <u>No Waiver</u>

The failure of either party to insist on the strict performance by the other party of any provision or obligation under this agreement, or to exercise any option, remedy or right herein, will not waive or relinquish such party's rights in the future to insist on strict performance of any provision, condition or obligation, all of which will remain in full force and affect. The waiver of either party on one or more occasion of any provision or obligation of this agreement will not be construed as a waiver of any subsequent breach of the same provision or obligation, and the consent or approval by either party to or of any act by the other requiring consent or approval will not render unnecessary such party's consent or approval to any subsequent similar act by the other. Notwithstanding any other term of this agreement, MCWD waives no immunity in tort. This agreement creates no right in and waives no immunity, defense or liability limit with respect to any third party.

### 8. <u>Insurance</u>

At all times during the term of this Agreement, CONSULTANT will have and keep in force the following insurance coverages:

- A. General: \$1.5 million, each occurrence and aggregate, covering CONSULTANT's ongoing operations on an occurrence basis and including contractual liability.
- B. Professional liability: \$1.5 million each claim and aggregate. Any deductible will be CONSULTANT's sole responsibility and may not exceed \$50,000. Coverage may be on a claims-made basis, in which case CONSULTANT must maintain the policy for, or obtain extended reporting period coverage extending, at least three (3) years from completion of the Services.
- C. Automobile liability: \$1.5 million combined single limit each occurrence coverage for bodily injury and property damage covering all vehicles on an occurrence basis.
- D. Workers' compensation: in accordance with legal requirements applicable to CONSULTANT.

CONSULTANT will not commence work until it has filed with MCWD a certificate of insurance clearly evidencing the required coverages and naming MCWD as an additional insured for general liability, along with a copy of the additional insured endorsement establishing coverage for CONSULTANT's work and completed operations as primary coverage on a noncontributory basis. The certificate will name MCWD as a holder and will state that MCWD will receive written notice before cancellation, nonrenewal or a change in the limit of any described policy under the same terms as CONSULTANT.

### 9. <u>Compliance With Laws</u>

CONSULTANT will comply with the laws and requirements of all federal, state, local and other governmental units in connection with performing the Services and will procure all licenses, permits and other rights necessary to perform the Services.

In performing the Services, CONSULTANT will ensure that no person is excluded from full employment rights or participation in or the benefits of any program, service or activity on the ground of race, color, creed, religion, age, sex, disability, marital status, sexual orientation, public assistance status or national origin; and no person who is protected by applicable federal or state laws, rules or regulations against discrimination otherwise will be subjected to discrimination.

### 10. Data and Information

All data and information obtained or generated by CONSULTANT in performing the Services, including documents in hard and electronic copy, software, and all other forms in which the data

and information are contained, documented or memorialized, are the property of MCWD. CONSULTANT hereby assigns and transfers to MCWD all right, title and interest in: (a) its copyright, if any, in the materials; any registrations and copyright applications relating to the materials; and any copyright renewals and extensions; (b) all works based on, derived from or incorporating the materials; and (c) all income, royalties, damages, claims and payments now or hereafter due or payable with respect thereto, and all causes of action in law or equity for past, present or future infringement based on the copyrights. CONSULTANT agrees to execute all papers and to perform such other proper acts as MCWD may deem necessary to secure for MCWD or its assignee the rights herein assigned.

MCWD may immediately inspect, copy or take possession of any materials on written request to CONSULTANT. On termination of the agreement, CONSULTANT may maintain a copy of some or all of the materials except for any materials designated by MCWD as confidential or non-public under applicable law, a copy of which may be maintained by CONSULTANT only pursuant to written agreement with MCWD specifying terms.

### 11. Data Practices; Confidentiality

If CONSULTANT receives a request for data pursuant to the Data Practices Act, Minnesota Statutes chapter 13 (DPA), that may encompass data (as that term is defined in the DPA) CONSULTANT possesses or has created as a result of this agreement, it will inform MCWD immediately and transmit a copy of the request. If the request is addressed to MCWD, CONSULTANT will not provide any information or documents, but will direct the inquiry to MCWD. If the request is addressed to CONSULTANT, CONSULTANT will be responsible to determine whether it is legally required to respond to the request and otherwise what its legal obligations are, but will notify and consult with MCWD and its legal counsel before replying. Nothing in the preceding sentence supersedes CONSULTANT's obligations under this agreement with respect to protection of MCWD data, property rights in data or confidentiality. Nothing in this section constitutes a determination that CONSULTANT is performing a governmental function within the meaning of Minnesota Statutes section 13.05, subdivision 11, or otherwise expands the applicability of the DPA beyond its scope under governing law.

CONSULTANT agrees that it will not disclose and will hold in confidence any and all proprietary materials owned or possessed by MCWD and so denominated by MCWD. CONSULTANT will not use any such materials for any purpose other than performance of the Services without MCWD written consent. This restriction does not apply to materials already possessed by CONSULTANT or that CONSULTANT received on a non-confidential basis from MCWD or another party. Consistent with the terms of this section 11 regarding use and protection of confidential and proprietary information, CONSULTANT retains a nonexclusive license to use the materials and may publish or use the materials in its professional activities. Any CONSULTANT duty of care under this agreement does not extend to any party other than MCWD or to any use of the materials by MCWD other than for the purpose(s) for which CONSULTANT is compensated under this agreement.

### 12. MCWD Property

All property furnished to or for the use of CONSULTANT or a subcontractor by MCWD and not fully used in the performance of the Services, including but not limited to equipment, supplies,

materials and data, both hard copy and electronic, will remain the property of MCWD and returned to MCWD at the conclusion of the performance of the Services, or sooner if requested by MCWD. CONSULTANT further agrees that any proprietary materials are the exclusive property of MCWD and will assert no right, title or interest in the materials. CONSULTANT will not disseminate, transfer or dispose of any proprietary materials to any other person or entity unless specifically authorized in writing by MCWD.

Any property including but not limited to materials supplied to CONSULTANT by MCWD or deriving from MCWD is supplied to and accepted by CONSULTANT as without representation or warranty including but not limited to a warranty of fitness, merchantability, accuracy or completeness. However, CONSULTANT's duty of professional care under paragraph 4, above, does not extend to materials provided to CONSULTANT by MCWD or any portion of the Services that is inaccurate or incomplete as the result of CONSULTANT's reasonable reliance on those materials.

#### 13. <u>Notices</u>

Any written communication required under this agreement to be provided in writing will be directed to the other party as follows:

#### To MCWD:

Administrator Minnehaha Creek Watershed District 15320 Minnetonka Boulevard Minnetonka, MN 55345

#### To CONSULTANT:

[Authorized Representative Organization Address]

Either of the above individuals may in writing designate another individual to receive communications under this agreement.

#### 14. Choice of Law; Venue

This agreement will be construed under and governed by the laws of the State of Minnesota. Venue for any action will lie in Hennepin County.

#### 15. <u>Whole Agreement</u>

The entire agreement between the two parties is contained herein and this agreement supersedes all oral agreements and negotiations relating to the subject matter hereof. Any modification of this agreement is valid only when reduced to writing as an amendment to the agreement and signed by the parties hereto. MCWD may amend this agreement only by action of the Board of Managers acting as a body.

**IN WITNESS WHEREOF**, intending to be legally bound, the parties hereto execute and deliver this agreement.

# CONSULTANT

Ву	Date:
lts	
	Approved as to Form and Execution
	MCWD Attorney
MINNEHAHA CREEK WATE	RSHED DISTRICT
By	Date:
lts	
$\langle \langle \rangle$	

Exhibit A Scope of Services