

January 21, 2026



CREATIVITY BEYOND ENGINEERING

An aerial photograph showing a wide, multi-lane road under reconstruction. The road is flanked by green grass and trees. In the background, there are residential houses and a large building. A parking lot with several cars is visible on the right side of the road.

Street Design Services:  
City of Manitowoc  
**Reconstruction of Franklin  
Street from South 6th Street  
to South 21st Street**

(262) 781-1000  
[rasmith.com](http://rasmith.com)

W62 N588 Washington Avenue, Suite 201  
Cedarburg, WI 53012-2074



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# Cover Letter

January 21, 2026

Mr. Greg Minikel, P.E.  
City of Manitowoc - Engineering Department  
900 Quay Street  
Manitowoc, WI 54220



CREATIVITY BEYOND ENGINEERING

W62 N588 Washington Avenue, Suite 201  
Cedarburg, WI 53012-2074  
(262) 781-1000

RE: Request for Proposal (RFP) | City of Manitowoc  
Reconstruction of Franklin Street from South 6th Street to South 21st Street

Dear Mr. Minikel:

We are excited about the opportunity to pursue this notable project with the City of Manitowoc. Our proposal includes our understanding and analysis of the project, an approach for successfully completing the project, examples of similar project experiences from our project team, an approximate schedule that aligns with the bid timelines, and an estimate of both the design fees and the construction costs.

As our proposal demonstrates, we have the experience and depth needed to complete this project. After reviewing the RFP and discussing the project with you, Adam Tegen, and Rob Michelson, we have a strong grasp of the project's nuances. This understanding allows us to develop a detailed approach and a schedule that will keep the project on task and within budget.

Below are several key factors that set raSmith apart and position us to deliver a high-quality outcome for the City of Manitowoc.

**Extensive Experience.** We have included a thorough list of eight project case studies, many demonstrating similar challenges that may arise on this project. These examples are intended to not only show our ability to work on large, complex projects with multiple infrastructure components (road/sewer/water/storm) but also to showcase our experience working with the many factors that set this project apart. These include coordination with the railroad company (crossings and encroachments), designing a road reconstruction in tight urban/downtown areas, providing multiple roadway concepts and renderings including pedestrian facilities in a corridor with varying land uses, and public outreach that will begin with early buy-in of the improvements and will include construction permits. We also have significant experience working seamlessly with other city utilities, incorporating their designs into our bid package, and navigating the more intricate project details such as working with fire departments to ensure their needs are met and addressing potential underground vaults that may surface.

**Flexibility.** We understand that as this project proceeds, there may be changes, including various design aspects that may or may not be needed. Although we have provided a detailed level of effort with associated design costs, we recognize that the project scope may change. Our goal is to remain flexible, both in assembling the appropriate team members as needed and in adapting our contract. We are more than willing to work with the City to negotiate fees aligned with various milestones and optional inclusions. This approach allows the City to anticipate potential costs while only utilizing services when and if they become necessary. The fee that is included at the end of this proposal is based on many assumptions that might not be needed, but we wanted to be conservative (yet realistic) in case certain items are needed.

**Familiarity.** Our team has worked directly with the key City staff, including engineering, community development and Manitowoc Public Utilities (MPU). Having the experience and knowledge of the City will eliminate the learning curve often associated with new projects.

**Commitment to Perform Services.** We are proud of our track record of providing exceptional professional consulting services with a high level of personal attention. Our team is committed to delivering projects on time and completing the necessary tasks to maintain schedule and keep the project moving forward.

Thank you again for this opportunity. We look forward to working with the City on this exciting and important project.

Sincerely,  
raSmith

A handwritten signature in black ink, appearing to read 'Troy Hartjes'.

Troy Hartjes, P.E.  
Senior Project Manager  
(262) 317-3305  
[troy.hartjes@rasmith.com](mailto:troy.hartjes@rasmith.com)

Brookfield, WI | Appleton, WI | Madison, WI  
Cedarburg, WI | Naperville, IL | Irvine, CA

# Analysis of Project/Project Approach

## Background and Understanding

In advance of the DOT's reconstruction of Washington Street (STH 42), the City of Manitowoc is looking at reconstructing Franklin Street between 6th Street and 21st Street. By 2029, Franklin Street will need to be fully reconstructed and available to use as the main corridor and detour route during the reconstruction of Washington Street. The need for this detour, combined with the condition of Franklin Street (which has not seen a major improvement since 1992), makes the need for this complete reconstruction necessary.

While the detour requirement and roadway condition are driving factors, this project also creates an opportunity to re-imagine the use and function of the corridor. Franklin Street's proximity to downtown, the near south side, the river, the Lake Michigan Car Ferry, and the potential for shared use by pedestrians and cyclists further justifies the need to evaluate multiple cross-sections throughout this one-mile segment to be evaluated.

Recent studies, including the Building Blocks of Sustainable Communities grant work and the City's updated Bike and Pedestrian Plan (2020) provide recommendations and concepts that should be considered for inclusion in the design of the corridor. Additionally, the Wisconsin Central Railroad shares a portion of the road right-of-way (14th Street to 18th Street) and runs adjacent to the roadway for several more blocks. Combined with the intersection of Water Street and access to the river, this very important corridor should be reviewed carefully. Prior to proceeding with the final design, the design team will work closely with the City and stakeholders to evaluate the many options for the potential layout of this corridor.

The current roadway corridor consists of an urban cross-section with curb & gutter and sidewalk throughout (except where the railroad occupies the right-of-way, reducing the sidewalk and curb to one side). It is understood that the new roadway corridor will remain urban, except at various locations due to the railroad. However, we will look at various layouts and geometric improvements, including pavement markings, parking, pedestrian crossings, and on-street bike lanes to create a complete roadway improvement that serves all users. As part of our design, the existing corridor will be evaluated for geometric deficiencies and safety issues, including any railroad-related concerns. These will be identified early and presented to the City along with potential impacts and options to address these concerns. The new layout and final design will meet current AASHTO, City, and WisDOT standards, which in itself may address some of these deficiencies.

Beyond designing a roadway with the proper geometrics to accommodate the safety of multiple users, aesthetic



improvements will also be considered. This project provides an opportunity to evaluate the entire right-of-way, from building to building, including new lighting and some landscaping. Although green space is currently limited, there are opportunities throughout the corridor for enhancements such as greenways, bumpouts, islands, or planters. We will work with the City and our landscape architect to see how this corridor can be reimagined. Coordination with MPU on the lighting plan will also be incorporated into the landscaping.

Although the roadway is the driving force behind the project, there are other critical items that will be considered as part of the design, including many utilities. In addition to electric, gas, and communications ("dry" utilities), the project must also account for sanitary sewer, water main, and storm sewer. Overhead lines and utilities exist along most of the route; while relocation may not be necessary, this will be evaluated during the preliminary layout considerations due to the long timelines often associated with utility adjustments. Sanitary sewer is located along the entire corridor, with sizes ranging from 18 inches up to 42 inches, with a large stretch (nine blocks) of either 30-inch or 36-inch pipe, much of which is near or over 100 years old (dating back to 1915). The sanitary has been televised, and it is understood that this infrastructure cannot remain in its current condition. The final solution may include lining, relay, or a combination of upgrades (including laterals).

Storm sewer facilities have also been televised and will require evaluation. Although the number of impervious areas may not substantially change, we will work with the City to review problem areas and what storm sewer facilities may need to be evaluated, resized, and replaced. We understand that there was some flooding at 9th Street and Franklin Street, plus the intersections of 15th/16th/17th Streets are at the bottom of a hill and will need to be looked at closely. Considerations for inlet plugging and aging infrastructure will be addressed. We assume

# Analysis of Project/Project Approach

most, if not all, local storm inlets will require replacement with a new layout and profile. We will also evaluate the bigger picture and overall drainage basins to help ensure a complete storm system solution.

The water main consists of various sizes including long stretches of 20-inch water main and segments of 10-inch, 12-inch and one block of 8-inch. It is understood that the water main will also be replaced. We will work with MPU to coordinate the exact relay limits and responsibilities. With shallow sanitary sewer, 60-inch storm crossings, and other existing utilities, the placement and alignment/profile of the new water main will need to be closely considered.

Finally, due to all the traffic and access as mentioned above, maintaining access for all stakeholders and users is important. A strategic phasing, staging, and traffic control plan, with potential detours is also anticipated.

## Challenges and Commitment

The Franklin Street reconstruction involves many standard roadway and utility elements, but also several complexities requiring additional coordination, planning, and communication. These include:

- **Railroad Coordination:** Currently, the rail lines (tracks) are located within the City's right-of-way, and the road narrows to accommodate these actively used tracks. Coordination, permitting, flexibility (with concepts and layouts), accommodation (to a point), and timing (especially given typical railroad responsiveness) are a few items to consider when dealing with this challenge.
- **Fire Station (and Emergency Vehicle Access):** Designing a layout that can accommodate the size (length), turning movements, and clearance (roadway to bottom of vehicle) is an important aspect when providing the updated geometrics (horizontal and vertical).
- **Underground Vaults:** When looking at corridors that are in more urban areas (and developed many years ago), there are underground vaults to consider when looking at the sidewalk. We have seen vaults (located under sidewalks) that are considered private property but located within the right-of-way. Coordination with the owners and/or utilities will be required to determine whether the vaults should be protected, abandoned, modified, or relocated.
- **Stakeholder Flexibility:** This corridor includes residential, commercial, industrial, governmental, and business, all looking to accommodate their unique needs. Having a design team that has worked with and seen various ideas, will help with the final product.
- **Staging/Phasing:** With the project being built in phases, our first bid package will incorporate the phasing of year 1 (2027) and transition into the existing condition. This initial phasing plan will also be cognizant

of the 2028 construction to limit encroachment on the 2027 project and set up a phasing plan between the two years. In addition, for each year we will include the necessary construction staging plans to allow access for all stakeholders. With a planned roadway cross-section of concrete pavement, our staging plan will take this into consideration when completing the necessary jointing plan.

- **Construction Permits:** In many cases, the sidewalk and paved areas within the right-of-way stretch from building to building. When dealing with buildings that are on the City property line, various considerations will be taken into account (structural, drainage, protection, access). We will need to obtain construction permits as our match point will most likely fall outside the right-of-way.
- **Signals:** Signal designs when working adjacent to a railroad along with other various items such as pre-emption and timing will need to be addressed. We will coordinate with the City regarding their design standards and preferences and provide recommendations for products such as traffic signal controllers, cabinets, vehicle detection, and remote communication to meet their needs. We anticipate the intersection will remain open to traffic during construction and require temporary traffic signals. According to the Federal Railroad Administration (FRA) Grade Crossing Inventory, the traffic signal currently operates with advance traffic signal preemption. We have worked closely with WisDOT and railroad companies on several recent projects, and we understand the scheduling demands in working through the preemption timing approval process and are prepared to jumpstart this task to keep the project on schedule.
- **Environmental Considerations:** We understand that the City has secured an EPA grant and Stantec is under contract to complete the Phase 1 work. However, knowing what to look for, what to consider, and the knowledge to help identify the areas where environmental risks may exist will help manage costs and allow Stantec to proceed with the appropriate Phase 1 environmental investigations.

These challenges are typical for a project of this length, located in a densely/older urban corridor, where the original infrastructure is being reconstructed. Therefore, it is essential to work with a consultant experienced in similar reconstruction projects with complex infrastructure replacement. The items below highlight our team and how we will work with the City to bring value to the design team.

# Analysis of Project/Project Approach

## Project Team

The raSmith team's project manager and team members have overseen numerous large street and utility projects with multiple facets for various communities, many within densely populated areas. We have a proven track record of coordinating surveying, design, stakeholder engagement, and bidding processes to keep projects on schedule.

We recognize that we are one part of a larger team and intend to work collaboratively with the City, MPU, the Public Infrastructure Committee, the fire department, and the stakeholders (businesses and residents) throughout the project. As we develop the initial concept plan with new horizontal geometrics, we understand that stakeholder input and evolving circumstances will require flexibility. Our experience with LRIP funding (and bid requirements), traffic management, downtown and business districts, railroads, and our familiarity with the City (both MPU and City engineering) will allow us to lead this team to a successful outcome.

Our team is prepared to adapt as needed whether due to City staff reviews, railroad coordination, stakeholder input, or other utility analysis. In addition, we have the depth and know-how to maintain the schedule and budget. Our previous project experience includes many similarities to those expected along this corridor. Our project team will remain mindful of the following key factors when preparing the design:

- 1. Deliver a Long-Lasting Roadway Design.** Provide a roadway design that will produce a safe street that serves the long-term interests of the City and its stakeholders. In addition to accommodating detour traffic during Washington Street's reconstruction, this project provides a unique opportunity to improve the corridor. We will present design options, consider constructability, and work toward cost-effective solutions.

- 2. Utility Coordination.** With the increasing challenges related to utility locating and relocation accuracy, our proposal includes extensive early coordination with utilities to ensure relocations occur ahead of construction when necessary.
- 3. Stakeholder Access.** Develop a detailed staging and phasing plan that provides access for stakeholders at all times without compromising the final design. This includes residents, City officials, local businesses, all travelers, and users of the Lake Michigan Car Ferry.
- 4. Provide a Qualified and Available Project Team.** Our team, led by project manager Troy Hartjes, has the expertise and availability to succeed in the key components of this project. We have team members that specialize in the various areas of the project, including project management and design leadership. raSmith has the resources, depth, and expertise to begin this project immediately and deliver a cost-effective and timely solution.
- 5. Design a Product That Can Be Built.** Our construction services team will provide additional quality control and conduct a constructability review to ensure the design can be built without costly change orders.

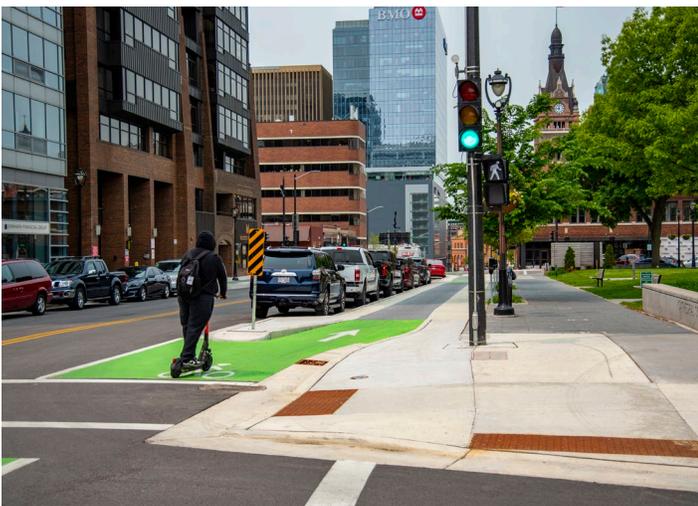
These strengths and our extensive experience on similar projects positions raSmith as a strong partner for the City.

## Project Approach

raSmith's goal is to provide the City with thoughtful planning, innovative ideas, and comprehensive design services supported by extensive coordination and communication with City staff, stakeholders, and residents. Project success will depend heavily on clear, consistent communication. We will begin by meeting with City staff to review the background information and initiate data gathering. We will also engage each of the stakeholders to understand concerns and issues that may impact the schedule or budget.

Our approach and process, tailored for your project, will entail the following:

- Early Stakeholder Engagement:** It is critical that we engage all stakeholders immediately, including the Public Infrastructure Committee, Manitowoc Fire Department, dry utilities (electric, gas, communications), and the railroad (as noted it is important to notify the railroad immediately). This will begin by initiating the first project meeting, shortly after any notice to proceed, and meeting with City staff and MPU to review the history and resources and confirm background information. After this meeting, along with the items listed below, we will create a detailed implementation plan and schedule and begin communication with other stakeholders.



# Analysis of Project/Project Approach

- **Maintain Ongoing Communication Throughout the Project:** Consistent follow-up and communication is critical, particularly when coordinating with residents to secure right-of-entry agreements. We anticipate at least one Public Works Committee meeting and one public information meeting. Similar to the Newton Watermain project, continuous communication will help ensure timely responses from all involved parties.
- **Identify Critical Path Elements and Ensure They Remain a Priority:** This includes establishing one point of contact for each stakeholder, coordinating with the railroad, and working with the City to discuss the cost estimate, budget set-up, and cost tracking for the potential items that could expand due to the initial analysis (sanitary sewer and storm sewer).
- **Collaborative Team Approach:** Work closely with the City to ensure accurate information is shared. We will work with City staff, including engineering and community development in reviewing past planning elements and reports, including the aforementioned Building Block grant, and confirm what is feasible to be incorporated into the design.
- **Conduct Strong Public Outreach:** Public informational meetings will give stakeholders opportunities to understand the project schedule, express concerns, and share ideas for corridor improvements. Keeping businesses and residents well informed will also support timely acquisition of construction permits.
- **Maintain Utility Service During Construction:** As important as it is to replace the infrastructure, it is equally as important to design a new system that allows for the existing system (sanitary, watermain and access) to remain active throughout construction. We will provide a sequence and phasing plan, which may include temporary services, to help minimize disruptions, while also keeping overall costs down.
- **Prioritize Constructability:** Involving our construction manager early in the process to review the project in its entirety will support the development of an overall construction sequence.
- **Value Engineering:** We will apply value engineering strategies throughout design to achieve the most cost-effective construction project, using detailed coordination, GIS mapping, survey, and innovative designs to allow for different construction options (especially as they relate to utilities).
- **Accurate and Detailed Concept Plans:** In order to avoid costly changes midway through design, it is imperative that our conceptual layouts (which will include multiple layouts over the entire segment), account for all users and railroad considerations, and that they are accurate. Upon completing the topographic survey and initial right-of-way mapping, we will draft preliminary layouts, each with the desired typical section.



- **Multiple Concepts:** We will prepare typical sections in two phases. The first phase will focus on broad corridor-wide concepts and renderings. After meeting with City staff, we will prepare refined geometric layouts and typical sections, including pedestrian crossings and a potential bike lane. Our roadway design approach seeks to identify project constraints and design a roadway that meets current standards, while also fitting the existing corridor constraints. By first identifying the project constraints, we will determine where, if any, different typical sections may be used prior to proceeding with conceptual layouts. When we meet with City staff to present the various concepts, we will then be able to identify the pros/cons/impacts for these conceptual layouts.

These efforts, combined with our understanding of the RFP, discussions with the City and MPU, and recent project experience, form the basis for the scope of services detailed in the accompanying level of effort spreadsheet.

Key factors and points within that spreadsheet include:

- **Environmental Reviews and Reports:** We will complete an endangered resource review, as necessary, for the DNR-Notice of Intent and review the DNR's website for any past environmental spills, buried tanks, or open records within the corridor. Stantec will complete a Phase 1 investigation over the entire project limits, and we will work with Stantec to identify the concerns from the Phase 1 environmental report (to be completed by Stantec). We will coordinate our design with Stantec to ensure any findings from the report do not become an issue during construction.
- **Agency/Utility/Railroad Coordination:** We will begin immediate coordination with each of the utilities (already talked to Rob Michelson from MPU), along with the railroad. This coordination will be upfront, then include sending preliminary drawings, draft final drawings, and final plans to ensure all work plans

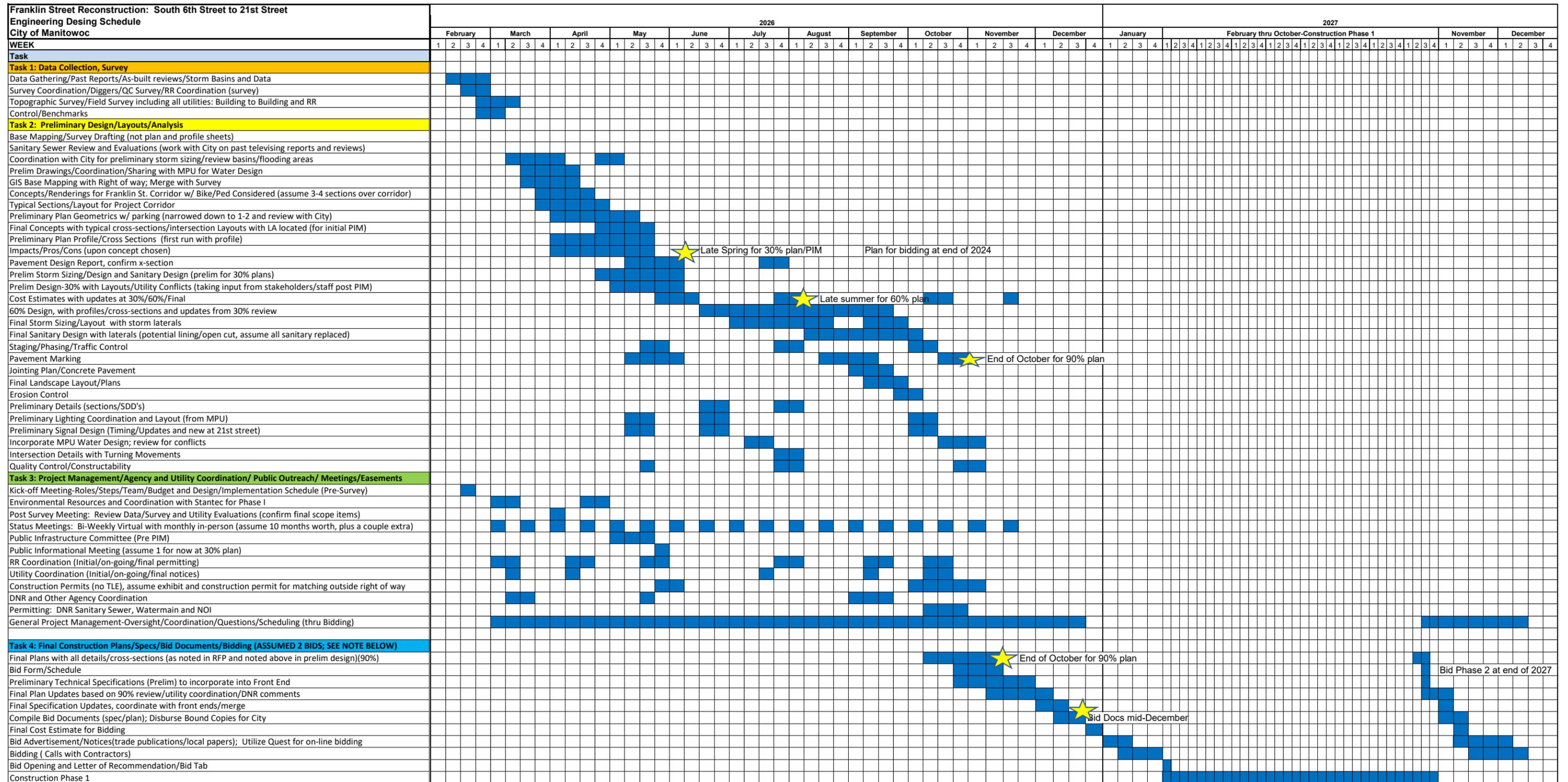
# Analysis of Project/Project Approach

from utilities are accounted for and the appropriate reviewing agencies have time for the necessary review and permit.

- **Comprehensive Survey:** A complete survey of the project corridor will be completed, including underground utilities, building-to-building survey including individual property low points, existing and proposed right-of-way (utilized along with GIS and City records to delineate the right-of-way), and a detailed survey of each driveway, particularly the fire departments.
- **Preliminary Design:** Develop layouts and concepts for the project corridor, including the inclusion of a bike lane, to determine the feasibility for this facility. This will help with the public outreach, utility coordination, and final planning. In addition, our preliminary layouts and design will evaluate and show potential pedestrian crossings and pavement markings as well as identify locations for aesthetic and landscape improvements, layout options at Water Street, and lighting considerations (work with MPU on this layout).
- **Preliminary and Final Analysis of the Storm and Sanitary Infrastructure:** We will work with the City in review of the televising and determine the appropriate replacement for each of the sanitary and storm runs within the corridor. The sanitary is clearly an important piece of the infrastructure for the entire City based on the size of the sewer (up to 42 inches). Our review will include various construction methods for the replacement of the sewer that are not only based on cost, but also keeping the system active during construction.
- **Water Main Coordination:** Work with MPU to prepare detailed plans that enable them to redline the water main design. We will then incorporate their redlines into the final design and into our plan set and confirm and identify any conflicts.
- **Geotechnical Review and Pavement Design:** Review of the geotechnical and soils reports along with a pavement design analysis to generate discussions with the City on various cross-sections. A concrete cross-section is anticipated, and we will work with the City and reference the pavement analysis report, to confirm the planned use of concrete.
- **Final Design and Bid Documents:** Complete a final design and bid package with the necessary details, cross-sections, traffic control, staging plan, specifications with measurement and payment sections, and appropriate bid items to ensure each item across two bid packages is accounted for in order to minimize the potential for costly overruns.



# Project Schedule



# Estimate of Construction Cost - Phase 1

The following cost estimates include all major items associated with a full urban-to-urban reconstruction with utilities. We have assumed full open cut replacement of the sanitary sewer and storm sewer infrastructure. Noting the larger sizes for each of these entities and the anticipated number of existing underground conflicts, we have used a more conservative cost approach.

In addition, as discussed, we included a 15% miscellaneous line item to account for smaller or unknown items, and a 15% contingency to cover unforeseen conditions that may arise. Updated cost estimates will be developed at the 30% design milestone, at which point we can begin refining the final construction costs.

**City of Manitowoc**  
**Franklin Street Reconstruction**  
**Phase 1 - S. 6th Street to S. 10th Street (approx. 1400 feet)**  
**Construction Estimate**

Item Number	Description	Quantity	Unit	Unit Cost	Cost
1	30" Sanitary Sewer Main Line	700	LF	\$ 550.00	\$ 385,000.00
2	36" Sanitary Sewer Main Line	350	LF	\$ 600.00	\$ 210,000.00
3	42" Sanitary Sewer Main Line	350	LF	\$ 675.00	\$ 236,250.00
4	Sanitary Sewer Laterals (estimate 50)	1500	LF	\$ 190.00	\$ 285,000.00
5	Sanitary Sewer Manholes	5	EACH	\$ 12,000.00	\$ 60,000.00
6	Excavation Common (estimated 6,000 CY)	1	LS	\$ 60,000.00	\$ 60,000.00
7	18" Crushed Limestone Base	8,000	TON	\$ 30.00	\$ 240,000.00
8	9" Concrete Pavement	7,800	SY	\$ 75.00	\$ 585,000.00
9	Remove & Replace Concrete Curb & Gutter 30-Inch	2,800	LF	\$ 38.00	\$ 106,400.00
10	Remove & Replace Concrete Sidewalk	14,000	SF	\$ 12.00	\$ 168,000.00
11	Storm Sewer Reinforced Concrete Pipe Mainline	700	LF	\$ 190.00	\$ 133,000.00
12	Storm Sewer Reinforced Concrete Pipe Leads 12-Inch	500	LF	\$ 90.00	\$ 45,000.00
13	Storm Sewer Laterals 6-Inch	400	LF	\$ 55.00	\$ 22,000.00
14	Catch Basins 2'x3'	18	EACH	\$ 3,000.00	\$ 54,000.00
15	Storm Manholes 48-Inch Diameter	15	EACH	\$ 4,500.00	\$ 67,500.00
16	Traffic Control/Detour	1	LS	\$ 40,000.00	\$ 40,000.00
17	Construction Staging/Phasing	1	LS	\$ 40,000.00	\$ 40,000.00
18	Mobilization	1	LS	\$ 20,000.00	\$ 20,000.00
19	Other Items (15%)	1	LS	\$ 413,572.50	\$ 413,572.50
				Subtotal Construction Cost	<b>\$ 3,170,722.50</b>
				15% Contingencies	\$ 475,608.38
				Project Total	<b>\$ 3,646,330.88</b>

- Assumed road length of 1400 feet and average width of 50 feet
- Watermain not included in estimate.
- Costs assume all roadway, storm, sanitary removed & replaced, from R/W to R/W.
- Miscellaneous items include pavement marking, misc. infrastructure, EBS, landscaping, driveways, restoration, sawcutting
- 15% Contingencies covers railroad and other unknown items

# Estimate of Construction Cost - Phase 2

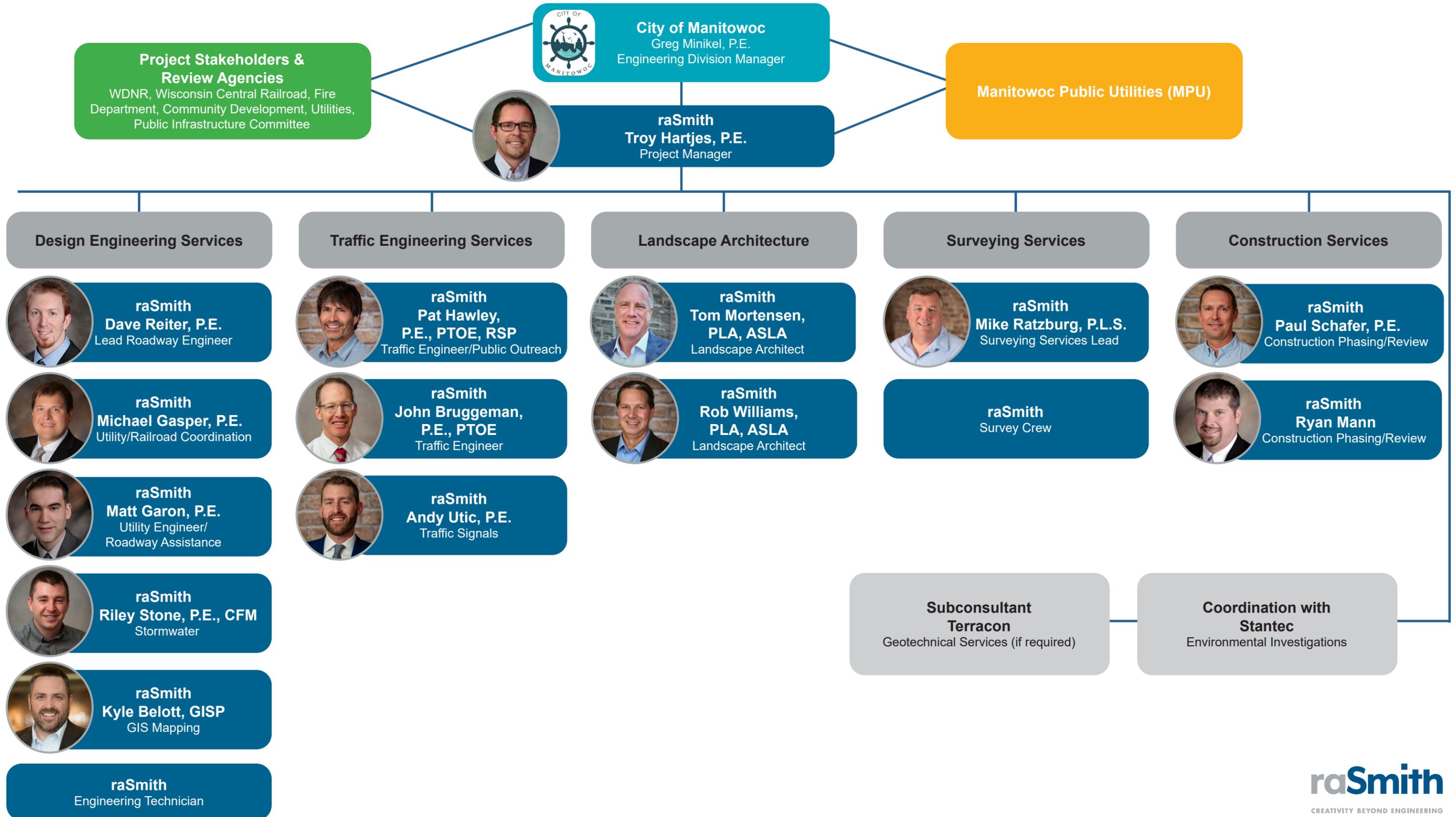
City of Manitowoc  
**Franklin Street Reconstruction**  
 Phase 2 - S. 10th Street to S. 21st Street (approx. 3800 feet)  
**Construction Estimate**

Item Number	Description	Quantity	Unit	Unit Cost	Cost
1	18" Sanitary Sewer Main Line	1400	LF	\$ 300.00	\$ 420,000.00
2	21" Sanitary Sewer Main Line	350	LF	\$ 350.00	\$ 122,500.00
3	30" Sanitary Sewer Main Line	1350	LF	\$ 550.00	\$ 742,500.00
4	36" Sanitary Sewer Main Line	700	LF	\$ 600.00	\$ 420,000.00
5	Sanitary Sewer Laterals (estimate 51)	1530	LF	\$ 190.00	\$ 290,700.00
6	Sanitary Sewer Manholes	15	EACH	\$ 12,000.00	\$ 180,000.00
7	Excavation Common (estimated 14,000 CY)	1	LS	\$ 140,000.00	\$ 140,000.00
8	18" Crushed Limestone Base	19,000	TON	\$ 25.00	\$ 475,000.00
9	9" Concrete Pavement	19,000	SY	\$ 70.00	\$ 1,330,000.00
10	Remove & Replace Concrete Curb & Gutter 30-Inch	7,600	LF	\$ 40.00	\$ 304,000.00
11	Remove & Replace Concrete Sidewalk	38,000	SF	\$ 12.00	\$ 456,000.00
12	Storm Sewer Reinforced Concrete Pipe Mainline	1900	LF	\$ 190.00	\$ 361,000.00
13	Storm Sewer Reinforced Concrete Pipe Leads 12-Inch	1000	LF	\$ 90.00	\$ 90,000.00
14	Storm Sewer Laterals 6-Inch	1000	LF	\$ 60.00	\$ 60,000.00
15	Catch Basins 2'x3'	36	EACH	\$ 3,000.00	\$ 108,000.00
16	Storm Manholes 48-Inch Diameter	30	EACH	\$ 5,000.00	\$ 150,000.00
17	Traffic Control/Detour	1	LS	\$ 75,000.00	\$ 75,000.00
18	Construction Staging/Phasing	1	LS	\$ 75,000.00	\$ 75,000.00
19	Mobilization	1	LS	\$ 20,000.00	\$ 20,000.00
20	Remove and Replace Signals	1	EACH	\$ 100,000.00	\$ 100,000.00
21	Other Items (15%)	1	LS	\$ 887,955.00	\$ 887,955.00
Subtotal Construction Cost					<b>\$ 6,807,655.00</b>
15% Contingencies					\$ 1,021,148.25
Project Total					<b><u>\$ 7,828,803.25</u></b>

- Assumed road length of 3800 feet and average width of 44 feet
- Watermain not included in estimate.
- Costs assume all roadway, storm, sanitary removed & replaced, from R/W to R/W.
- Miscellaneous items include pavement marking, misc. infrastructure, EBS, landscaping, driveways, restoration, sawcutting
- 15% Contingencies covers railroad and other unknown items

# Project Team: Organizational Chart

The key raSmith staff shown below will be performing the work for the City of Manitowoc. They will not be substituted or reassigned to another project without the City's prior approval. Multiple technicians, administrative staff, and project engineers will be utilized throughout the project to help with the plan and contract production.



# Project Team: Resumes

We have provided the resumes for our project manager and lead designers/staff. If resumes are needed for technical, administration, or project engineers, we will provide them upon request.



## Troy Hartjes, P.E.

Project Manager

Troy has 30 years of experience in municipal public works projects. Troy's extensive project experience includes: urban and rural roadway rehabilitation and construction; sanitary sewer and water main system design; stormwater conveyance systems; water and sewer system planning; stormwater management; stormwater utilities; comprehensive drainage plans; and residential subdivision site design.

### Education

B.S. Civil Engineering, Transportation and Municipal Emphasis, University of Wisconsin–Milwaukee, 1995

### Professional Registration

Professional Engineer: Wisconsin

### Professional Affiliations

American Society of Civil Engineers  
American Council of Engineering Companies

American Public Works Association

### Project Experience

- Meinecke Avenue Storm and Sanitary Sewer, City of Wauwatosa, WI
- Jacobson Road Reconstruction, Village of Menomonee Falls, WI
- Northeast Interceptor Sewer, Village of Germantown, WI
- Cedarburg Business Park, City of Cedarburg, WI
- Calhoun Road Reconstruction, City of New Berlin, WI
- Blue Stem Subdivision, Village of Grafton, WI
- Goldendale Road and Holy Hill Road Interceptor Sewer and Transmission Main, Village of Germantown, WI
- Beres Road Reconstruction, City of New Berlin, WI
- East Trunk Relief Sewer, City of Mequon, WI
- Rogers Drive Reconstruction, City of New Berlin, WI



## David R. Reiter, P.E.

Lead Roadway Engineer

Dave has 26 years experience in a broad range of civil engineering areas such as utility design, roadway design, drainage, paving, grading, and preliminary site engineering reports. Dave also has experience as an inspection engineer with the Wisconsin Department of Transportation and private consultants. His inspection experience includes water main, storm sewer, sanitary sewer, paving, grading, landscaping, retaining wall, and curb and gutter installation. In addition, Dave has worked on survey crews.

### Education

B.S. Civil Engineering, Marquette University, May 1998

### Professional Registrations

Professional Engineer: Wisconsin, 2003

E.I.T. Certificate, 1997

### Professional Affiliations

American Society of Civil Engineering

### Project Experience

- Manitowoc Business Park Street & Utility Project, Manitowoc, WI
- Salem Business Park Infrastructure Improvements, Salem Lakes, WI
- S. 41st Street Redevelopment District Public Utilities & Public Street Improvements Projects, West Milwaukee, WI
- 108th and 117th Street Water Main/Relay Design, Wauwatosa, WI
- WMHI Water Main, WI Resource Center, Winnebago, WI
- Weyer Road, Pewaukee, WI

**raSmith**

CREATIVITY BEYOND ENGINEERING

# Project Team: Resumes



## Michael Gasper, P.E.

Utility/Railroad Coordination

Michael has applied his engineering skills and more than 20 years of experience on municipal, traffic, and roadway projects. During the course of his career, he has experience on urban and rural roadway, freeway design, and share-use path projects for WisDOT; as well as roadway, water main and sewer public works projects for municipalities. Michael's background in transportation projects includes roadway geometric design, roundabout design and analysis, system and service interchange design (including diverging diamond), pavement design and design study reports, as well as traffic impact and crash analyses, intersection control evaluations (ICE), future traffic projections and roadway construction inspection. Additionally, he is knowledgeable of the WisDOT Facilities Development Manual's processes and design standards, FHWA cost-benefit analysis and ADA and PROWAG standards.

### Education

B.S. Civil Engineering, Transportation Emphasis, Marquette University, 2002

### Professional Registration

Professional Engineer: Wisconsin

### Professional Affiliations

Institute of Transportation Engineers

### Project Experience

- County W, N Riverside Drive, STH 33 to Schowalter Drive, Saukville, WI
- Columbia Road, Highland Drive to 1st Avenue, Town of Cedarburg, WI
- Cedar Sauk Road, CTH Y to Northwood Drive, Town of Cedarburg, WI
- Small Road & Calhoun Road Intersection, New Berlin, WI
- Calhoun Road, New Berlin, WI
- STH 11, Durand Avenue, City of Racine, WI
- STH 31, Village of Mount Pleasant, WI
- County A (Kettle Moraine Scenic Drive), STH 23 to Young Street, Sheboygan County, WI
- STH 57, Village of Brown Deer and City of Mequon, WI
- STH 175, Village of Lomira, WI



## Matthew J. Garon, P.E.

Utility Engineer/Roadway Assistance

Matt is a project engineer with more than 22 years of experience in municipal public works projects. His project experience includes: utility design, including water main, storm sewer, and sanitary sewer; roadway design for municipal clients and the Wisconsin Department of Transportation (WisDOT); stormwater management plans; and site development.

### Project Experience

- Newton Gravel Pit Water Main Extension, City of Manitowoc, WI
- East Trunk Relief Sewer, City of Mequon, WI
- Goldendale Road Sanitary Sewer and Water Main, Village of Germantown, WI
- Rogers Drive Reconstruction, City of New Berlin, WI
- 104th Street and Fisher Parkway Improvements, City of Wauwatosa, WI
- Meinecke Avenue Flood Mitigation, City of Wauwatosa, WI
- Scotts Company Building Addition, Village of Germantown, WI
- Lincoln Avenue Reconstruction, City of New Berlin, WI

### Education

B.S. Civil Engineering, University of Wisconsin-Platteville, 2003

B.S. Environmental Engineering, University of Wisconsin-Platteville, 2003

### Professional Registration

Professional Engineer: Wisconsin

Years with raSmith: 9

Years of experience: 22

**raSmith**

CREATIVITY BEYOND ENGINEERING

# Project Team: Resumes



## Riley Stone, P.E., CFM

Stormwater

### Education

B.S. Civil Engineering, University of Wisconsin–Milwaukee, 2017

B.S. Physics, University of Wisconsin–La Crosse, 2017

### Professional Registration

Professional Engineer: WI (No. 48601-6)

### Certifications

Certified Floodplain Manager,  
Association of State Floodplain  
Managers

### Professional Affiliations

Wisconsin Association for Floodplain,  
Stormwater, and Coastal Management

Riley specializes in stormwater management and flood control, delivering innovative solutions to complex surface water challenges. He has designed drainage systems for site developments and transportation projects, and authored feasibility studies that guide strategic decision-making. With a deep knowledge of stormwater regulations and floodplain requirements, Riley streamlines compliance and ensures project success. His strong background in hydrologic and hydraulic analysis, coupled with advanced modeling expertise, makes him a trusted resource for design validation and accurate plan reviews. Riley also supports communities by conducting erosion control inspections and helping them meet MS4 permit obligations, reinforcing his commitment to sustainable water management.

### Project Experience

#### Stormwater Design & Flood Control

- 109th Street & Potter Road, City of Wauwatosa, WI
- Waukesha County Airport / Silvernail Road, City of Waukesha, WI
- Oakwood Road Culvert Replacement, City of Oak Creek, WI
- CTH K (Phase 1), City of Kenosha, WI
- Camp & Center Lake Floodplain Study, Village of Salem Lakes, WI
- Fish Passage Restoration, Ozaukee County, WI

#### MS4-Related Responsibilities

Assisted municipalities with MS4 annual reports to ensure they meet MS4 permit requirements. Prepared municipality-wide pollutant loading analysis using WinSLAMM, inspected stormwater management facilities, and conduct erosion control inspections for various communities.



## Kyle Belott, GISP

GIS Mapping

### Education

B.A. Environmental Geography, UW-Milwaukee, 2004

Associate of Applied Science in CAD  
Technology, ITT Technical Institute,  
1996

### Professional Registrations

Certified Geographic Information  
System Professional (GISP)

Kyle has over 29 years of experience assessing, designing and implementing geospatial solutions, developing mobile and desktop applications, converting a wide variety of data formats, performing geographic analyses, and providing end user training. Kyle acts as the GIS Administrator for several Wisconsin communities, providing geospatial services to capture, convert, and manage datasets. Kyle has volunteered with the Esri–Wisconsin User Group as vice president since 2010. raSmith is an Esri Business Partner and has achieved the ArcGIS Online Specialty designation.

### Project Experience

- Waukesha Water Utility/Great Water Alliance – Field data collection workflow and GPS point processing to various coordinate datums, Waukesha, WI
- Clement J. Zablocki Medical Center, Correct FCA Sanitary Deficiencies, Milwaukee, WI
- Water GIS MicroStation/Esri Conversion, Manitowoc Public Utilities, Manitowoc, WI
- Sanitary and Storm Sewer GIS MicroStation/Esri Conversion, Manitowoc, WI
- Sign Inventory and Maintenance Program, City of Waupun, Village of Fox Point, Village of Greendale, WI
- Storm Sewer System Data Conversion, City of Berlin, WI

# Project Team: Resumes



## Pat Hawley, P.E., PTOE, RSP

Traffic Engineer/Public Outreach

Pat has 33 years of transportation project management experience. His areas of expertise include: traffic planning, access management, site circulation, traffic impact studies, roundabouts, and parking studies. Pat regularly provides expert witness testimony on access, traffic operations, and safety issues for public and private sector clients. He has managed large multi-disciplined project teams on complex projects.

### Project Experience

- W. National Avenue (STH 100 to Lincoln Avenue), West Allis, WI
- I-794, Milwaukee, WI
- US 12, Lake Delton/Wisconsin Dells, WI
- Calhoun Road, Brookfield, WI
- 16th Street, Mount Pleasant, WI
- WIS 31, Racine County, WI
- County O/Moorland (I-94 to US 18), Waukesha County, WI
- County O/Moorland (County I to County ES), Waukesha County, WI
- County O/Moorland (County D to WIS 59), Waukesha County, WI
- Traffic Support Services, WisDOT SE Region, WI
- Village-Wide On-Call Traffic Support, Village of West Allis, WI
- Oneida Street, Appleton, WI
- WIS 116, