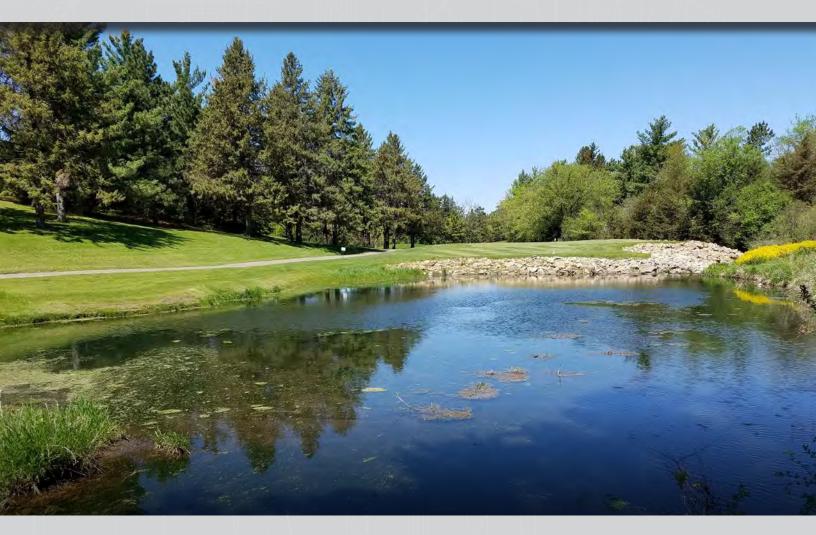
May 8, 2020





## Proposal for Golf Course and Parmeadow Ponds 1 & 3 Dredging Project

#### **Contact:**

Tim Olson, P.E., CFM 651-724-0404 timothy.olson@bolton-menk.com

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May 8, 2020

Cole Johnson Water Quality Technician Northfield City Engineering Office 801 Washington Street Northfield, MN 55057 Cole.Johnson@ci.northfield.mn.us

RE: Proposal for Golf Course and Parmeadow Ponds 1 & 3 Dredging Project

Dear Mr. Johnson:

The City of Northfield has initiated the Golf Course and Parmeadow Ponds 1 & 3 Dredging Project to restore the as-constructed condition and water quality capacity of these stormwater ponds. Like you, Bolton & Menk, Inc. takes great pride in maintaining safe, sustainable, and beautiful community amenities. Our approach to project development, design, and construction services makes Northfield's priorities our priorities. We understand what needs to be accomplished to successfully restore the condition of the Golf Course and Parmeadow Ponds.

**Local Expertise** – The City of Northfield wants a consultant who is familiar with your community and processes. Through our team's previous work in Northfield, such as the Spring Creek Watershed Assessment (2015), the City-Wide Stormwater Pond Assessment (2017), and Parmeadow Pond 1 Preliminary Improvements (2017), we have extensive knowledge of both the area and specific project needs. We will build on our existing knowledge and relationships with city staff to efficiently move forward with the project, saving you valuable time and resources.

**Cost-Efficient Solutions** – Like any community, we understand the City of Northfield is watching its bottom line. We believe you will find significant cost-savings and efficiencies unique to our approach, as our team has the foundational knowledge needed to hit the ground running with this project. Our solid working relationship is clear and will translate into cost savings through efficient communication, our strong understanding of your needs, direct access to project data, and unique understanding of the issues surrounding these stormwater ponds.

**Minimal Disruption** – Northfield is a bustling city. Business owners, community members, and visitors need easy access to services. Our team has the necessary insight to complete this project with minimal disruption, as we have a thorough understanding of the construction needs of these ponds. In addition, we have a strong reputation for finishing projects within budget and on time.

In continued service to the City of Northfield, we are excited at the opportunity to complete the Golf Course and Parmeadow Ponds 1 & 3 Dredging Project. I will serve as your lead client contact and project manager. Please contact me at 651-724-0404 or timothy.olson@bolton-menk.com if you have any questions regarding our proposal.

Respectfully submitted, **Bolton & Menk, Inc.** 

Timothy Olson, P.E., CFM Water Resources Project Manager

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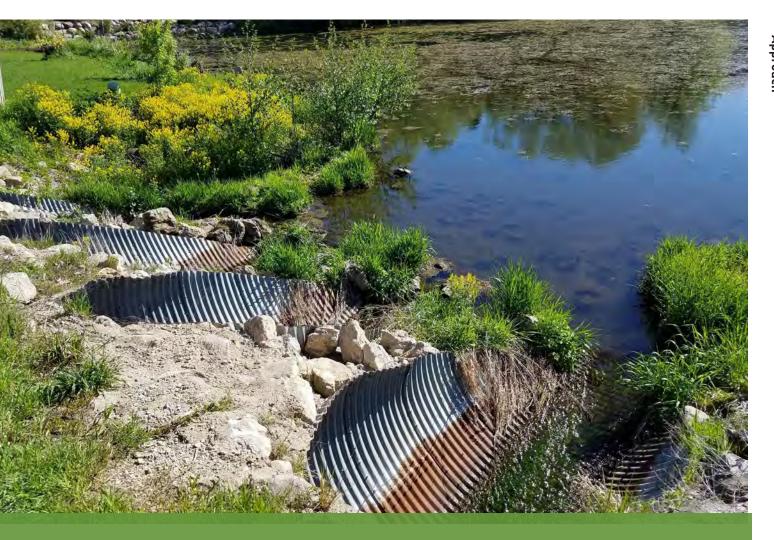
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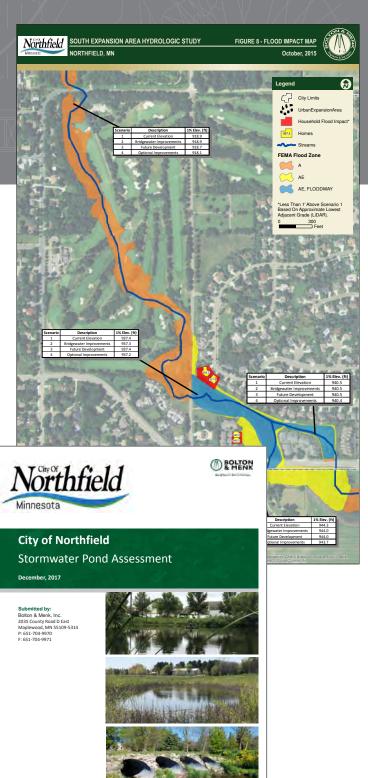
## UNDERSTANDING AND APPROACH Section 1

## UNDERSTANDING AND APPROACH

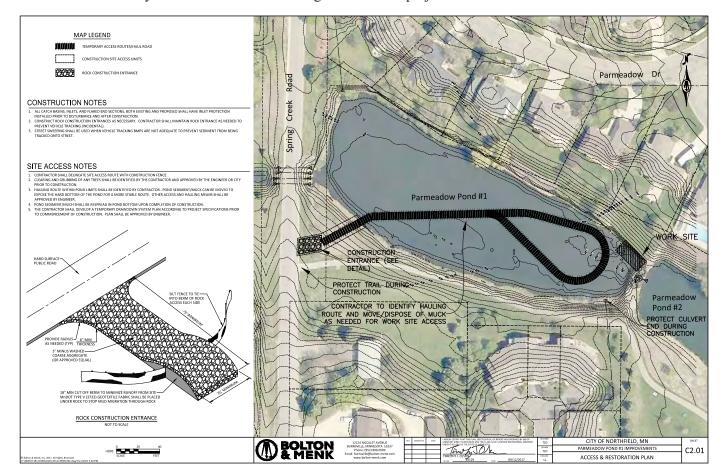
## History of Partnership and Collaboration

The City of Northfield and Bolton & Menk have a rich history in and mutual understanding of the Spring Creek Watershed and the city's stormwater ponds. We are ready to see this collaboration through construction. To date, Bolton & Menk has assisted the city in developing the following related projects:

- **Spring Creek Watershed Analysis**—This project included comprehensive modeling and assessment of flooding conditions throughout Spring Creek within Northfield. The modeling included the Parmeadow series of ponds, triple barrel culvert outlet, and discharge into and out of the Golf Course Pond. Our critical knowledge of the area hydraulics under a number of rainfall scenarios gives us a head start on understanding potential pond retrofits that would help protect adjacent homes.
- City-Wide Stormwater Pond Assessment— Using a kayak and depth finder, Bolton & Menk worked with city staff to conduct bathymetric assessments, collect field data, and prioritize pond cleaning for 50 ponds in town. TSS and TP treatment effectiveness and estimate pond cleaning costs were also completed for the top eight priority ponds. The Parmeadow 1 & 3 and Golf Course Ponds were recommended for cleaning. This assessment put us in the pondsliterally. Our staff has floated through each pond, collected sediment depth measurements, walked the perimeter looking for maintenance deficiencies, and extensively photographed and documented the overall conditions. This gives us foundational knowledge that will translate into cost savings and efficiencies for the city.



