

## Proposal for

# Future Business Park RFQ

City of Ramsey, MN



January 5, 2015

### Submitted by:

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# BOLTON & MENK, INC.®

## Consulting Engineers & Surveyors

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January 5, 2015

Mr. Patrick Brama  
Economic Development Manager  
City of Ramsey  
7550 Sunwood Drive NW  
Ramsey, Minnesota 55303

RE: Request for Quotes  
Future Business Park

Dear Mr. Brama:

We appreciated the opportunity to discuss the Future Business Park with you and Bruce. Our proposal was prepared based on our conversations, the written Request for Quotes, and our understanding of the City of Ramsey and the opportunities this area has to offer. As you review our proposal, we hope you find:

**Our Team** has experience in Ramsey as well as the capabilities required to complete the project. **Kevin Bittner** and **Chris Chromy** are Principals in our firm and will lend their experience and knowledge of the area to the project team. Each will serve in a QA/QC role, with little to no time charged to the City. **Kevin Kielb** (Municipal) and **Bryan Nemeth** (Traffic) will lead and guide the majority of the work effort, with support from **Ross Tillman** and **Jason Cook**. Each has played a role in recent projects completed in Ramsey and each understands the importance of this project for future City growth.

**Our Recent Experience** in the area will be a benefit to moving the project forward. Recent experienced gained in the last year include the TH 10 Study, Mississippi River Trail projects, assistance with Riverdale Drive storm water analyses, and assistance with the Local Road Improvement Program funding application. We understand the City's needs and have a unique insight into traffic patterns and future growth opportunities in Ramsey.

**Our Commitment** to you is as both a consultant and a neighbor. We are across the street and are readily available to meet and discuss issues as they arise. Additionally, we have a vested interest in seeing Ramsey continue to grow in an effective and responsible manner.

Respectfully submitted,

**Bolton & Menk, Inc.**

Kevin F. Bittner, P.E.  
Principal Engineer/Ramsey Office Manager  
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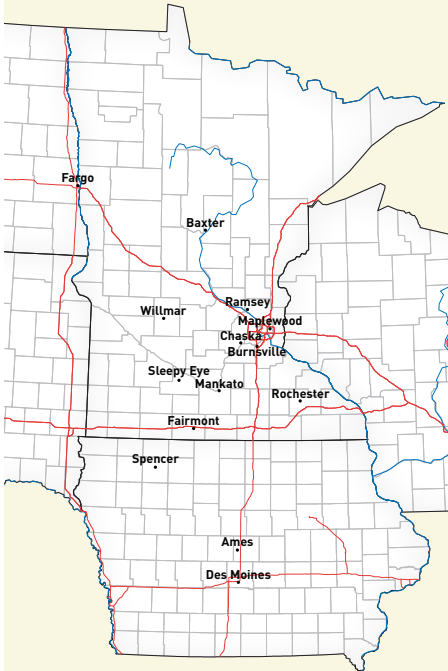


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## Firm Background



At Bolton & Menk, Inc. our staff is trained to consider new and innovative technologies in designing, planning and building for tomorrow. Ever since John Bolton and Martin Menk founded the company over six decades ago, we have been committed to improving quality of life through engineering excellence and client service. Today, Bolton & Menk, Inc. has over 325 employees including a professional staff of over 125 engineers, planners, landscape architects and surveyors.

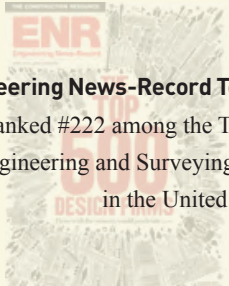
In serving cities of all sizes for more than 65 years, we have become experts in providing essential community services such as reconstruction, expansion and maintenance of public infrastructure. As city needs have grown more complex and diversified, we have added corresponding specialized expertise in many service areas.

Beyond our technical experience and engineering skills, our ability to serve cities is also based on management and product delivery strategies we have developed over time:

- Learning and adapting to each city's standards and processes
- Early definition of the project, goals and expectations
- Staff retention that provides our clients with consistent & familiar staffing
- Proactive communication with city staff, stakeholders and the public
- Following through on all aspects of project delivery, start to finish

### Engineering News-Record Top 500

Ranked #222 among the Top 500 Engineering and Surveying Firms in the United States.



### Services Provided:

- Civil and Municipal Engineering
- Water and Wastewater Engineering
- Traffic and Transportation Engineering
- Aviation Planning and Engineering
- Water Resources Engineering
- Environmental Review Services
- Landscape Architecture Services
- Surveying and Mapping

Bolton & Menk's success with municipalities is grounded not only in these technical and managerial approaches, but also in a commitment to customer service and client satisfaction. We realize that our clients can choose from a number of municipal consultants. Consequently, we must continually strive to not only be a reliable technical resource, but also a responsive partner with the ability to listen to and understand the unique needs of each city, resulting in a truly collaborative and successful relationship.

Bolton & Menk has completed numerous projects in Ramsey, including traffic related analyses, storm sewer analyses and feasibility studies in and around the study area. We will use this knowledge as we work to complete the current study. More detailed explanations of our project understanding, experience and proposed staffing is presented in the subsequent pages of this proposal.



# Project Understanding

The City of Ramsey continues to see growth as the area eases its way out of the recent recession. As growth continues to occur in and around the COR area, the City is seeing pressure to prepare new areas for development. The City is currently considering the large area west of Armstrong Boulevard, east of Puma Street, north of T.H. 10 and south of Alpine Drive. To help understand the improvements required for the area, the City has requested for proposals for preparation of the following documents:

- Traffic Impact Study
- Feasibility Report
- Preliminary Design Layout

Consideration will be given to phasing strategies for implementation of the improvements. Additional information related to our understanding of required services is included in our Scope of Services section of this proposal.

## Schedule

The project is on a fast paced schedule, with Award to the successful consultant at the latter part of January and completion of all services by the end of March. An outline for our proposed schedule for the improvements follows. Refinements are anticipated based on City staff availability for meetings.

