BOLTON & MENK
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October 7th, 2025

Jason Anderson, P.E.
Director of Public Works/City Engineer
City of Marshall
344 West Main Street, PO Box 477
Marshall, MN 56258

RE: Proposal for Stormwater Management Plan Modeling Updates & Analysis

Dear Mr. Anderson:

On behalf of Bolton & Menk, Inc., we thank you for the opportunity to present this proposal in response to the City of Marshall's request to update its city-wide stormwater model, evaluate the benefits of constructing stormwater basins at 8 different locations throughout the city, and analyze 4 existing stormwater basins as potential candidates for implementation of a "Smart Pond" system. The project scope and proposed fees below have been prepared as requested for the necessary engineering services to complete this project. If this proposal is acceptable, we will prepare a professional services agreement using the City of Marshall's agreement format.

Project Understanding

In partnership with the City of Marshall, Bolton & Menk completed the 2020 Comprehensive Stormwater Modeling project, which developed a city-wide stormwater model. This model is used to evaluate local drainage issues and support the development of capital improvement plans.

The city remains committed to maintaining this model with the highest level of accuracy. For that reason, the model will be updated to include ten (10) recent reconstruction projects.

Once updated, the model will be leveraged to:

- Evaluate the potential benefits of constructing stormwater basins at eight (8) locations throughout the city.
- Evaluate the potential benefits of retrofitting up to four (4) existing basins with a "Smart Pond" system. The "Smart Pond" system utilizes weather forecasts, sensors, and in some cases electronically controlled valves to manage water levels based on real-time weather forecasts and actual water level data. This will include a cost-benefit analysis of installing the system.

Scope of Work

Our scope of work includes each functional part of the project broken out as a separate task. Throughout the project, the city can expect regular communication from us, and we will schedule routine check-in meetings to discuss key design decisions, schedule, and budget updates. In addition, quality control reviews will be conducted to ensure Bolton & Menk's internal protocols for quality production and delivery are appropriately applied and adhered to.

Task 1 – City-wide Stormwater Model Updates

To initiate the project, Bolton and Menk, Inc. will utilize the most current city-wide stormwater model and update it to incorporate selected reconstruction projects.

The scope of the model updates will include:

- Drainage Areas:
  - The drainage areas from the reconstruction projects, as provided by the City, will be incorporated into the existing model.
  - If drainage areas are not provided, new ones will be delineated for an additional cost of $450 per project, and the existing model will be updated accordingly.

- Storm Sewer Infrastructure Updates: The storm sewer modeling will be revised to include new alignments, pipe sizes, pipe materials, invert elevations, and rim elevations.

- Storage and Outlet Structures: All newly constructed stormwater detention basins, including their outlet control structures, will be incorporated into the model.

Assumptions

- The City will provide all necessary data to support accurate updates to the model, including as-built plans, hydraulic models, drainage areas, and all relevant electronic files.
- A summary report or analysis of the updates is not included in this scope of work.

Task 2 – Potential Stormwater Basins Analysis

The City has identified eight (8) potential storage areas that may enhance the overall performance of the City's stormwater management system.

A high-level feasibility analysis will be conducted for each location, considering the following key factors:

- Spatial Constraints: Evaluation of available space and land use limitations.

- Existing Ground Elevations: Assessment of topographic conditions to determine suitability for storage

- Existing Storm Sewer Infrastructure: Review of current storm sewer configurations and connectivity.

Each potential storage area will be incorporated into the city-wide model and analyzed for its potential benefit.

Assumptions

- The proposed storage areas are assumed to function as either wet sedimentation basins or dry detention basins.
- The potential benefit will be evaluated at one location, to be clearly defined by the City prior to the start of the project.
- A 1-page memorandum will be prepared summarizing the design criteria and its potential benefit at the identified location. This memorandum will include design basin live storage volume, outlet pipe size, and effects on the evaluated location of interest.
- High level preliminary project costs will be based on a unit cost per pond volume.

Task 3 – Smart Stormwater Basin Analysis

The City has identified four (4) existing stormwater basins for evaluation as potential candidates for implementation of a "Smart Pond" system.

The Smart Pond system leverages the following technologies to actively manage stormwater storage:

- Real-time weather forecasts
- On-site sensors for water level monitoring
- Electronically controlled valves

These technologies work together to optimize basin performance by proactively adjusting water levels in anticipation of storm events.

As part of the evaluation, a cost-benefit analysis will be conducted to assess the financial feasibility and potential system-wide benefits of implementing Smart Pond technology at each of the four locations.

Assumptions

- Each basin's storage volume will remain as-is.
- The potential benefit will be evaluated at one location, to be clearly defined by the City prior to the start of the project.
- A 1-page memorandum will be prepared summarizing the design criteria and its potential benefit at the identified location. This memorandum will include design basin live storage volume, outlet pipe size, "smart pond" assumptions, and effects on the evaluated location of interest.
- High level preliminary project costs will be based on a standard cost of installing a "smart Pond" controller.

Final Deliverables

A summary of deliverables is as follows:

- Check-in calls
- City-wide storm sewer model updated with ten (10) reconstruction sites
- A summary memorandum on the benefits of each of the eight (8) potential stormwater basin
- A summary memorandum and cost benefit analysis of each of the four (4) "Smart Pond" retrofits.

Information To Be Provided by The City

For the purposes of this proposal, we assume the city will provide the following information:

- Record drawings, hydraulic modeling, and relevant electronic files of all reconstruction projects.
- Locations of potential stormwater basins that are to be evaluated.
- Locations of potential "smart ponds" that are to be evaluated.
- Problem areas to be evaluated based on proposed stormwater basins and "smart ponds".

Team

The following team is available and committed to complete the work identified in the project scope:

Shane Traulich, PE – Project Manager
Derek Benoy, PE – Water Resources Project Engineer
Jocelyn Gallais, EIT – Water Resources Design Engineer

Schedule

All identified team members are available to begin work on this project as soon as possible. We recognize that the City may elect to implement components of each task in a phased or prioritized manner. Bolton & Menk is prepared to coordinate closely with City staff to develop a mutually agreeable project schedule that accommodates funding, staffing, and operational constraints. A preliminary high-level schedule is provided below:

Notice to Proceed: October 2025
City-wide storm sewer model Updates: December 2025
Potential Stormwater Basin Analysis: January 2026
"Smart Pond" Analysis: January 2026

Fees

The total estimated not to exceed hourly fee for the project scope as described above is shown below. Any work outside of this scope shall be authorized by the city prior to furnishing additional services. Additional services will be provided on an hourly basis in accordance with our regular schedule of fees upon approval by city staff.

CLIENT: City of Marshall PROJECT: 2025 SWMP Modeling Updates								
TASK NO.	WORK TASK DESCRIPTION		Project Engineer	Hydraulics Engineer	Total Hours	Total Cost (Per Project)	Number of Project Locations	Total Cost (All Project Locations)
1.0	City-wide Stormwater Model Updates		0	7	7	$1,050	10	$10,500
1.1	Additional Drainage Area Delineation (If necessary)		0	3	3	$450	10	$4,500
2.0	Potential Stormwater Basin Analysis		2	16	18	$2,750	8	$22,000
3.0	Smart Stormwater Basin Analysis		2	13	15	$2,300	4	$9,200
	TOTAL HOURS		4	39	43			
	AVERAGE HOURLY RATE		$175.00	$150.00				
	SUBTOTAL		$700	$5,900	$6,600			
	TOTAL FEE							**$46,200**

Thank you for your consideration and the opportunity to provide the City of Marshall with this proposal.

Respectfully submitted,

Bolton & Menk, Inc

Shane Traulich, P.E.
Project Manager