• **Parmeadow Pond 1 Preliminary Improvement Plan**—In 2017, Bolton & Menk worked with city staff to develop preliminary construction plans to correct an erosion issue in the northeast corner of Parmeadow Pond 1. This included additional bathymetric survey of a scour hole near the erosion site, preliminary cross sections of the current conditions and proposed corrections, site access locations, and restoration. With a 30% design in place, our base files can easily be translated into final design files for this project.



- **MS4 Program Assistance and Stormwater Ordinance Development**—While not directly related to this pond improvement project, Bolton & Menk assisted the city in developing stormwater, erosion control, and shoreline and floodplain ordinances to comply with the city's MS4 permit and program. This collaboration has allowed us to better understand your specific MS4 needs, goals for regulation, and commitment to environmental protection.
- **Parmeadow Drive Flood Zone Survey**—Bolton & Menk worked with city staff to conduct a field survey surrounding 1300 Parmeadow Drive at the intersection of Parmeadow Drive and Spring Creek Road. This included topographic survey surrounding two homes in the northwest corner of Parmeadow Pond 1, finished floor elevations, inventory of critical landscape features, and inventory for the Parmeadow Pond 1 outlet culverts under Spring Creek Road.
- **Continued Survey Services**—We are actively engaged in various projects in the City of Northfield which include the 2019 Street Improvement and 2020 Mill & Overlay projects. For these projects, we performed topographic surveys and are currently performing construction staking.

## **Fundamental Project Understanding**

Bolton & Menk helped the city identify Parmeadow 1 & 3 and Golf Course Ponds as high priority for cleaning. The following is a summary of the information gathered during the Stormwater Pond Assessment Phase.

| Unique<br>ID | Pond Name           | Year<br>Built | Year<br>Dredged | Sediment<br>Accumulation<br>(cu-ft) | As-<br>Constructed<br>Volume<br>(cu-ft) | Percent<br>Full | Accumulation<br>Per Year<br>(cu-yds/yr) | Total<br>Project<br>Estimate |
|--------------|---------------------|---------------|-----------------|-------------------------------------|---|-----------------|---|------------------------------|
| PND-0077     | Golf Course Pond #2 | 1980          | NA              | 6,348                               | 10,310                                  | 61.6%           | 6.4                                     | \$98,560                     |
| PND-0044     | Parmeadow Park #3   | 1986          | 1998            | 93,066                              | 158,177                                 | 58.8%           | 181.4                                   | \$186,380                    |
| PND-0042     | Parmeadow Park #1   | 1986          | 1998            | 90,169                              | 241,700                                 | 37.3%           | 175.8                                   | \$179,760                    |



The Pond Assessment project included an estimate of accumulated sediment, sediment quality and contamination testing, and project costs. Overall project costs included potential access points, disturbed areas, traffic control, and restoration. A visual inspection of the pond riparian area, storm sewer connections, and outlet control structures were also performed. We understand this information will be verified in the field to finalize the recommended pond improvements. Preliminary visual inspections identified the following concerns:

- Sediment deltas at culvert ends
- Sparse and/or invasive vegetation
- Evidence of illicit discharge and/or accumulated gross solids
- Excessive algae
- Bank erosion
- Cracking in rock overflow/falls area

The Parmeadow Ponds are controlled by rock overflow structures, or "falls." The structures control water surface elevations in the pond system and regulate discharges. The ultimate outfall is a quadruple barrel, 6-foot diameter corrugated metal culvert system, which flows directly into the Golf Course Pond. Spring Creek hydraulic modeling showed potential impacts to at least five homes adjacent to the Parmeadow Pond system.

## **Perceived Project Challenges**

The project includes ponds that are located on the flow channel of Spring Creek, meaning that Spring Creek flows directly through the area. Therefore, construction methods must consider seasonal variations in discharge rate. Winter construction will be critical, focusing work during the coldest, lowest flow months.

Dewatering will also be a critical component to construction and must occur when minimal bypass flows are required. Bolton & Menk will work with the city early in the design to establish a preferred bypass plan. This will also be verified with the contractor upon award.

Sediment samples were collected in all three ponds to determine the contamination level during the Pond Assessment project in 2017. At that time, the Golf Course Pond was a management level 2, and the Parmeadow Ponds were management level 1. We understand the city would like to update the contamination data. Since the ponds are located on the main stem of Spring Creek, the Minnesota Department of Natural Resources (MnDNR) and U.S. Army Corps of Engineers (USACE) will likely claim jurisdiction. Conducting a thorough wetland review and delineation will be critical immediately in the project. It is important for the city to understand that the ponds in question are not likely incidental wetlands. Instead, they were excavated in the Spring Creek floodplain that once exhibited wetland signatures. Further, since Spring Creek is on the MnDNR Public Water Inventory (PWI), permitting could be extensive and require several iterations with the agencies. Since the MnDNR is currently limited amidst COVID-19 shutdowns, the review could take months. It is understood that the MnDNR is currently backlogged. Bolton & Menk will begin this process early to avoid costly project delays. We will also work with our agency contacts to determine the level of permitting required to complete construction.



## Work Plan Task A: Data Gathering

Bolton & Menk will coordinate a kickoff meeting to discuss project details, logistics, schedule, and roles and responsibilities of project and city staff. We will also discuss options for dewatering the ponds, potential for bypass flow diversion, and its potential impact on the project schedule. This proposal does not include full plans for dewatering. We are happy to revise our scope should the city, or permitting authority, require a more robust dewatering plan.

We will establish horizontal and vertical project control (i.e. Rice County Coordinates, NAD 83, 1996 Adj./ NAVD 88) matching data prepared by Bolton & Menk for the 2017 assessment, to be used by both Bolton & Menk and the contractor. This will supplement the work performed for the flood zone survey along Spring Creek Road at the Spring Creek crossing and for property address 1300 Parmeadow Drive in fall 2013 and additional topographic survey in January 2019.

Wetland data collection and a delineation will be scheduled and completed immediately upon notice to proceed. Wetland permitting is the most sensitive component to the project in terms of overall project schedule. We will collect the following information prior to the delineation:

- Available aerial photographs
- Rice County LiDAR maps
- National Wetlands Inventory maps
- MNDNR Public Waters Inventory
- Rice County soil survey maps

The data collection task will include a Level 2 Wetland Delineation. We will visit the site to delineate all aquatic resource boundaries within the designated property. The delineation will include performing transects and sampling in the vicinity of those wetlands, placing 3-foot pin flags at the limits of any wetlands found. Our delineator will use a sub-meter GPS unit to accurately locate and map each. As part of the delineation process, we will investigate the incidental status of the wetlands through the Wetland Conservation Act (WCA). If we find any of the ponds to be incidental, we will apply for concurrence of our findings.

Bolton & Menk will supplement the visual inspections performed with the Pond Assessment project and update any new inspection data. We propose to use digital inspection forms and store them in a GIS-based application. All inspections will include a photo library.

We will leverage the preliminary Parmeadow Pond Improvement construction plans to generate final construction plans and specifications. We will also coordinate survey of the pond's inlets and outlets, including full inventory of each structure. We will make recommendations for infrastructure improvements. The survey will also include elevations of the low opening at 1300 Parmeadow Drive.

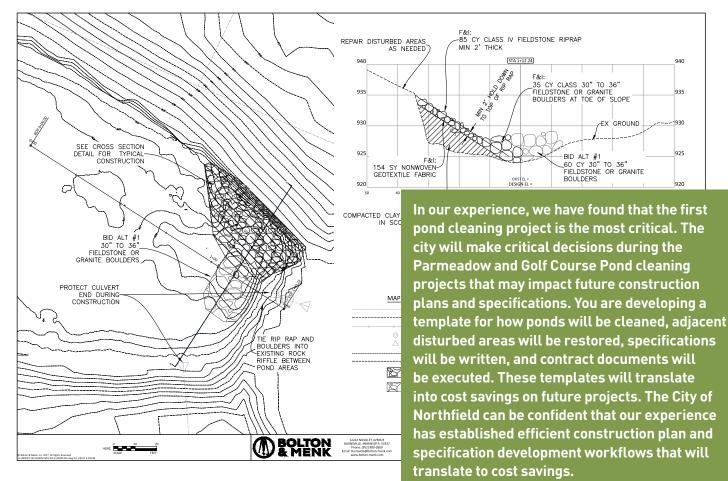
Bolton & Menk will use its project partners to provide cost effective and timely sediment sampling.

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#### **Task B: Prepare Construction Plans and Specifications**

Bolton & Menk will prepare construction plans, specifications, and construction cost estimates for improvements to Parmeadow Ponds 1 & 3 and the Golf Course Pond. This will include draft submissions at 50% and 95% completion, including a conference call or meeting at each submittal milestone. Revised plans will be provided to the city electronically.

Our plans will also include a dewatering plan. Since this component may be particularly sensitive to the permitting agencies, we intend to submit a draft, 50%, 95%, and final plans and specifications for dewatering. These tasks have been broken out individually in the Cost Breakdown section of our proposal, should the city choose to have the contractor develop a dewatering plan.



#### Task C: Permitting

Based on anticipated disturbance area and potential dredging methods, we will apply for and secure Minnesota Pollution Control Agency (MPCA) construction stormwater, and other permitting, as needed. We will also coordinate and secure WCA and USACE permitting.

Even if we find the ponds to be incidental through the WCA, this activity is still under the jurisdiction section 404 of the Clean Water Act and MnDNR as Spring Creek flows through the ponds. Bolton & Menk will use the aquatic resource delineation to determine and prepare the appropriate permit application to account for any aquatic resource impacts

proposed by the pond dredging. This will include the Minnesota joint application to the USACE and completing the online MnDNR Permitting and Reporting System (MPARS) application. The applications will include GIS-based figures and sequencing analysis, permit narrative, and project plan set. The permits may also require submitting the dewatering plan.

In some cases, reviewing agencies request additional information and/or a technical evaluation panel meeting during the review process. If our attendance is requested at a meeting to discuss accepting the delineated boundaries or the agencies request additional information, this service will be provided on an hourly basis at our wetland specialist rate. **Please note that if these tasks are not requested, you will not be billed.** 

We understand the city is responsible for the costs of all permits.

### **Task D: Public Engagement**

Bolton & Menk will facilitate and lead one public meeting, accompanied by city staff, to be conducted around the 50% plan milestone. We will also present the final plans at a regularly scheduled city council meeting, in preparation for authorization of bids.



### Task E: Bidding

The city can rely on Bolton & Menk's vast experience in managing the bidding process. As part of these bidding services, we will

- Prepare the advertisement and invitation for bid
- Prepare contract documents
- Respond to bid-inquiries
- Issue addendums, as needed
- Facilitate bid opening and tabulation
- Award contract

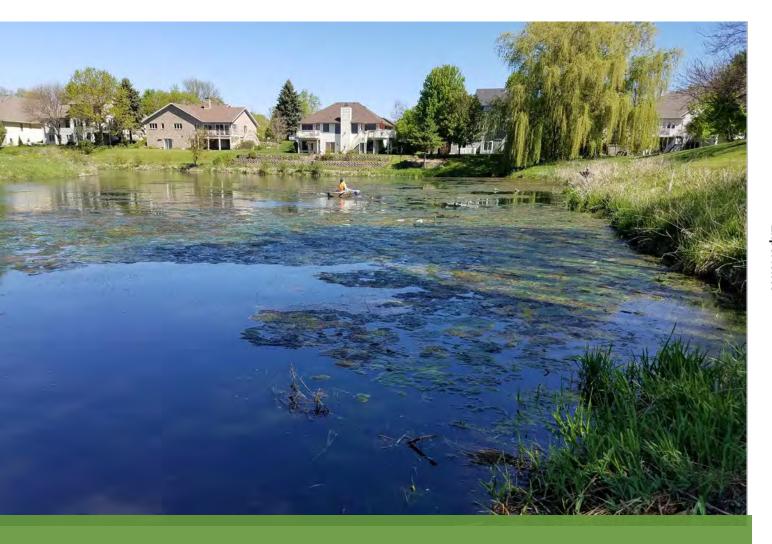
### **Task F: Construction Services**

Bolton & Menk will perform construction-related survey including construction staking (with a base proposal of 24 hours) and verification of dredging elevations and storm sewer improvements (as needed). This will include submittals in AutoCAD or Civil3D to the contractor. We assume one as-built survey for the base of this proposal. If additional as-built survey is required based on results of construction, we will inform the city and discuss additional fees.

We understand the city will be largely responsible for construction administration, but we are prepared to assist with the following:

- Attend preconstruction meeting
- Attend on-site construction meetings
- Prepare and issue change orders
- Approve contractor payment
- Coordinate with residents
- Approve shop drawings and materials

Bolton & Menk will be responsible for construction observation. We will assume 20 hours per week for 16 weeks. Additionally, we assume the project engineer will be available on site for 8 hours per week for 16 weeks.



## BACKGROUND AND EXPERIENCE Section 2

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## BACKGROUND AND EXPERIENCE

A sampling of recent projects with similar tasks and challenges to the Golf Course and Parmeadow Ponds 1 & 3 Dredging Project follows. Client satisfaction through quality deliverables, cost-effective rates, and timely project delivery are top priorities for Bolton & Menk. Please contact the references on page 16 to evaluate our performance on similar projects.



## Annual Pond Cleaning Projects City of Woodbury, Minnesota

MS4 communities are challenged with assessing, prioritizing, and cleaning their stormwater ponds. Not only do ponds fill with sediment over time, but the sediment has the potential to be contaminated, which increases disposal costs. The City of Woodbury has several hundred stormwater ponds that require maintenance; the city realizes that stormwater ponds that have filled over time are less effective in managing pollutant discharge and have a higher potential to impact their local surface water resources. Woodbury has adopted an effective approach to prioritize cleaning of these ponds.

The city has created a cost-effective approach to assess the sediment loading in their numerous stormwater ponds and systematically clean them in conjunction with capital improvement projects. Bolton & Menk works directly with the city to identify the costs associated with pond cleaning projects, conduct field assessments of the basins to determine other maintenance needs, understand the pond hydraulics to determine if other retrofits are required to minimize flooding conditions, and understand the potential efficiencies associated with coupling the pond projects with local roadway improvements.

The City of Woodbury and Bolton & Menk have worked closely since 2014 to identify pond improvement projects. These projects included construction oversight, sediment testing and removal, pond shoreline reconstruction and restoration, outfall structure improvements, hydraulics assessments and emergency overflow analyses, and erosion and sediment control. By coupling these improvement projects with local roadway projects and a single contractor, the permitting, mobilization, and construction costs are significantly reduced.

## Forest Lake Pond Improvements City of Forest Lake, Minnesota

The City of Forest Lake has over 100 stormwater ponds, many of which were constructed 30 or more years ago. Sediment has accumulated in the ponds, restricting their capacity to improve water quality. For city staff to prioritize pond sediment cleaning and understand capital costs, a city-wide assessment of the pond sediment accumulation was proposed.

In 2018, Bolton & Menk performed a city-wide bathymetric assessment of 104 ponds in Forest Lake. This assessment included measurement of the total accumulated sediment in each pond using a kayak and sonar equipment and visual inspections of the pond area and outlet control structures. The city and Bolton & Menk developed a pond cleaning priority schedule focused around capital improvement projects near the highest priority basins.

The city completed their second pond cleaning project in 2019 and intends to clean one high-priority pond per year, while budgets allow. The city is now able to accelerate their pond assessment and cleaning schedule and meet the requirements of its MS4 permit.



## Pulaski Pond Improvements City of Buffalo, Minnesota

Pulaski Pond is a shallow detention basin that discharges directly into Lake Pulaski. It was constructed by the Pulaski Ponds Development in 1992. In 2006, the pond was surveyed, and the average depth was only 2.5 feet. The Lake Pulaski Improvement District (LID) requested the City of Buffalo investigate the effectiveness of Pulaski Pond in treating stormwater runoff prior to discharge into the lake. The LID and city were concerned about an increase in algae blooms in Lake Pulaski over the previous couple of years. They also felt that algae blooms were occurring earlier in the summer than normal. Further, a sediment plume had established near the discharge connection from Pulaski Pond to the lake over the last several years that was present, and growing, during heavy rain events.

Bolton & Menk partnered with the LID, City of Buffalo, and Aquatic Restoration Services to conduct sediment sampling, develop an improvement plan, and clean the pond. Several improvement options were considered to improve water quality including deepening the pond, adding an aerator, constructing iron enhanced sand filters, and/or implementing additional best management practices in the agricultural land uses upstream.

The city and LID completed a dredging project in partnership with Aquatic Restoration Services. Approximately 740 cubic yards of sediment were removed and disposed. This project was the first phase in restoring sedimentation capacity in the pond, helped the City of Buffalo implement its MS4 requirements, and initiated a long-term approach to helping clean Lake Pulaski.





## KEY PERSONNEL Section 3

## KEY **PERSONNEL**

The Bolton & Menk team serves as an extension of city staff, maintaining close coordination between the city and project team. The proposed team provides the optimum combination of accessibility, community knowledge, and specialized expertise. Our project manager, Tim Olson, will be supported by key individuals and support staff. Bolton & Menk can draw upon more than 500 other team members throughout our firm, as needed, to meet your needs. Project team member bios are included below. Full résumés are included in the Appendix.



#### Tim Olson, P.E., CFM Project Manager

Bolton & Menk understands delivering a sensitive project like this requires exceptional management. Tim has the qualifications and experience to monitor progress, schedule, and budget while working closely with the city and project team to ensure critical issues are addressed in a timely manner.

Tim has been a water resources engineer with Bolton & Menk since 2006. His experience includes project management in both design and construction of complex water resources and environmentally sensitive projects. He specializes in comprehensive surface water management planning; innovative best management practice design; detailed hydraulic and hydrologic modeling; drainage design and construction plan review; NPDES Phase I & II MS4 and construction stormwater permitting requirements; and coupling GIS techniques with water resources design and analysis. Tim has a passion for stormwater and water quality education and participates in several stormwaterrelated steering committees and stakeholder groups. He enjoys facilitating partnerships, developing new relationships, and collaborating with stakeholders to define a common vision and work toward shared goals.

#### Similar Project Experience

- City-Wide Stormwater Pond Assessment, City of Northfield, MN—Tim managed the project, directed field staff, reviewed project deliverables, and communicated project information with city staff.
- Stormwater Improvements, City of Monticello, MN—Tim led the water resources team to develop hydraulic modeling for pond improvements and direct bathymetric assessments.
- Stormwater Pond Assessments and Improvements, City of Forest Lake, MN—Tim directed field staff in bathymetric and MS4 data collection for 104 ponds in town and developed plans, specifications, and cost estimates for the first two high-priority pond cleaning projects.



## Dustin deFelice, P.E.

Water Resources Project Engineer

Dustin will work closely with Tim to ensure the project is technically feasible and all construction plans and specifications are completed with accuracy and on schedule.

Dustin is a water resources project engineer responsible for the design and implementation of stormwater management systems to satisfy stormwater regulations. He began his career in 2012 and prior to joining Bolton &

his career in 2012 and, prior to joining Bolton & Menk, worked as a water management engineer for the Wisconsin Department of Natural Resources. While with the DNR, he provided technical assistance to communities regarding the National Flood Insurance Program and administered Wisconsin's Dam Safety Program, which involved the assistance of plan review, on-site review, and approvals for dam repairs and reconstructions. Dustin has extensive experience in HEC-RAS and HEC-HMS programs, as well as with HydroCAD and Autodesk Storm and Sanitary Analysis. He likes the unique challenges each project presents and

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enjoys watching project designs ultimately be constructed and function as intended during storm events.

#### Similar Project Experience

- Stormwater System and Pond Improvements, City of Woodbury, MN—Dustin developed detailed design, construction plans, and project specifications for numerous pond and drainage system improvements throughout the city.
- 21<sup>st</sup> Street Water Quality Improvements, City of Hastings, MN—Dustin managed the design of several water quality BMPs and produced plans and project specifications.
- Comprehensive Stormwater Management Plan, City of Cottage Grove, MN—Dustin actively manages a comprehensive hydraulic model for the City of Cottage Grove, which includes regular hydraulic assessment of active development and model updates.



#### Derek Benoy, EIT

Water Resources Design Engineer

Derek will use his intrinsic knowledge of Northfield's stormwater pond system, specifically the Parmeadow Ponds, to evaluate field data and translate the technical project information to the plan. Derek will also perform inspections during construction.

Derek is a water resources design engineer, starting his career at Bolton & Menk in 2016 as an intern and beginning full-time in 2017. His primary responsibilities include developing hydrologic and hydraulic modeling for preliminary project layouts, storm sewer design, sanitary sewer design, water quality modeling, stormwater plan implementation, general stormwater planning, reviewing development plans, and preparing Stormwater Pollution Prevention Plans for a variety of civil engineeringrelated construction projects. Derek has experience using Autodesk Civil 3D design software and ArcMap 10 analysis. He has additional experience in hydraulic design using HydroCAD, Autodesk Storm and Sanitary Analysis, XPSWMM, HEC-RAS, and HEC-HMS.

#### Similar Project Experience

- City-Wide Stormwater Pond Assessment, City of Northfield, MN—Derek was responsible for bathymetric information and field inspections, including the Parmeadow Ponds, for the city.
- Stormwater Pond Assessments and Improvements, City of Forest Lake, MN—Derek collected bathymetric and MS4 pond inspection data for 104 ponds in Forest Lake.
- MS4 Construction Site Inspections, Cities of Cottage Grove and Maple Grove, MN—Derek performs and manages MS4 construction site inspections. He is responsible for meeting with contractors on site and reporting on SWPPP and erosion control deficiencies.



## Eric Wilfahrt, L.S.

Survey Manager

Eric will provide survey oversight and guide field crews to collect all information necessary for design. He will also ensure construction staking is clear and accurate.

Eric likes to complete projects that have complex and challenging right-

of-way and boundary determinations. He manages survey operations for the firm's south metro locations. He began his surveying career in 2004. He is responsible for managing, researching, preparing, calculating, interpreting, and writing legal descriptions related to ALTA, topographic, plats, boundary, and engineering surveys. He has additional quality control and oversight duties. Eric is proficient in AutoCAD, AutoCAD Map, COGO, CG-Survey for AutoCAD, Eagle Point Software, Civil 3D, Trimble Business Center, Leica Cyclone 9, and Leica Topo II Software.

#### Similar Project Experience

• Flood Zone Survey at Parmeadow Drive, City of Northfield, MN—Eric performed topographic survey to identify flood issues for use in design for flood mitigation. Work included full topographic survey up to the rear of a house located at 1300 Parmeadow Drive along with obtaining low opening of house.

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- 2013 Street Improvements, City of West St. Paul, MN—Eric and his survey crew performed topographic survey of a pond bottom to conduct a pond cleaning project. He managed the coordination, data gathering, and drafting.
- Marie Avenue Improvements, City of West St. Paul, MN—Eric managed survey of a pond bottom for use in design of a pond cleaning and dredging project.



#### Doug Bisek

Senior Survey Field Technician

#### Doug will assist Eric with survey tasks for the project.

Doug joined Bolton & Menk in 1999. He is a survey crew chief responsible for field operation of

municipal and private surveying services including construction staking, topographic, boundary, and ALTA surveys. He is proficient in the use of survey instrumentation, including Trimble Robotic Total Station, Trimble Survey Controllers, Trimble GPS Equipment, and Trimble Dini Level. Doug has experience with a variety of civil, municipal, and transportation projects. He enjoys working with clients to provide real solutions to their projects.

#### Similar Project Experience

- Flood Zone Survey at Parmeadow Drive, City of Northfield, MN—Doug led the survey field work in conjunction with Eric and the survey crew.
- Marie Avenue Improvements, City of West St. Paul, MN—Doug managed all field aspects of the survey and coordinated data with the city and project team.
- 2013 Street Improvements, City of West St. Paul, MN—Doug led the survey crew in collecting all field data.



### Dan Donayre, WDCP

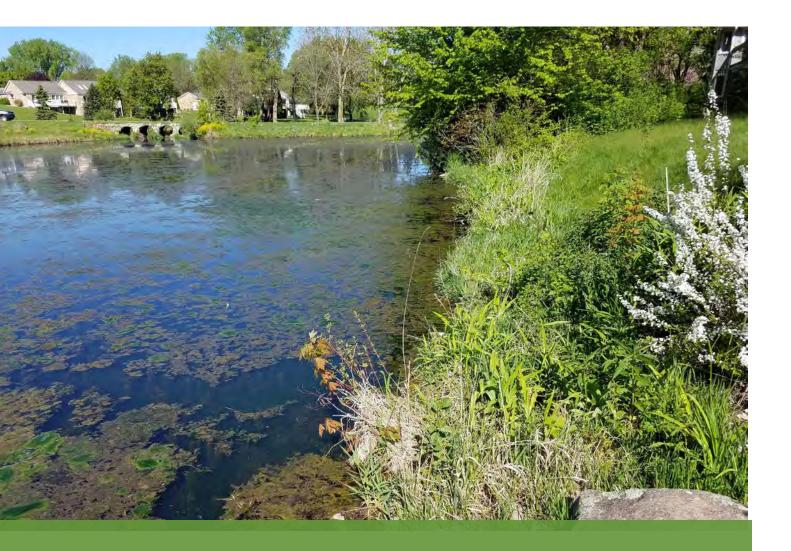
Senior Natural Resources Specialist

Dan will be responsible for securing all natural resources permitting, conducting TEP meetings as needed, and coordinating all critical natural resources impacts with regulatory agencies.

Dan leads our natural resources team and is responsible for coordinating with state and federal agencies to work through difficult aquatic resource delineations and permitting. He began his duties in 2006 and, during this time, has conducted hundreds of wetland delineations, GPS surveys, and MnRAM analyses. Dan has successfully completed Wetland Conservation Act (WCA), Minnesota Department of Natural Resources, and U.S. Army Corps of Engineers permitting processes related to type and boundary applications, replacement plans, de minimis applications, exemption applications, no loss applications, and banking plans. He also acts as the local government unit (LGU) for several client communities. His duties as LGU include reviewing applications under the WCA, organizing and leading technical evaluation panel meetings, and issuing notices of decision.

#### **Similar Project Experience**

- Wentworth Avenue Reconstruction, City of West St. Paul, MN—This project included grading in and around a public water wetland. Dan managed all natural resources permitting surrounding the disturbance and wetland restoration. He also managed delineation of numerous other wetlands impacted by the project.
- 64<sup>th</sup> Street Reconstruction and Ravine Restoration, City of Inver Grove Heights, MN—Dan managed the delineation and permitting of potential wetland impacts associated with a ravine restoration. He also secured MnDNR permitting for a new connection to a lake.
- Duck Lake Road Improvements, City of Eden Prairie, MN—Dan performed wetland and natural resources delineations for Duck Lake and developed permitting for fill within the lake.



## COST BREAKDOWN Section 4

## COST BREAKDOWN

The following tables summarize the hours and cost breakdown for each major work task item. The estimated fee includes labor, general business, and other normal and customary expenses associated with operating a professional business. **Unless otherwise noted, the fees include vehicle and personal expenses, mileage, telephone, survey stakes, and routine expendable supplies; no separate charges will be made for these activities and materials.** Expenses beyond the agreed scope of services and non-routine expenses, such as large quantities of prints, extra report copies, out-sourced graphics and photographic reproductions, document recording fees, outside professional and technical assistance, and other items of this general nature will be invoiced separately.

For your convenience, we have separated Design (Tasks A through D) and Construction (Tasks E and F). We have included the recommended construction observation and survey as identified in the Request for Proposals. However, these construction times could be reduced. Should construction timelines differ from the city's original assumptions, our fee will also be adjusted.

We are currently proposing to use Derek Benoy for construction inspection. Derek performed much of the bathymetric assessment in Northfield and is particularly familiar with the maintenance issues on the Parmeadow Ponds. If the city is comfortable with lower bill rate staff, we would be happy to use those staff for construction observation.

|                 | ity of Northfield<br>Golf Course and Parmeadow Ponds 1 & 3 Dredging Project |                 |                                    |                                    |                |                                   |                                 |          |
|-----------------|---|-----------------|------------------------------------|------------------------------------|----------------|-----------------------------------|---------------------------------|----------|
| Task<br>No.     | Work Task Description   | Project Manager | Water Resoures<br>Project Engineer | Water Resources<br>Design Engineer | Survey Manager | Office/Field<br>Survey Technician | Natural Resources<br>Specialist | Totals   |
| Α               | Data Gathering  |                 |                                    |                                    |                |                                   |                                 |          |
| A.1             | Coordinate/Facilitate Kickoff Meeting                                       | 2               | 2                                  |                                    |                |                                   |                                 | 4        |
| A.2             | Gather Wetland Information  |                 |                                    |                                    |                |                                   | 5                               | 5        |
| A.3             | Perform Wetland Delienation   |                 |                                    |                                    |                |                                   | 20                              | 20       |
| A.4             | Perform On-Site Field Inspections   | 10              |                                    | 10                                 |                |                                   |                                 | 20       |
| A.5             | Coordinate Pond Sediment Testing  | 1               |                                    |                                    |                |                                   |                                 | 1        |
| A.6             | Conduct Field Survey - Inlets/Outlets, Low Opening                          |                 |                                    |                                    | 2              | 13                                |                                 | 15       |
|                 | Subtotal Hours - Task 1   | 13              | 2                                  | 10                                 | 2              | 13                                | 25                              | 65       |
| В               | Prepare Construction Plans and Specifications                               |                 |                                    |                                    |                |                                   |                                 |          |
| B.1             | Prepare Draft Construction Plans, Specifications, and Estimated Costs       | 3               | 6                                  | 16                                 |                |                                   |                                 | 25       |
| B.2             | Prepare Draft Dewatering Plan   | 2               | 2                                  | 8                                  |                |                                   |                                 | 12       |
| B.3             | Prepare 50% Construction Plans, Specifications, and Estimated Costs         | 3               | 8                                  | 24                                 |                |                                   |                                 | 35       |
| B.4             | Prepare 50% Dewatering Plan   | 2               | 2                                  | 8                                  |                |                                   |                                 | 12       |
| B.5             | Prepare 95% Construction Plans, Specifications, and Estimated Costs         | 5               | 8                                  | 24                                 |                |                                   |                                 | 37       |
| B.6             | Prepare 95% Dewatering Plan   | 2               | 2                                  | 8                                  |                |                                   |                                 | 12       |
| B.7             | Facilitate 50% Review Meeting   | 2               | 2                                  |                                    |                |                                   |                                 | 4        |
| B.8             | Facilitate 95% Review Meeting   | 2               | 2                                  |                                    |                |                                   |                                 | 4        |
| B.9             | Revise Final Contract Documents   | 1               | 6                                  | 8                                  |                |                                   |                                 | 15       |
|                 | Subtotal Hours - Task 2   | 22              | 38                                 | 96                                 | 0              | 0                                 | 0                               | 156      |
| С               | Permitting  |                 |                                    |                                    |                |                                   |                                 |          |
| C.1             | Determine and Obtain MPCA Permits for Construction                          |                 | 1                                  | 4                                  |                |                                   |                                 | 5        |
| C.2             | Obtain WCA USACE Permitting   |                 |                                    |                                    |                |                                   | 20                              | 20       |
| C.3             | Convene TEP   |                 |                                    |                                    |                |                                   | 4                               | 4        |
| C.4             | Determine and Obtain MnDNR Permitting                                       |                 |                                    | 4                                  |                |                                   | 20                              | 24       |
|                 | Subtotal Hours - Task 3   | 0               | 1                                  | 8                                  | 0              | 0                                 | 44                              | 53       |
|                 |   |                 |                                    |                                    |                | -                                 |                                 |          |
| <b>D</b><br>D.1 | Public Engagement   | 10              |                                    | 2                                  |                |                                   |                                 | 12       |
| D.1<br>D.2      | Conduct One Neighborhood Meeting<br>Present Project at City Council Meeting | 4               |                                    | 2                                  |                |                                   |                                 | 6        |
| 0.2             | Subtotal Hours - Task 4   | 14              | 0                                  | 4                                  | 0              | 0                                 | 0                               | 18       |
|                 |   |                 |                                    |                                    |                |                                   |                                 |          |
|                 | Design Total Hours  | 49<br>\$145     | 41<br>\$120                        | 118<br>\$120                       | 2              | 13<br>¢155                        | 69<br>\$124                     | 292      |
|                 | Average Hourly Rate   | -               | \$130                              | \$120                              | \$164          | \$155                             | \$124                           | 627 40 4 |
|                 | Design Subtotal   | \$7,105         | \$5,330                            | \$14,160                           | \$328          | \$2,015                           | \$8,556                         | \$37,494 |

E Bidding

|     |   |             |          | Tot      | al Fee |         | \$104 | 4,084    |
|-----|---|-------------|----------|----------|--------|---------|-------|----------|
|     | Construction Subtotal                             | \$2,900     | \$18,720 | \$38,880 | \$820  | \$5,270 | \$0   | \$66,590 |
|     | Average Hourly Rate                               | \$145       | \$130    | \$120    | \$164  | \$155   | \$124 |          |
|     | Construction Total Hours                          | <b>5</b> 20 | 144      | 324      | 5      | 34      | 0     | 527      |
|     | Subtotal Hours - Task 6                           | 2           | 132      | 324      | 5      | 34      | 0     | 497      |
| F.7 | Create As-Built Information and Record Drawings   |             |          |          | 3      | 10      |       | 13       |
| F.6 | Issue Letter of Final Acceptance                  | 2           |          |          |        |         |       | 2        |
| F.5 | Create Punch List                                 |             |          | 4        |        |         | -     | 4        |
| F.4 | Construction Observation - Project Engineer       |             | 128      |          |        |         | -     | 128      |
| F.3 | Construction Observation                          |             |          | 320      |        |         |       | 320      |
| F.2 | Construction Administration Assistance            |             | 4        |          |        |         |       | 4        |
| F.1 | Perform Construction Survey - Single Verification |             |          |          | 2      | 24      |       | 26       |
| F   | Construction Services                             |             |          |          |        |         |       |          |
|     | Subtotal Hours - Task 5                           | 18          | 12       | 0        | 0      | 0       | 0     | 30       |
| E.6 | Award Contract                                    | 2           |          |          |        |         |       | 2        |
| E.5 | Conduct Bid Opening and Tabulation                | 6           |          |          |        |         |       | 6        |
| E.4 | Issue Addendum                                    | 2           | 4        |          |        |         |       | 6        |
| E.3 | Respond to Pre-Bid Inquiries                      | 4           |          |          |        |         |       | 4        |
| E.2 | Prepare Contract Documents                        | 2           | 4        |          |        |         |       | 6        |
| E.1 | Prepare Advertisement for Bid                     | 2           | 4        |          |        |         |       | 6        |



## PROJECT SCHEDULE Section 5



## PROJECT SCHEDULE

We have developed a schedule detailing the anticipated work tasks, task relationships, critical path timeline, deliverable due dates, and completion dates. This schedule is based on our review of the project background, description, and scope of services included in the Request for Proposals and our experience on other similar projects. Upon selection, Bolton & Menk will work with city staff and other project partners to revise and update this schedule as needed to ensure successful delivery of this project.

|                                      |                                       |         |     |         |     | 2020 |      |      |              |              |          |      |      |       |      |       |    | 2021 |       |   |         |     |        |      |          |
|--------------------------------------|---------------------------------------|---------|-----|---------|-----|------|------|------|--------------|--------------|----------|------|------|-------|------|-------|----|------|-------|---|---------|-----|--------|------|----------|
|                                      |                                       | Month   |     | May     |     | lune |      |      | uly          |              | August   |      |      | mber  |      | ober  |    | ovem |       |   | cembe   |     | Januar |      | February |
|                                      |                                       | Week of | 4 1 | 1 18 25 | 1 8 | 15 2 | 2 29 | 6 13 | 3 20 2       | 73           | 10 17 24 | 31 7 | 7 14 | 21 28 | 5 12 | 19 26 | 29 | 16   | 23 30 | 7 | 14 21 2 | 8 4 | 11 18  | 25 1 | 8 15 2   |
| A Data Gathering                     |                                       |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| A.1 Coordinate/Facilitate Kickoff M  | leeting                               | [       |     | 0       |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| A.2 Gather Wetland Information       |                                       |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| A.3 Perform Wetland Delineation      |                                       |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| A.4 Perform On-Site Field Inspection | ons                                   |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| A.5 Coordinate Pond Sediment Tes     | ting                                  |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| A.6 Conduct Field Survey - Inlets/O  | utlets, Low Opening                   |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| B Prepare Construction Plans a       | nd Specifications                     |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| B.1 Prepare Draft Construction Pla   | ns, Specifications, and Estimated Cos | sts     |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| B.2 Prepare 50% Construction Plan    | s, Specifications, and Estimated Cost | ts      |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| B.3 Prepare 95% Construction Plan    | s, Specifications, and Estimated Cost | ts      |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| B.4 Facilitate 50% Review Meeting    |                                       |         |     |         |     | 6    | )    |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| B.5 Facilitate 95% Review Meeting    |                                       |         |     |         |     |      |      |      | $\mathbf{O}$ |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| B.6 Revise Final Contract Documer    | ts                                    |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| C Permitting                         |                                       |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| C.1 Determine and Obtain MPCA P      | ermits for Construction               |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| C.2 Obtain WCA USACE Permitting      |                                       |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| C.3 Convene TEP                      |                                       |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| C.4 Determine and Obtain MnDNR       | Permitting                            |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| D Public Engagement                  |                                       |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| D.1 Conduct One Neighborhood M       | eeting                                |         |     |         |     | C    |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| D.2 Present Project at City Council  | Meeting                               |         |     |         |     |      |      |      |              | $\mathbf{O}$ |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| E Bidding                            |                                       |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| E.1 Prepare Advertisement for Bid    |                                       |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| E.2 Prepare Contract Documents       |                                       |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| E.3 Respond to Pre-Bid Inquiries     |                                       |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| E.4 Issue Addendum                   |                                       |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| E.5 Conduct Bid Opening and Tabu     | lation                                |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| E.6 Award Contract                   |                                       |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| F Construction Services              |                                       |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| F.1 Perform Construction Survey -    | Single Verification                   |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| F.2 Construction Administration As   | ssistance (As Needed, Additional Hou  | urly)   |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| F.3 Construction Observation         |                                       |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| F.4 Construction Observation - Pro   | ject Engineer                         |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| F.5 Create Punch List                |                                       |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| F.6 Issue Letter of Final Acceptance | e                                     |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |
| F.7 Create As-Built Information and  | d Record Drawings                     |         |     |         |     |      |      |      |              |              |          |      |      |       |      |       |    |      |       |   |         |     |        |      |          |





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## REFERENCES

Past performance serves as a great indicator of future performance. Our clients tell us we are doing a great job, and they will tell you, too!

## Teresa Keller, Senior Engineering Project Coordinator

### **City of Woodbury**

8301 Valley Creek Road Woodbury, MN 55125 651-714-3500 teresa.keller@woodburymn.gov

## Dave Adams, Public Works Director

**City of Forest Lake** 1408 Lake Street South Forest Lake, MN 55025 651-464-3550 dave.adams@ci.forest-lake.mn.us

#### Laureen Bodin, City Administrator City of Buffalo

212 Central Avenue Buffalo, MN 55313 763-682-1181 Laureen.Bodin@ci.buffalo.mn.us

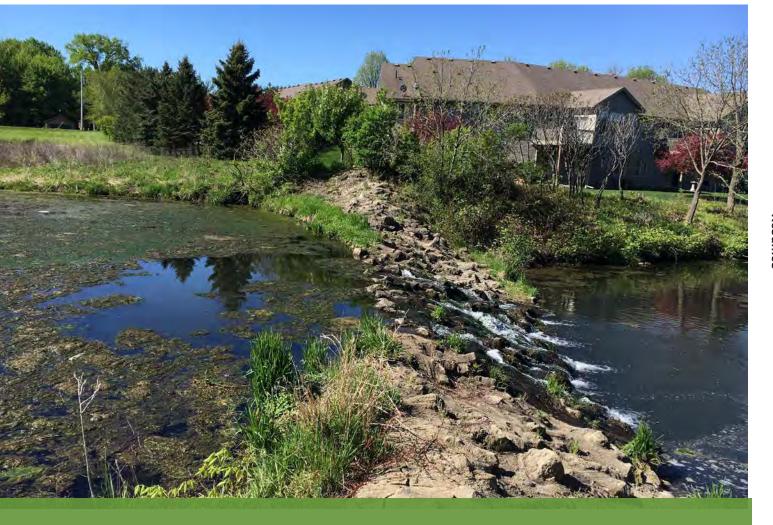
A recent survey asked Bolton & Menk clients to rate us on a scale of 1-10 on our ability to meet a project budget and a project design schedule. They gave us an average of 9.3 on our ability to meet a budget and 9.5 on our ability to meet a design schedule.

Bolton & Menk knows the importance of delivering a project on time and within budget. We have extensive internal quality controls to ensure efficiency of our staff and value to our clients. Bolton & Menk is experienced in dealing with the unexpected issues that may be encountered during a project. We will keep the city informed and continually monitor the schedule and budget. We are committed to delivering quality projects and affirm our ability to provide services within the requirements of the City of Northfield.

#### Ability to meet budget

9.3

Ability to meet design schedule



## KEY PERSONNEL **RÉSUMÉS** Appendix



## Timothy J. Olson, P.E., CFM



Real People. Real Solutions.

Project Manager

## Education

Master of Science - Civil Engineering, Water Resources South Dakota School of Mines & Technology

Bachelor of Science - Civil Engineering, Water Resources South Dakota School of Mines & Technology

## Registration

Professional Engineer, Minnesota, Iowa, North Dakota, Wisconsin

## Certifications

FEMA Certified Floodplain Manager

## Organizations

Minnesota Society of Professional Engineers

## Summary

Tim has been a water resources engineer with Bolton & Menk since 2006. His experience includes project management in both design and construction of complex water resources and environmentally sensitive projects. He specializes in comprehensive surface water management planning; innovative best management practice design; detailed hydraulic and hydrologic modeling; drainage design and construction plan review; NPDES Phase I & II MS4 and construction stormwater permitting requirements; and coupling GIS techniques with water resources design and analysis. Tim has a passion for stormwater and water quality education and participates in several stormwater-related steering committees and stakeholder groups. He enjoys facilitating partnerships, developing new relationships, and collaborating with stakeholders to define a common vision and work toward shared goals.

## **Experience**

#### Site Design and Stormwater Management Design

- Clear Lake Water Quality Improvements, City of Forest Lake, MN
- Jarvis Street and 165<sup>th</sup> Road Reconstruction and Trail Improvements, City of Elk River, MN
- Washington County Public Works Schematic Design Report, Washington County, MN
- River to River Greenway Stormwater Management, Dakota County, MN
- CSAH 12 (Spring Lake Road) Water Quality and Wetland Restoration, Scott County, MN
- Willow Creek Drainage Improvements, City of Buffalo, MN
- Bluff Street Trail Improvements, City of Minneapolis, MN
- Mississippi River Trail, City of Anoka, MN
- Ravine Restoration, Benco Electric, City of Mankato, MN
- CSAH 23, Ottawa Bypass, Le Sueur County, MN
- Backflow Prevention and Lift Stations, City of Belmond, IA
- Urban Village Stormwater Management, City of Woodbury, MN
- TH 295/TH 233 Turnbacks, City of Saint Peter, MN
- 2006/2010 Wal-Mart Stores, Cities of Osceola, Denison and Shenandoah, IA
- 2006/2010 Various Water and Wastewater Treatment Facilities, Site and Stormwater Management Design, SWPPP Preparation
- 2010 CSAH 41 Wetland Restoration and Industrial Park Regional Stormwater Management Design, City of North Mankato, MN
- 2009-2010 Comprehensive Airport Site Design, Stormwater Management Design, and Phased SWPPP Design, City of Blue Earth, MN
- 2009-2010 Northwest Industrial Area, Regional Stormwater Management Design, City of Marshall, MN
- 2009 Tiger Lake Expansion and SWPPP Preparation, City of Marshall, MN
- 2008-2009 Eastwood Industrial Park, Comprehensive Stormwater Management Design and SWPPP Preparation, City of Mankato, MN

- 2008-2009 Stormwater Management Design and SWPPP and Construction Permit Preparation, Crystal Valley Coop
- 2007-2008 Owatonna Public Utilities Flood Mitigation and Stormwater Lift Station Design, City of Owatonna, MN
- 2007 Silver Lake Road (CSAH 136) Storm Sewer Design, Hennepin County, MN

#### Stormwater Managements Plans (SWMP)

- SWMP, Shakopee Mdewakanton Sioux Community
- 2010 Citywide Hydraulic and Hydrologic Modeling, Comprehensive Report Preparation, and Detailed ArcGIS Analysis, City of Paynesville, MN
- 2010 Citywide Hydraulic and Hydrologic Modeling, Comprehensive Report Preparation, and Detailed ArcGIS Analysis, Minnesota State University, Mankato, MN
- 2009 Citywide Hydraulic and Hydrologic Modeling, Comprehensive Report Preparation, and Detailed ArcGIS Analysis, City of Saint Francis, MN
- 2008 Citywide Hydraulic and Hydrologic Modeling, Comrehensive Report Preparation, and Detailed ArcGIS Analysis, City of Wells, MN
- 2008 Citywide Hydraulic and Hydrologic Modeling, Comprehensive Report Preparation, and Detailed ArcGIS Analysis, City of Jordan, MN
- 2008 Citywide Hydraulic and Hydrologic Modeling, Comprehensive Report Preparation, and Detailed ArcGIS Analysis, City of Ramsey, MN

#### Hydraulics and Hydrologic Modeling

- CSAH 4 Trail Improvements, Dakota County, MN
- Heart River Levee Freeboard Analysis, City of Mandan, ND
- TH 5 Corridor Improvements Study, City of Waconia, MN
- Lake Washington Outlet Sill Dam, Lake Washington, MN
- East Central Stormwater Improvements, City of Storm Lake, IA
- Flood Mitigation & Culvert Replacements, Crow Wing County, MN
- Turtle Creek Flood Mitigation, City of Austin, MN
- Walnut Street Flood Mitigation, City of Owatonna, MN
- 2010 Stormwater Utilities Inventory, Citywide Hydraulic Modeling, ArcGIS Analysis, and ArcGIS Web Mapping, City of Osseo, MN
- 2010 Iowa River Floodplain Modeling, ArcGIS Analysis, and Stormwater Lift Station Design, City of Belmond, IA
- 2010 County Ditch 56 Digital Flood Insurance Rate Map (DFIRM) Review and Floodplain Study, City of Lake Crystal, MN
- 2009 County Ditch 12 Floodplain Modeling, Including a Conditional Letter of Map Revision Based on Fill (CLOMR-F), City of Worthington, MN
- 2007 Countywide DFIRM Study, Hydraulic Model of 53 Stream Miles along 7, Meeker County, MN
- Major Streams, Floodplain Delineation and ArcGIS Analysis, Flood Insurance Study (FIS) Document Preparation, and Preparation of the Technical Support Data Notebook (TSDN)

#### Water Quality Improvements

- Water Quality Best Management Practice (BMP) Selection Study, City of Marine on St. Croix, MN
- Government Center Campus, Washington County, MN
- Hardee's Water Quality Tree Planter Box, City of Mankato, MN
- Broadway Avenue Streetscape, Albert Lea, MN

- 2010 Preliminary ArcSWAT Modeling, Best Management Practice (BMP) Feasibility Analysis, and Detailed ArcGIS Analysis, Lake Washington District, MN
- 2008-2009 Eastwood Industrial Park, Regional Bioswale and Bioretention System Design, City of Mankato, MN
- 2008 SWPPP Implementation, P8 Modeling, and Detailed ArcGIS Analysis, City of North Mankato, MN
- 2008 SWPPP Implementation, P8 Modeling, and Detailed ArcGIS Analysis, City of Saint Peter, MN
- 2008 MN SWPPP Implementation, P8 Modeling, and Detailed ArcGIS Analysis, City of New Ulm, MN

#### Floodplain Analysis, Mapping and FEMA Coordination

- Sand Creek Flood Analysis and Remapping, City of Jordan, MN
- Turtle Creek Flood Mitigation, City of Austin, MN
- Meeker County DFIRM, Meeker County, MN
- Count Ditch 12 Flood Mitigation, City of Worthington, MN
- Sunset Pond Dam Safety Analysis, City of Burnsville, MN
- FEMA DFIRM Study, Lake Crystal, MN



## Dustin J. deFelice, P.E. Water Resources Project Engineer



Bachelor of Science - Environmental Engineering University of Wisconsin, Platteville

## Registration

Professional Engineer, Minnesota

## Certifications

U of M Certifications

- SWPPP Site Management
- SWPPP Design

#### MnDOT Certifications

- Aggregate Production
- Bituminous Street I
- Grading and Base I
- Concrete Field I

## Organizations

American Academy of Environmental Engineers

### Summary

Dustin is a water resource design engineer responsible for the design and implementation of stormwater management systems to satisfy stormwater regulations. He began his career in 2012 and, prior to joining Bolton & Menk, worked as a water management engineer for the Wisconsin Department of Natural Resources. While with the DNR, he provided technical assistance to communities regarding the National Flood Insurance Program and administered Wisconsin's Dam Safety Program, which involved the assistance of plan review, on-site review, and approvals for dam repairs and reconstructions. Dustin has extensive experience in HEC-RAS and HEC-HMS programs, as well as with HydroCAD and Autodesk Storm and Sanitary Analysis. He likes the unique challenges each project presents and enjoys watching project designs ultimately be constructed and function as intended during storm events.

## Experience

#### Design Experience

- Public Works Expansion Project, City of Woodbury, MN
- Lever Street NE Improvements, City of Blaine, MN
- Cross Roads Project, Prairie Island Indian Community
- Headwaters Parkway and Fenway Avenue Intersections Improvements, City of Forest Lake, MN
- Melrose Greenfield Plant, City of Melrose, MN
- White Bear Animal Hospital, City of White Bear Lake, MN
- Public Works Expansion, City of Mounds View, MN
- TH 10 Solution, City of Anoka, MN
- Recreation Facility Grading Plan, City of Annandale, MN
- The Artery Improvements, City of Hopkins, MN
- 2015 Improvements, City of Paynesville, MN
- Palomino 4th Street Utility & Street Improvements, City of Apple Valley, MN
- Vine Street Improvements, City of Hudson, WI
- Tower Road Improvement Study, City of Hudson, WI
- Campus Water, Sewer, and Infrastructure Replacement, North Dakota State College of Science
- Tea Garden Area Storm Drainage Report, City of Ames, IA
- North Area Street & Utility Improvements, City of Clearwater, MN

#### **Construction Observation**

- Safe Routes to School Pedestrian Connection Improvements, City of Forest Lake, MN
- Street Reconstruction, City of Prior Lake, MN
- Southridge 2<sup>nd</sup> Addition Street & Utility Improvements, City of Woodbury, MN
- Witham Lift Station, City of Eagan, MN







## Education

Bachelor of Science - Civil Engineering Michigan Technological University

Masters of Science - Environmental Engineering Michigan Techniological University

## Registration

Engineer-in-Training

## Certifications

MnDOT Certifications

• Construction Site Management

U of M Certifications

• SWPPP Design

#### Summary

Derek is a water resources design engineer, starting his career at Bolton & Menk in 2016 as an intern and beginning full-time in 2017. His primary responsibilities include developing hydrologic and hydraulic modeling for preliminary project layouts, storm sewer design, sanitary sewer design, water quality modeling, stormwater plan implementation, general stormwater planning, reviewing development plans, and preparing Stormwater Pollution Prevention Plans for a variety of civil engineering related construction projects. Derek has experience using Autodesk Civil 3D design software and ArcMap 10 analysis. He has additional experience in hydraulic design using HydroCAD, Autodesk Storm and Sanitary Analysis, XPSWMM, HEC-RAS, and HEC-HMS.

#### Experience

#### **Design Experience**

- 2018 Street and Alley Improvements, City of Two Harbors, MN
- West Point Douglas Road, City of Cottage Grove, MN
- Black Beach Campground, City of Silver Bay, MN
- 2019 South Interceptor North Forestview Stormwater Outlet, City of Baxter, MN
- Hamburg Avenue Improvements, City of Lakeville, MN
- B Line, Robert District Sanitary Analysis, City of Inver Grove Heights, MN
- Woodbury Public Works Building Expansion, City of Woodbury, MN
- Bridlewood Farms Street & Utility Improvements, City of Woodbury, MN
- 2018 Roadway Rehabilitation Project, City of Woodbury, MN
- Clear Lake Water Quality Improvements, City of Forest Lake, MN
- Safe Routes to School, City of Forest Lake, MN
- Street & Utility Improvements, City of Apple Valley, MN
- Kenyon Avenue Reconstruction, City of Lakeville, MN
- Street & Utility Improvements, City of Scandia, MN
- Hadley Avenue Street & Utility Improvements, City of Cottage Grove, MN

#### **Field Experience**

- Empire Township Stormwater Pond Assessment, Empire Township, MN
- Forest Lake MS4 Stormwater Pond Assessment, City of Forest Lake, MN
- Donegal South Utility Improvements, City of Maple Grove, MN
- Northfield Stormwater Pond Assessment, City of Northfield, MN





## Eric R. Wilfahrt, L.S. Survey Manager



Bachelor of Science - Land Surveying St. Cloud State University

Associate of Applied Science - Land Surveying Technology South Central College

Associate of Applied Science - Civil Engineering Technology South Central College

## Registration

Licensed Land Surveyor, Minnesota

## Organizations

Minnesota Society of Professional Surveyors

National Society of Professional Surveyors

### Summary

Eric likes to complete projects that have complex and challenging right-of-way and boundary determinations. He is a project surveyor who manages survey operations for the firm's south metro locations. He began his surveying career in 2004. He is responsible for researching, preparing, calculating, interpreting, and writing legal descriptions related to ALTA, topographic, plats, boundary, and engineering surveys. He has additional quality control and oversight duties. Eric is proficient in AutoCAD, AutoCAD Map, COGO, CG-Survey for AutoCAD, Eagle Point Software, Civil 3D, Trimble Business Center, Leica Cyclone 9, and Leica Topo II Software.

#### **Experience**

#### Land Acquisition and Control Surveys

- CSAH 42 Right-of-Way Plat, Dakota County, MN
- CSAH 42 Right-of-Way Plat, Scott County, MN
- CSAH 12 Right-of Way Plats, Scott County, MN
- Right-of-Way Plat, City of Hopkins, MN
- Right-of-Way Plats, City of Jordan, MN
- Official Map, City of Burnsville, MN
- Official Map, Olmsted County, MN
- Right-of-Way Plat, City of Waconia, MN
- CSAH 44 Right-of-Way Plat, Scott County, MN
- CSAH 27 Right-of-Way Plat, Scott County, MN
- CSAH 12 Right-of-Way Plat, Wright County, MN
- Hennepin Avenue/Lyndale Avenue Improvements, City of Minneapolis, MN
- St. Anthony Parkway and Bridge Improvements, City of Minneapolis, MN
- Granary Road Improvements, City of Minneapolis, MN
- HARN Leveling, City of Golden Valley, MN

#### **Construction Staking**

- Street & Public Utility Improvements, City of Elko, MN
- Street & Public Utility Improvements, City of Hopkins, MN
- Street & Public Utility Improvements, City of Burnsville, MN
- Street & Public Utility Improvements, City of Prior Lake, MN
- CSAH 96 Reconstruction, Ramsey County, MN
- Glen Road, City of Newport, MN
- Chili's Restaurant, City of Shakopee, MN
- Public Trail, City of Elko New Market, MN
- Marschall Road (CSAH 17) and Vierling Drive Improvements, City of Shakopee, MN



#### Subdivision Platting and Development

- Registered Land Survey, Shakopee Mdewakanton Sioux Community
- Tacoma West Industrial Park, City of Norwood Young America, MN
- Cannon Greens, City of Cannon Falls, MN
- Curren Addition, City of Lakeville, MN
- Registered Land Surveys, City of Jordan, MN
- Lone Oak Center, City of Eden Prairie, MN
- Crossroads Station, City of Plymouth, MN
- Big Lake Center C.I.C., City of Big Lake, MN
- Forest Park Heights, City of Burnsville, MN
- U-Haul Addition, City of Burnsville, MN
- Vista View 9th Addition, City of Burnsville, MN

#### **Topographic and Design Surveys**

- 2<sup>nd</sup> Street Sanitary Sewer Improvements, City of Hopkins, MN
- Granary Road, City of Minneapolis, MN
- Wal-Mart Site in Waverly, IA, Wal-Mart Stores, Inc.
- Performing Arts Center, City of Burnsville, MN
- 18th Avenue Trail NE, City of Minneapolis, MN
- Church Street, City of Elko New Market, MN
- NE Penn Drainage Area Survey, City of Bloomington, MN
- Hennepin Avenue/Lyndale Avenue Improvements, City of Minneapolis, MN
- St. Anthony Parkway and Bridge Improvements, City of Minneapolis, MN
- Dinkytown Greenway, City of Minneapolis, MN
- State Capital Complex Topographic and Boundary Survey, State of Minnesota Real Estate and Construction Services

#### **Mining and Landfill Surveys**

- Demolition Landfill Topographic Survey in Nicollet County, M.R. Construction
- Landfill Records Research, Various Sites in Minnesota, MPCA



## Douglas A. Bisek, CST III Senior Survey Crew Chief



Bachelor of Science - Business Administration University of Minnesota, Waseca

## Certifications

National Society of Professional Surveyors

• Certified Survey Technician, Level III - Construction

eRailSafe System Badge, BNSF Contractor

## Training

40-Hour HAZWOPER Training

## Organizations

Minnesota Society of Professional Surveyors

### Summary

Doug joined Bolton & Menk in 1999. He is a survey crew chief responsible for field operation of municipal and private surveying services including construction staking, topographic, boundary, and ALTA surveys. He is proficient in the use of survey instrumentation, including Trimble Robotic Total Station, Trimble Survey Controllers, Trimble GPS Equipment, and Trimble Dini Level. Doug has experience with a variety of civil, municipal, and transportation projects. He enjoys working with clients to provide real solutions to their projects.

#### Experience

#### Topographic and Design Surveys

- CSAH 33 Reconstruction, McLeod County, MN
- CSAH 3 (Excelsior Boulevard) Reconstruction, Hennepin County, MN
- CSAH 32 Reconstruction, Carver County, MN
- CSAH 44 Reconstruction, Ramsey County, MN
- CSAH 42 Reconstruction, Dakota County, MN
- CSAH 50 Reconstruction, Dakota County, MN

#### **Construction Staking**

- CSAH 96 Reconstruction, Ramsey County, MN
- I-494/Tamarack Road Interchange, City of Woodbury, MN
- CSAH 30 Reconstruction, Carver County, MN
- CSAH 12 Reconstruction, Scott County, MN
- US 61 Reconstruction, City of Red Wing MN

#### Boundary and ALTA/ACSM Land Title Surveys

- Surveys of Several Properties in Minneapolis, North Central University
- Burnsville Bluffs Park 2<sup>nd</sup> Addition, Smith Roberts National Corporation
- Part of SW-SE and SE-SW of Section 24, Twp. 31, R. 24, Hom Furniture
- Lots 1, 2, and 3, Block 1, Crystal Town Center, Paster Enterprises
- Lot 2, Block 1, Hall-Gilbert Addition and Part of Outlot B, Donnays Oak Park 15<sup>th</sup> Addition, Jones Walker
- Part of SE-NE of Section 15, Twp. 31, R. 24 and part of the SW-NW of Section 14, Twp. 31, R. 24, Jones Walker

### **Geodetic Control Surveys**

- 2<sup>nd</sup> Order, Class 1, Vertical Control Survey to HARN Stations in Polk County, MnDOT
- 2<sup>nd</sup> Order, Class 1, Vertical Control Survey to New and Existing City and MnDOT Benchmarks, City of Golden Valley, MN
- HARN Observations of Geodetic Monuments, MnDOT

## **Airport Surveys**

- Airport Topographic, and Construction Staking, City of Faribault, MN
- Airport Topographic and Construction Staking, City of Hayward, WI





## Cesar Daniel Donayre Senior Natural Resources Specialist



Bachelor of Arts - Environmental Studies University of North Carolina, Wilmington

MN Certified Wetland Delineator #1191

Professional Wetland Scientist

#### Organizations

Minnesota Wetland Professionals Association

Society of Wetland Scientists

### Summary

Dan is responsible for coordinating with state and federal agencies to work through difficult aquatic resource delineations and permitting. He thoroughly enjoys being a part of transforming a once bleak landscape into a vibrant, selfsustaining ecosystem. He began his wetland duties in 2006 and has conducted hundreds of wetland delineations, GPS surveys, and MnRAM analyses. Dan has successfully completed Wetland Conservation Act (WCA), Minnesota Department of Natural Resources, and U.S. Army Corps of Engineers permitting processes related to type and boundary applications, replacement plans, de minimis applications, exemption applications, no loss applications, and banking plans. He also acts as the local government unit (LGU) for several communities. His duties as LGU include reviewing applications under the WCA, organizing and leading technical evaluation panel meetings, and issuing notices of decision.

#### **Experience**

#### Wetland Delineations and Permitting

- CSAH 83 Reconstruction Mitigation and Permitting, Shakopee Mdewakanton Sioux Community
- Mississippi River Trail, City of Anoka, MN
- Judd Street Mitigation, City of Marine on St. Croix, MN
- Clear Lake Water Quality Improvements, City of Forest Lake, MN
- Minnesota River Greenway Trail, MnDNR
- I-90 Off-Site Wetland Delineation, MnDOT
- North Mine Wetland Delineation, Unimin Corporation
- Settlers Parkway, City of Buffalo, MN
- Water Resource Management Plan, City of Ramsey, MN
- Perry Regional Airport, City of Perry, IA
- Virgo Street Improvements, North Branch Township, MN

#### Wetland Restoration Design and Monitoring

- HRM Wetland Bank, Lac Qui Parle County, MN
- Dresselville Wetland Bank, Le Sueur County, MN
- Stevenson Wetland Bank, Nicollet County, MN
- North Mankato Wetland Bank, Nicollet County, MN
- Sibley Meadows Wetland Bank, Sibley County, MN
- Kingman Wetland Bank, Renville County, MN
- McCorckle Wetland Bank, Sac County, IA