Notice to Proceed	January 21, 2015 (Day after City Council Meeting)
Kick Off Meeting	January 22nd (or as soon as possible after Notice)
Begin Traffic Counts and Data Collection	January 22nd
Update Meeting	February 19th
TIS and Feasibility Report to City	February 28th
Update Meeting	March 19th
All Deliverables to City	March 28th

## Jurisdictional Authority/Approvals/Permits

As the project moves from the planning stages to design and construction, permits will be required from various agencies. Understanding and planning for requirements associated with obtaining permits and approvals at this time will be critical to the ultimate success of the process. The City may want to consider involving agencies such as Anoka County as a planning partner during the course of the study. The following agencies will be permitting entities for considered improvements:

- Minnesota Pollution Control Agency: NPDES Storm Water Permit
- Minnesota Pollution Control Agency: Sanitary Sewer Extension Permit
- Minnesota Department of Health (MDH): Watermain Extension and Dewatering

# Project Understanding

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- Anoka County: Work in Right of Way
- Lower Rum River Watershed Management Organization: Storm Water

## Recent Improvements

Bolton & Menk assisted the City of Ramsey with a feasibility study related to improvements in the area in 2010 and 2011. The street and utility improvements completed at that time included:

- Extension of sanitary sewer along the west side of Armstrong Boulevard from just north of Sunwood Drive to Bunker Lake Boulevard,
- Extension of watermain from the east side of Armstrong Boulevard to the west side of Bunker Lake Boulevard,
- Extension of sanitary sewer and watermain in newly platted Bunker Lake Boulevard right-of-way,
- Development of a storm sewer system to service the street and right-of-way requirements,
- Extension of Bunker Lake Boulevard roadway,
- Paving of Puma Street, and
- Extension of a bituminous trail along Puma Street from Bunker Lake Boulevard to Alpine Drive.

All of the improvements completed at that time were consistent with the City's Comprehensive Plans.

## Combining Previous and Future Improvements

Significant consideration and planning was completed prior to completion of the improvements constructed in 2011. Understanding that process will be critical to analyzing future improvements. A description of past improvements, and a discussion of anticipated future improvements is described below. The study area is depicted on Figure 1 at the back of this section.

## Street and Trail Improvements

### Bunker Lake Boulevard

The previous improvements provided a two-lane roadway from Armstrong Boulevard to Puma Street. The roadway was designed to allow for future widening and expansion as development and other potential transportation improvements surrounding the area increased traffic on this roadway. It is anticipated that ultimate expansion of Bunker Lake Boulevard to two lanes in each direction with center turn lane will be required with future development along Bunker Lake Boulevard.

The Comprehensive Plan indicates that projected traffic on this roadway could be 11,000 ADT if the street is part of a future Mississippi River crossing. Without being part of a River crossing, the Comprehensive Plan provides 20-year projections of 5,000 ADT.

The roadway was located within the right-of-way to provide future flexibility in roadway expansion with minimal modifications to what will be constructed.

# Project Understanding

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As a portion of this project, we will analyze roadway capacities and determine the best solution for expanding the roadway.

## **Puma Street**

Puma Street received only minimal improvements, being widened from 18 feet width to 24 feet and paved with 2 inches of bituminous over 6 inches of aggregate base. In the future, a more significant upgrade to the roadway will be required.

Previously, a 32 foot wide street with curb and gutter with full base and pavement improvement was suggested. We will analyze needs for this roadway segment.

## **Bituminous Trails**

A 10-foot wide bituminous trail along the north side of the Bunker Lake Boulevard from Armstrong Boulevard to Puma Street and on the west side of Puma Street from Bunker to Alpine Drive was constructed previously.

Needs for additional trails in and around the project area will be reviewed.

## **Intersections**

Bunker Lake Boulevard and Armstrong Boulevard was reconstructed to include turn lanes and signalization. This is one of four intersections requiring analysis per the Request for Proposals. All of the locations to be studied include the intersections directly affected by the study area:

- CSAH 83 (Armstrong Boulevard) at CSAH 116 (Bunker Lake Boulevard)
- CSAH 83 (Armstrong Boulevard) at Alpine Drive NW
- Alpine Drive NW at Bunker Lake Boulevard
- Alpine Drive NW at Puma Street NW

Because two of the roadways involved in the analysis are under Anoka County jurisdiction, County involvement will be required during the analysis.

Intersection capacities and needs (turn lanes, intersection control requirements, etc.) will be evaluated as a portion of the project.

## **Sanitary Sewer Improvements**

Sanitary sewer was extended north along the west side of Armstrong Boulevard from 146th Avenue/Sunwood Drive NW to Bunker Lake Boulevard, a distance of 1,430 feet. To meet the Comprehensive Sanitary Sewer Plan and serve additional areas beyond the study area, a 21-inch sewer main was required. It was intended to extend the 21-inch trunk sewer further to the north an additional to service Fire Station No. 1 and the proposed future location of the water treatment plant.

# Project Understanding



In accordance with the Comprehensive Plan, an 18-inch sanitary sewer was be extended westward in Bunker Lake Boulevard a distance of approximately 2,750 feet. This line will provide service to the study area, as well as future development that may occur on the south side of Bunker Lake Boulevard, and could be further extended in accordance with the Comprehensive Plan.

The image to the left (from the City’s 2012 Comprehensive Sanitary sewer Study) depicts 18-inch trunk sanitary sewer extended to west of Armstrong Boulevard through the study area.

## Water Distribution and Supply Improvements

Watermain was extended across Armstrong Boulevard from the main on the east side of Armstrong. From there, the watermain was further extended westward in Bunker Lake Boulevard, a distance of approximately 2,750 feet.



It was then planned to extend this trunk watermain west to Puma Street and north to Alpine Drive via Puma Street to provide future looping and provide water to unserved areas and future developments. Loops within the development will then be utilized to promote reliability and functional flexibility as well as promoting fresh water moving throughout the system.

It was previously determined that the elevated storage for the City of Ramsey is adequate to provide fire flow to the study area. The distribution system was also found to be adequate to move the water from the City’s three towers to the study area.

## Additional Consideration:

**The right-of-way of Bunker Lake Boulevard could be utilized for a future route of a 30-inch raw watermain from a future intake on the Mississippi River to the proposed site of the water treatment plant, just south of Fire Station No. 1. Because the exact location of the intake and raw watermain alignment had not yet been determined, no provisions were made during the previous improvements. This future watermain corridor should be evaluated with the current analysis.**

The image to the left (from the City’s 2012 Comprehensive Water System Study) depicts trunk water facilities extended to west of Armstrong Boulevard through the study area.

## Storm Water Management

Drainage for the study area is essentially sheet flow to the center of the site to existing wetlands, and then easterly through the wetlands and through a culvert under Armstrong Boulevard.

Our understanding is that a storm sewer system was installed in Bunker Lake Boulevard to manage the storm water runoff within the right-of-way. We anticipate that this included considerations for the future widening and extension of Bunker Lake Boulevard as well.

# Project Understanding

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Storm water retention ponds will be required to control the runoff from the study area in accordance with the City's Surface Water Management Plan requirements. We will work with the City to determine storm sewer piping and ponding needs for the entire area, including both public and private land areas.

## Right-of-Way Requirements

We will analyze all improvement area for Right of Way and easement requirements. While it is anticipated that most of the improvements will be development driven, and Right of Way secured through the platting process, understanding and documenting the needs will be critical. The City can then provide that documentation to developers as they begin to consider options within the study area.

## Phased Improvements

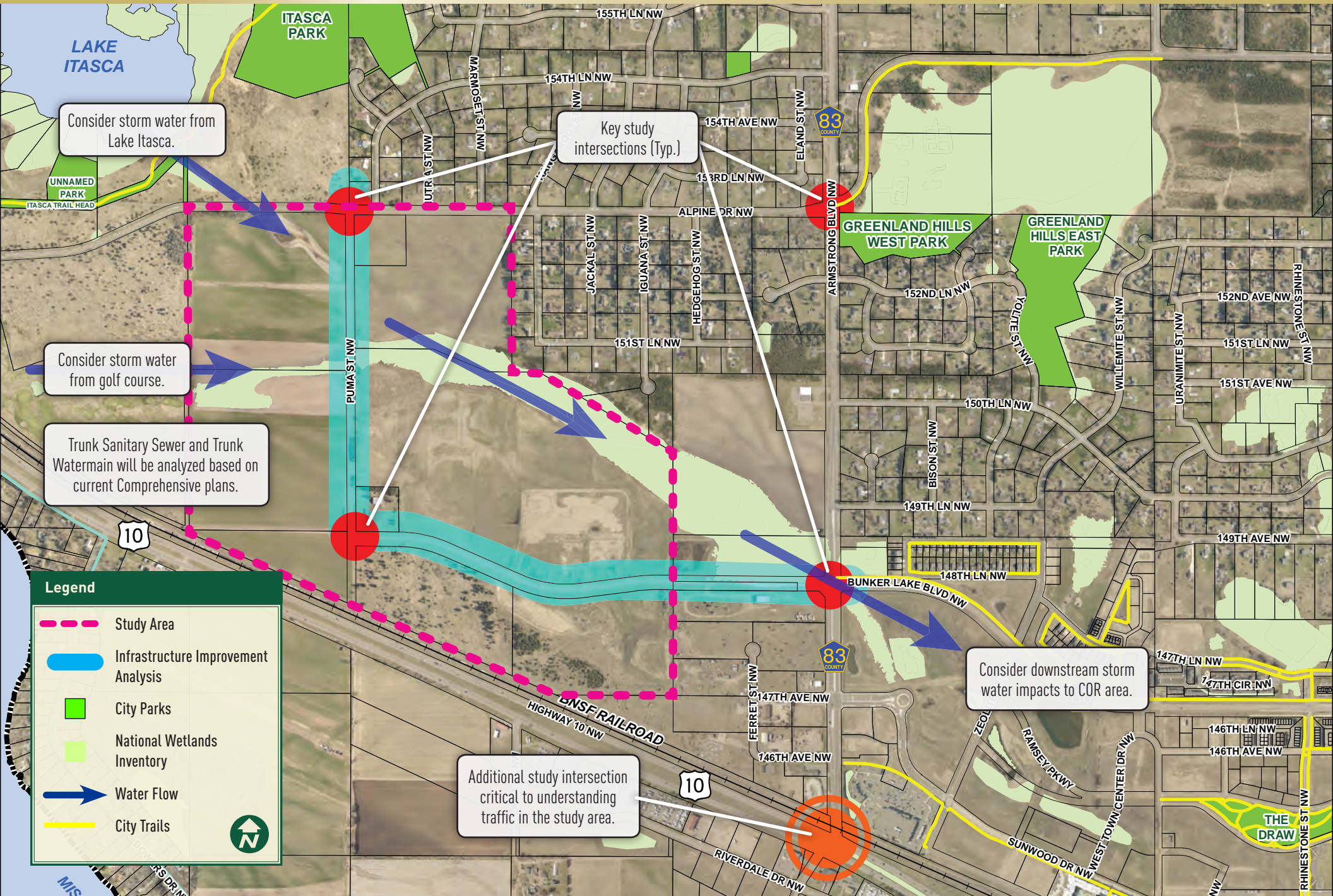
While there is a general understanding of the improvements required to ultimately serve the area, sequencing of the improvements will need to be considered. We will work with the City to develop useable information to allow for the consideration of phased improvements. This could include widening Bunker Lake Boulevard as the next phase of improvements, while Puma Street improvements could occur in future phases. Costs for each phase will be developed to allow for the City to plan for the sequenced implementation of the improvements.

## Regional Storm Water Management Plan

While requested as an additional service item in the Request for Quotes, we recommend proceeding with the regional storm water analysis at this time. With Lake Itasca and the golf course located immediately west of the study area, there is limited space available in the upstream end of the watershed. Immediately downstream lies the COR area of Ramsey. Any improvements to this area will need to consider not only site drainage, but conveyance, storage and maintenance of storm water on a more regional basis.

In 2010, Botlon & Menk assisted the City in developing a Surface Water Management Plan (SWMP), Wetland Management Plan, and associated regional stormwater modeling. The regional modeling included subcatchment runoff, surface storage volume, culvert crossing and storm sewer, and overland flow routing calculations through the Lake Itasca watershed and the future business/residential park. The City can rely on our extensive knowledge of the local drainage patterns and wetland system to develop stormwater management concepts that function organically as development occurs.

# Future Business Park RFQ



Consider storm water from Lake Itasca.

Consider storm water from golf course.

Trunk Sanitary Sewer and Trunk Watermain will be analyzed based on current Comprehensive plans.

Key study intersections (Typ.)

Consider downstream storm water impacts to COR area.

Additional study intersection critical to understanding traffic in the study area.

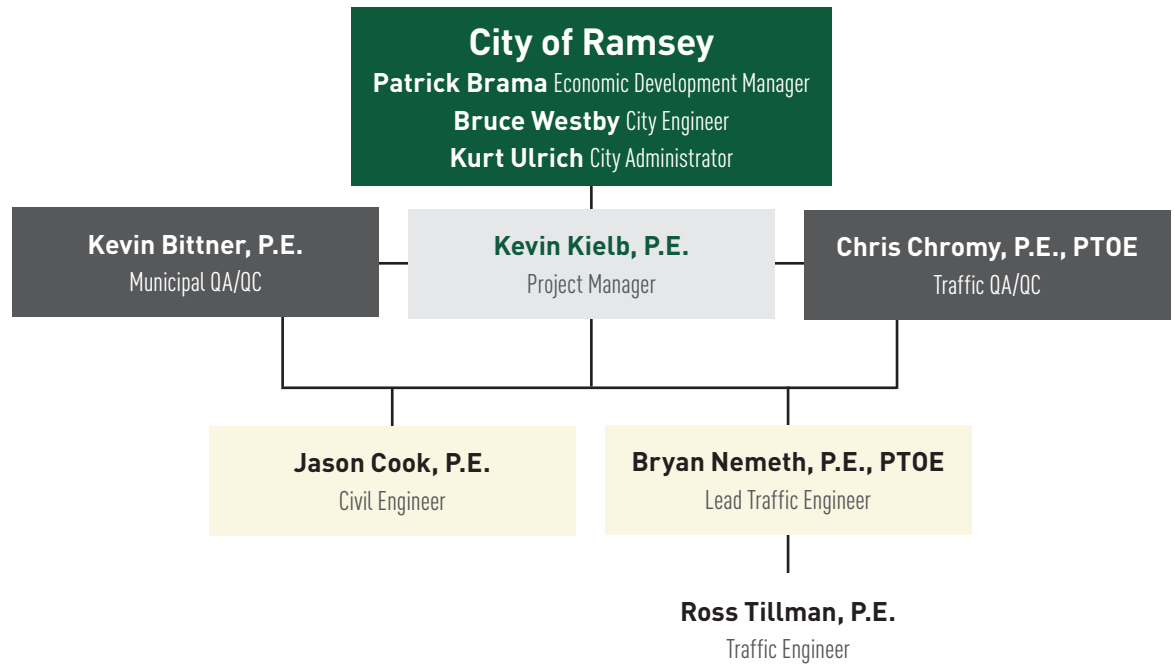
**Legend**

- Study Area
- Infrastructure Improvement Analysis
- City Parks
- National Wetlands Inventory
- Water Flow
- City Trails



# Key Personnel

The following is a summary of the proposed key personnel and their roles and responsibilities for this project. Detailed resumes for the key personnel can be provided upon request.



**Kevin Kielb, P.E.** will serve as the Project Manager and will provide a review of all documents. He will oversee quality assurance throughout the project process and be responsible for committing sufficient personnel and resources to accomplish the project work plan within the time frame defined. He will work closely with the project manager to ensure the study goals are met, provide study review, and will be critical in making sure the City’s needs are met.

**Kevin Bittner, P.E. and Chris Chromy, P.E., PTOE** will serve in QA/QC roles for the project. Kevin is the Ramsey Office Manager and Chris is the Transportation Group Manager. Kevin has extensive knowledge of this area through previous studies completed in 2010 and 2011, while Chris’s involvement in the recent T.H. 10 Study will provide insights into future corridor growth that could impact the study area.

**Bryan Nemeth, P.E., PTOE** will serve as the Lead Traffic Engineer. Bryan has worked on numerous projects that have required traffic modeling, forecasting, safety, and operations/capacity analysis. He has experience in completing traffic studies for cities throughout the region, from small scale residential developments, to high-rise commercial/residential towers, schools, and large scale big-box retailers. He is currently working with MnDOT on developing a training program for analysis of unsignalized pedestrian crossings. His proactive approach and open communication with the team, client, and stakeholders, will be a key to successful delivery of the traffic study.

# Key Personnel

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**Ross Tillman, P.E.** will assist Bryan in completing the analysis efforts. He is experienced in traffic forecasting using multiple methodologies including ITE trip generation manuals and the Metropolitan Council Model. He is also well versed in ITE trip generation and traffic operations and simulation analysis using Synchro, SimTraffic, CORSIM, VISTRO, and VISSIM, along with HCS. He will be involved in the analysis, developing recommendations and writing the formal report. He has completed traffic studies for cities, counties, and MnDOT. He will also direct field data collection efforts that will be essential in evaluating existing conditions and correctly calibrating models.



**Jason Cook, P.E.** will assist Kevin Kielb in preparation of the Feasibility Report. Mr. Cook is a Project Engineer with experience in municipal engineering. Since beginning his career in 2004, he has gained a wide range of experience in project administration from conception through construction. His background includes development and design of municipal reconstruction projects, including street construction, sanitary sewer systems, water distribution systems, storm water collection systems and pedestrian facility construction. His administrative duties have included preliminary engineering reports, preliminary and final design cost estimates, attendance at city council meetings, bidding assistance and construction administration. In addition, Mr. Cook has assisted in training young E.I.T.'s on proper construction observation skills and is an expert in water system modeling.



## Similar Work Experience

Bolton & Menk has a long history working with the City of Ramsey and also working with communities on projects similar to the Future Business Park area. Projects we have completed within Ramsey include:

- 1.5 MG Elevated Water Tower, City of Ramsey, Minnesota
- 167th Avenue Improvements, City of Ramsey, Minnesota
- Armstrong Boulevard Trail Improvements, City of Ramsey, Minnesota
- Comprehensive Sanitary Sewer and Water Plans, City of Ramsey, Minnesota
- Comprehensive Sanitary Sewer Planning and Construction, City of Ramsey, Minnesota
- Comprehensive Transportation Plan, City of Ramsey, Minnesota
- Comprehensive Water System Study, City of Ramsey, Minnesota
- Environmental Assessment Worksheet (EAW) for the Ramsey Crossings Commercial Development, City of Ramsey, Minnesota
- Environmental Assessment Worksheet for Pulte Homes Development, City of Ramsey, Minnesota
- Environmental Assessment Worksheets (EAW) for the Oakwood Development and Marigold Pond, City of Ramsey, Minnesota
- Marigold Pond EAW, City of Ramsey, Minnesota
- Mississippi Trunk Sanitary Sewer Extension EAW, City of Ramsey, Minnesota
- Northwest Water and Sewer Expansion, City of Ramsey, Minnesota
- Project 'Delta', City of Ramsey, Minnesota
- Ramsey Boulevard, City of Ramsey, Minnesota
- Section 106 Reviews, City of Ramsey, Minnesota
- Surface Water Management Plan, City of Ramsey, Minnesota
- Surface Water Treatment Pilot Project, City of Ramsey, Minnesota
- Town Center Development, City of Ramsey, Minnesota
- Traffic Impact Studies, City of Ramsey, Minnesota
- Trunk Sanitary Sewer Extension, City of Ramsey, Minnesota
- Water Resources Management Plans in Rapidly Growing Metropolitan Areas, Cities of Ramsey (2007), Belle Plaine (2006), Elko (2005), Norwood Young America (2004), Watertown (2004), Jordan (2003)
- Water System Study, City of Ramsey, Minnesota
- Well No. 6 and Raw Watermain Extension, City of Ramsey, Minnesota
- Wells No. 7 & 8, Raw Watermain Extension, Wellhouse No. 4, City of Ramsey, Minnesota

The following pages provide a listing of projects similar in scope to the current Request for Quotes.

# Similar Work Experience

## **Business Park, City of Annandale**

### **Mark Casey now serves as the City Administrator for the City of St. Anthony Village**

The City of Annandale's existing Business Park had reached its capacity resulting in the need for expansion. The Annandale City Council identified property for the proposed expansion and turned to Bolton & Menk, Inc. their City Engineer to prepare the legal descriptions necessary for the property acquisition. After the property had been acquired, Bolton & Menk prepared preliminary and final plats for the property. As the property was being platted, Bolton & Menk completed a Preliminary Engineering Report for the project. Through that process, Bolton & Menk identified the potential to provide City utilities to the Business Park Expansion area while allowing for the future development of 200 acres of adjacent City property. Through the process, the City of Annandale was able to serve the immediate needs of the Business Park expansion area while planning for the future development of their existing property. Bolton & Menk's planning resulted in reduced capital and maintenance costs for the City into the future.

Bolton & Menk, Inc. completed grading, drainage, erosion control, storm water pollution prevention, and utility construction plans for the project and managed the construction through completion. The project included the design and construction of approximately 1,500 feet of bituminous roadway with concrete curb and gutter. The utilities designed and constructed consisted of 12-inch diameter watermain, hydrants, and 6-inch industrial services, 8-inch diameter sanitary sewer mainline with 6-inch service laterals, and 12-inch to 27-inch diameter storm sewer with 12-inch and 15-inch services.

## **Marketplace East Industrial Park, City of Big Lake**

### **Scott Johnson now serves as the City Administrator for the City of Medina**

A developer approached the City Council regarding the construction of a private Industrial Park and requested a 429 Financing Agreement. Given the City's financial stake in the project, Bolton & Menk, (the City Engineer) was directed to prepare the plans, specifications, and bidding documents and manage the construction of the project through completion.



The project consisted of the design and construction of approximately 2,400 feet of bituminous roadway with concrete curb and gutter and sidewalk. The utilities designed and constructed consisted of 12-inch diameter watermain, hydrants, and 8-inch industrial services, 10-inch to 12-inch diameter sanitary sewer mainline with 6-inch industrial service laterals, and 12-inch to 33-inch diameter storm sewer with 12-inch industrial services.

Upon completion of the project, approximately 100 acres had access to City utilities for development. In addition to preparing the construction documents and managing the project, Bolton & Menk, Inc. also prepared assessment rolls and assisted City staff with the assessment process.

# Similar Work Experience

## Industrial Park Expansion, City of Big Lake

### Scott Johnson now serves as the City Administrator for the City of Medina

The City of Big Lake Economic Development Authority was interested in expanding their existing Industrial Park and identified 40 acres adjacent to their park as the expansion area. Bolton & Menk, Inc. prepared legal descriptions required for the purchase of the property as well as preliminary and final plat documents. Bolton & Menk prepared a Preliminary Engineering Report for the approval of the Economic Development Authority and City Council. When the property was purchased, a homestead with a house and outbuildings existed on the property. During the design of the project, Bolton & Menk, Inc. developed a plan and obtained all necessary regulatory permits for the removal of the existing structures, well, and septic system in accordance with all permit requirements.

Bolton & Menk, Inc. completed grading, drainage, erosion control, storm water pollution prevention, and utility construction plans for the project and managed the construction through completion. Since a wetland existed on the site, Bolton & Menk obtained all necessary MnDNR and wetland permits and incorporated the protection of the wetland into the project's storm water management plan. Prior to the design of the project, no users were identified for the Industrial Park. Bolton & Menk researched the City's Zoning Ordinance and worked closely with City Planning Staff to determine maximum impervious surface areas so that the Park's regional storm water pond could be designed to accommodate all potential users which maximized the saleable property area.

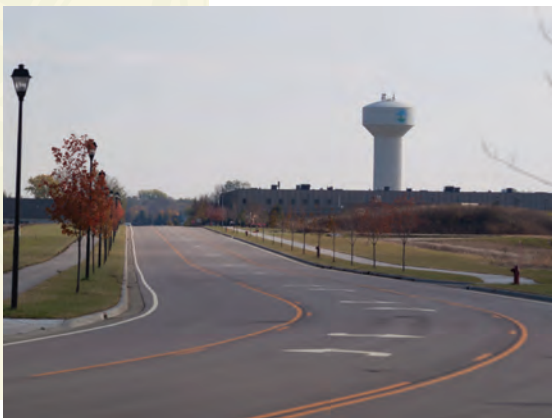
The project included the design and construction of approximately 1,800 feet of bituminous roadway with concrete curb and gutter. The utilities were designed and constructed consisted of 12-inch diameter watermain, hydrants, and 6-inch industrial services, 10-inch to 15-inch diameter sanitary sewer mainline with 6-inch industrial service laterals, and 12-inch to 33-inch diameter storm sewer with 15-inch industrial services.

## Tacoma West Industrial Park, City of Norwood Young America

Bolton & Menk prepared plans and specifications for a new 60-acre Industrial Park in the City of Norwood Young America. The project included construction of a 21" trunk sanitary sewer and construction of a new regional lift station and 12" forcemain to the City's Wastewater Treatment Facility. The project was successfully bid at \$2,900,000.

## Northport Industrial Park, City of North Mankato

As North Mankato's City Engineer for over 50 years, Bolton & Menk has been involved with all phases of the City's Northport Industrial Park. The latest expansion, completed in 2012, involved the construction of City streets and utilities as well as a County State Aid Highway (CSAH) and new interchange to facilitate the development of an additional 228-acres in the industrial park. The joint City/County project included the extension of Nicollet CSAH 41 to connect with the newly constructed TH 14/CSAH 41 interchange, as well as the extension of City streets Carlson Drive and Howard Drive. CSAH 41 was completed as a concrete paved roadway, while Carlson Drive and Howard Drive were completed as bituminous roadways.



# Similar Work Experience

In addition to the roadway construction, the project included the extension of trunk sanitary sewer and watermain to service the industrial lots, as well as the construction of a regional storm water detention pond. The project also involved the construction of a large 17-acre wetland bank.

Funding for the project included ATP Federal Aid grants, County State Aid funding, Municipal State Aid funding, City local option sales tax funds, utility enterprise funds, special assessments, and local City and County funds. The project was completed for a cost of \$8.5 million, not including the interchange construction.

## Industrial Park, City of Dawson

Bolton & Menk is assisting the City of Dawson, Minnesota with a critical infrastructure project to support current and future growth of the ag-processing cluster currently located in the industrial park. The services Bolton & Menk is providing include coordination with Federal EDA and Minnesota DEED; completing all required Federal EDA engineering reports; conducting preliminary design meetings with the City of Dawson funding agencies and all agencies required to oversee the successful completion of the project; prepare and submit applications, plans and reports to all agencies; attended a mandatory conference with Federal EDA staff along with supporting agencies; attendance at all meetings required to procure approvals; provide revisions to existing drawings as required; provide all inspections full and part-time including site visits by professional engineers; completing preliminary plans and cost estimates; completing final plans, specifications and cost estimates; secure required state and local approvals; completing proposed contract documents for bidding; provide surveillance of project construction to assure compliance with plans, specifications and contract documents.

The proposed project consists of improving the infrastructure in the 40 acre existing industrial park and developing a 65 acre industrial park on the east side of CSAH 37. The infrastructure improvements in the existing 40 acre industrial park include grading and finishing two existing gravel roads with curb and gutter, bituminous and storm sewers. In addition to the road improvements, a storm water treatment and rate control for the additional impervious area in west industrial park. The development of the east 65 acres consists of the installation of sanitary sewer collection utilities, industrial waste collection system, water utilities, bituminous roads, curb and gutter, storm sewer conveyance systems and a storm water pond for treatment and rate control.

Both the existing and new industrial park roads will also be illuminated. The project is proposed to be funded through a Federal EDA grant in the amount of \$1,189,500 and a \$500,000 Minnesota DEED grant. The remaining financing will be through the City and private investments.

## Waterview Business Park, City of Willmar

### Mel Odens now serves as MnDOT State Aid Engineer for D8

The Waterview Business Park in Willmar, Minnesota was approximately an 85-acre site that was graded for commercial retail lots. It consists of about 1.2 miles of paved road surface, 2.2 miles of B624 curb and gutter, 6,542 linear feet of sanitary sewer, 5,973 linear feet of ductile iron pipe watermain, and 7,202 linear feet of concrete storm sewer pipe. The site utilities were installed from October 2006 to August of 2007.

Street work was completed from May of 2007 to June 2008.



# Similar Work Experience

## **Torgerson Industrial Park, City of Jackson**

Bolton & Menk, Inc. assisted the City of Jackson and the Jackson Economic Development Corporation (JEDC) in the development of a new industrial and commercial park on the north side of the City. Bolton & Menk evaluated various sites in and near the City to determine feasibility and potential costs of development. Upon selection of a site, we provided master planning of the site to include street, utility and lot layout, as well as drainage evaluation.



The City of Jackson and the JEDC undertook the development of Phase I of the Torgerson Industrial Park in 2006. The improvement project consisted of approximately 1900 feet of street, utility, and drainage improvements. A storm water retention basin was developed for the site to meet federal, state, and local storm water runoff requirements, as well as to provide additional runoff rate control to downstream properties. The City utilized a state infrastructure grant program that provided fifty percent matching funds for the project. Improvements were completed in 2006, with paving of the new road completed in 2007.

## **Industrial Park Improvements, City of Howard Lake**

### **Kelly Hinnenkamp now serves as the City Administrator for the City of Annandale**

Bolton & Menk, Inc. was responsible for the development of a 20-acre industrial park for the City of Howard Lake, Minnesota. Services provided include the design of a storm water collection and storm water treatment system, comprehensive site grading plan, underground utilities, streets and turning and bypass lane construction on Trunk Highway 12. The project also included improvements to the City's trunk sanitary sewer collection and trunk water distribution systems to service the new 20-acre industrial park. The storm sewer system that was installed was designed to handle the total impervious surfaces of the completed industrial park. The project was completed by the City through a 429 process, as petitioned by the group of local developers. The project was completed at a construction cost of \$615,000.

## **Industrial Park Improvement Project, City of Marshall**

Bolton & Menk, Inc. was responsible for the development of a 45-acre industrial park for the City of Marshall, Minnesota. Services provided include the design of a storm water collection and ponding system, comprehensive site grading plan, underground utilities, streets and sidewalks. The project also included improvements to the City's trunk sanitary sewer collections system, and trunk water distribution system, along with the development of a storm sewer outfall for future developments in the vicinity of the new industrial park.

# Similar Work Experience

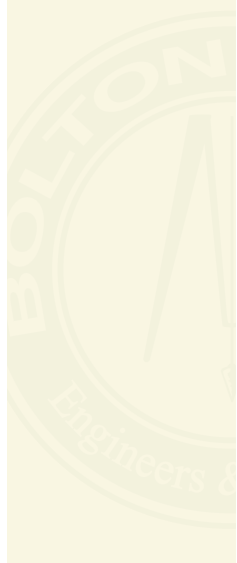
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## Eastwood Energy Industrial Park, City of Mankato



Bolton & Menk was selected by the City of Mankato to provide a low impact design for a new “Green by Design” 40-acre industrial park. The objective was to implement numerous innovative ideas including bioretention basins, bioswales and native prairie seedings to ultimately reduce the impact of development on the surrounding environment and waterways. Additionally, Bolton & Menk concentrated on an adjacent trail system along with trails and walkways throughout the park. The designs of these alternative transportation routes

were completed at narrower widths to reduce pavement throughout the park. The City plans to implement “green elements and ordinances” such as increased set-backs and less pavement to encourage sustainable design.





# Scope of Services

Bolton & Menk, Inc. has prepared our Scope of Services based on our understanding of the City's expected needs at this time as described in the Request for Quotes. Our Scope is divided into three primary categories:

- Traffic Impact Study
- Feasibility Report
- Preliminary Design Layout

While these three items result in identifiable final deliverables, preparation of each item will require interactions, adjustments and refinements with each of the other study components. For instance, the Traffic Impact Study will guide intersection requirements to be used in preparation of the Preliminary Design Layout, which is then used in the Feasibility Report phase to develop improvement costs. As such, while each task is presented individually below, all three tasks will be occurring simultaneously to achieve the final results.

The base of the entire process will be associated with the findings of the Traffic Impact Study. The results will largely drive the roadway requirements needed for the area.

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**We anticipate that the Traffic Impact Study and Preliminary Design Layout will ultimately be included as appendices to the feasibility Report to allow the City to have one consolidated document resulting from this project.**

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## Traffic Impact Study

### Task 1: Trip Generation

#### Task 1.1: Data Collection

##### Task 1.1A Existing Data

Bolton & Menk will request existing information from the City, County, State, and the Metropolitan Council as needed for the study. This includes:

- Data regarding anticipated site uses, including land use, size, site orientation, and other data as required to properly estimate traffic characteristics for the site,
- Recent existing traffic counts completed in the area including daily and peak hour volumes,
- Existing and proposed infrastructure improvements including roadway and intersection improvements,
- Copies of previous planning and environmental studies,
- Forecasts of future traffic volumes,
- Historic traffic growth rates,

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- Crash records and summaries, and
- Intersection signal design layouts and signal timing data for signalized intersections.

We understand that a portion of the above items will be completed by Bolton & Menk staff while preparing the Feasibility Report portion of the analysis. Where information is not readily available, data will be collected or assumptions made based upon the ITE Trip Generation Manual and other industry accepted sources.

## **Task 1.1B Analyze Existing Data and Collect Data**

Bolton & Menk will analyze existing data including traffic counts and geometrics. A field visit will be completed to verify the intersection geometry and traffic control, as well as include a visual check to identify hot spot locations, traffic operations, and congestion. The information used in the study to develop recommendations will be summarized.

Traffic counts to be used in the analysis will be collected at the following intersections:

- TH 10/169 at CSAH 83 (Armstrong Boulevard),
- CSAH 83 (Armstrong Boulevard) at CSAH 116 (Bunker Lake Boulevard)
- CSAH 83 (Armstrong Boulevard) at Alpine Drive NW
- Alpine Drive NW at Bunker Lake Boulevard
- Alpine Drive NW at Puma Street NW

The locations to be studied include the intersections directly affected by development of the study area and also an intersection (TH 10/169 at CSAH 83) that influences access to the entire area.

Peak Hour Turning Movement Counts will be collected for the AM peak period (generally 6:30-8:30) and the Afternoon/PM peak period (generally 2:30-6:30). The exact hours of collection will be determined after discussions with the City, County, and State.

## **Task 1.2: Development Traffic (Trip Generation and Distribution)**

The trip generation rate for the study area will be calculated using ITE Trip Generation Manual methodology. The distribution of the trips into and out of the study area to the roadway network will be based on the existing trip distribution and future forecasts trip distribution as available from planning models.

We understand that there is the potential for phased construction as the area develops. Trip rates will be developed at year of phase 1 of development, phase 2 of development, and at year 2040 or 20 years after build out of the property (i.e. 20 years after phase 2 complete). These trips will be input onto the existing roadway network.

## **Task 1.3: Traffic Forecasts**

### **Task 1.3A No-Build Traffic Forecasts**

Bolton & Menk will develop the “No-Build” traffic volumes at the specified counted intersections and critical roadways for the roadway network assuming an increase in background traffic. This background traffic growth will be determined using historical growth rates, school growth projections, and future 2040 traffic projections.

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Future turning movement volumes for the peak hours from the ADT forecasts will be determined using appropriate planning software and methodology.

## **Task 1.3B Build Traffic Forecasts**

Bolton & Menk will add the “No-Build” traffic volumes to the study area traffic volumes to develop the “Build” traffic volumes for the roadway network.

## **Task 2: Future Geometric and Intersection Control Needs**

This portion of the analysis will form a tie between the Traffic Impact Study and the Feasibility Report. Our analysis will provide the information required to complete the Preliminary Design Layout to be used for cost estimating, phasing, and impacts as the Feasibility Report is being prepared.

### **Task 2.1: Additional Build Traffic Forecasts**

Bolton & Menk will develop Build traffic volumes within the study area west of Armstrong Boulevard and internal to the study area for the proposed roadway network based on the trip generation numbers developed.

### **Task 2.2: Existing Conditions**

The existing roadway network and intersection traffic counts will be evaluated using Synchro analysis software. The program will evaluate the operations of the existing intersections through a delay and capacity analysis at a Highway Capacity Manual level of detail. This will be compared against the existing conditions at the time of the previous study to assess the difference in the future analysis baseline year conditions.

### **Task 2.3: Traffic Operations Analysis**

#### **Task 2.3A No-Build Traffic Conditions**

The No-Build peak hour traffic will be input onto the existing roadway network to determine the baseline traffic conditions for the area. Planned roadway, intersection, and traffic control changes will be taken into account as needed for each analysis year. The capacity of the intersections being studied will be determined through the use of Highway Capacity Manual (HCM) procedures in Synchro.

#### **Task 2.3B Build Traffic Conditions**

The Build peak hour total volumes will be onto the existing roadway network with planned roadway, intersection, and traffic control changes as needed for each analysis year. The capacity of the intersections being studied will be determined through the use of Highway Capacity Manual (HCM) procedures in Synchro.

### **Task 2.4: Traffic Mitigation Analysis**

All intersections showing a LOS D or worse will be analyzed for traffic and roadway improvements that are necessary to bring the intersection back to a LOS D for both the No-Build and Build conditions. A list of recommended on-site and off-site improvements required to mitigate the projected traffic congestion or safety issues attributed to the study area will be identified for comparison to the “before” conditions.

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The improvements recommended will be identified to handle the forecasted traffic of each analysis year. Improvements will be recommended to increase safety and capacity and may include changes in intersection control, lane capacity, or signal timing for each of the intersections. The improvement alternatives will be evaluated using Highway Capacity Manual techniques in Synchro.

## **Task 2.5: Study Report**

A study report will be prepared to summarize the process used to develop the anticipated trips, the process used to develop the findings, and recommendations for improvements. The study report will also document implementation strategies necessary to achieve the vision.

- a) Eight (8) copies of the draft report documenting analytical procedures, results and recommendations will be submitted to the City of Ramsey, Anoka County, Mn/DOT, and appropriate agencies for review.
- b) The draft report will be updated and revised in accordance with comments and discussions with the reviewing agencies and prepare/distribute eight (8) copies of the final report.

## **Feasibility Report**

### **Task 1: Data Gathering and Review**

#### **Task 1.1: Review Existing Plans, Studies, and Geotechnical Information**

We will prepare a base plan with consideration given to existing record or as-built plans. The base map will be built from existing data and record drawings, with no field survey anticipated. The base plan will be utilized for preparation of the Preliminary Design Layout.

##### **Task 1.1A: Review of Documents**

Bolton & Menk will review record and as-built plans, studies and geotechnical information provided by City Staff and incorporate the findings in the base plan.

##### **Task 1.1B: Preparation of Base Plan**

Electronic base plan in AutoCAD Civil3D 2014 file format and printed drawings for use in discussion at project coordination meetings with City Staff.

### **Task 2: Feasibility Report**

We will produce a Feasibility Report documenting the findings of preliminary design tasks. Objectives of the report are to meet the requirements of the MN Chapter 429 Special Assessment Process and document issues in need of attention during final design. At a minimum, the following key components will be considered:

- Roadway
- Sidewalks
- Trails
- Storm Water Management

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- Street Lighting
- Trunk Water Service
- Trunk Sanitary Sewer Service

Additionally, the report will account for the following items, which could have an impact on overall project costs:

- Private Utilities
- State Aid Design and Approval Requirements
- Anoka County Design Requirements

## **Task 2.1: Feasibility Report Preparation**

The Feasibility Report will include the following:

- Written discussion of preliminary design findings.
- Compilation of preliminary plans developed under separate tasks.
- Development of preliminary cost estimates based on estimated quantities from the preliminary layouts and unit prices from bids received for similar projects.
- Development a preliminary assessment roll based on the preliminary estimated project costs and the direction of the City Engineer’s interpretation and application of the City’s Assessment Policy.
- Discussion of permit requirements.
- Discussion of the project schedule.
- Discussion of potential phasing of improvements.

The final document will be provided to the City for review and comment. Adjustments to the document will be made based upon comments received and a final version will be provided to the City in hard copy and electronically in PDF format.

## **Preliminary Design Layout**

### **Task 1: Preliminary Design**

Using the base map, results from the Traffic Impact Study and results from additional analysis, we will prepare a Preliminary Layout of desired improvements.

Preparation of the Preliminary Design Layout will be performed in coordination with City staff. Major design components of this subtask include the following:

- Preliminary design of the roadway alignment, width, and typical section. We understand the roadway alignment will generally match the existing alignment, unless otherwise indicated by City staff.
- Preliminary layout of curb.
- Preliminary layout (plan view) of water and sanitary sewer trunk facility improvements, including preliminary pipe sizes.
- Preliminary layout of storm water management strategies, including pond locations.

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We anticipate that the Preliminary Design Layout will include a series of drawings depicting stages of construction/implementation. The Preliminary Design Layout will be included as an attachment to the Feasibility Study.

## Additional Services

### Task 1: Storm Water Management Analysis and Plan

#### Base Services

The Feasibility Report provided as a part of the base services will include stormwater management concepts that provide a road map that will guide development phasing, including the associated costs for the localized study area. During the feasibility stage, drainage areas will be developed to site localized and regional facilities and to determine trunk storm sewer sizing. Preliminary pond and infrastructure sizing are important at this stage to ensure that stormwater management decisions are technically informed and guidance documents are accurate and sustainable. In turn, Preliminary Design Layouts are developed simultaneously, thereby expediting future construction plan production.

#### Expanded Regional Analysis

Development of regional stormwater management in the study area will ultimately include:

- Flood control and water quality components to meet local, state, and federal guidelines.
- Integration of water resource features that provide an aesthetic function and promote development.
- A set of tools to help the City make informed decisions regarding the construction of stormwater infrastructure as development phases occur and how to best utilize the plan to provide incentives for development.
- Congruency amongst MS4 permit requirements, City-defined water quality goals and protection of the adjacent water resources.
- An updated regional hydraulic model that is seamless integrated into the current SWMP models to maintain the living nature of the plan.
- Protection and possibly mitigation of all impacted wetlands.

Regional facilities will be located to best suit anticipated development patterns. We will collaborate closely with the City to assemble strategies for assessing developers in a manner that incentivizes development.



## Conflict of Interest and Good Standing

In providing engineering services to many municipalities and other public agencies in the Upper Midwest, Bolton & Menk, Inc. occasionally must address competing interests between our public clients. Bolton & Menk has normally been able to ethically and successfully represent the overlapping interests of its public clients by providing internal staff separation for the work performed. Prior to accepting competing public project assignments, it is Bolton & Menk standard policy to notify the City and the other public agency requesting services that a potential conflict may exist. We will then make appropriate arrangements, such as re-assignment, to prevent any actual conflict of interest. At the present time, we deem that there are no actual or perceived conflicts of interest with the proposed project.

Bolton & Menk, Inc. hereby commits that we are currently in compliance and good standing with Federal, State, County and local units of government. We are currently designated as a Business Corporation (Domestic), Active and In Good Standing with the Secretary of State of Minnesota. Federal Tax ID: 41-0832249. State Tax ID: 8323511.



# Fee Schedule

Bolton & Menk, Inc.'s proposed costs for the work summarized within this proposal have been detailed in the table below.

Task	Hours	Fee
<b>Traffic Impact Study</b>		
1.0 Trip Generation	60	\$6,990
2.0 Future Geometric and Intersection Control Needs	72	\$8,390
<b>Feasibility Report</b>		
1.0 Data Gathering and Review	24	\$2,500
2.0 Feasibility Report	58	\$6,800
<b>Preliminary Design Layout</b>		
1.0 Preliminary Design	82	\$8,560
<b>Total Base Project Fees</b>	<b>346</b>	<b>\$33,240</b>
<b>Additional Services</b>		
1.0 Regional Storm Water Management	50	\$5,620
<b>Additional Services Fee</b>		<b>\$5,620</b>

Charges are based on hours spent at hourly rates in effect for the individuals performing the work. These rates include labor, general business and other normal and customary expenses associated with operating a professional business.

Employee Classification	Hourly Billing Rates
Sr. Principal Engineer/Surveyor	\$170-240/Hour
Sr. Project Manager - Principal Engineer/Surveyor	\$127-180
Senior Transportation/Aviation Planner	\$125-170
Project Manager (Inc. Landscape Architect)	\$106-165
Project/Design Engineer/Planner/Landscape Architect	\$52-165
Licensed Surveyor	\$66-140
Project Surveyor	\$82-120
Specialist (Nat. Resources; GIS; Traffic; Graphics; Other)	\$47-130
Senior Technician (Inc. Survey <sup>1</sup> )	\$72-165
Technician (Inc. Survey <sup>1</sup> )	\$33-130
Administrative Support & Clerical	\$29-110
Structural/Electrical/Mechanical/Architect	\$120-215
GPS/Robotic Survey Equipment	NO CHARGE
CAD/Computer Usage	NO CHARGE
Routine Office Supplies	NO CHARGE
Routine Photo Copying/Reproduction	NO CHARGE
Field Supplies/Survey Stakes & Equipment	NO CHARGE
Mileage	NO CHARGE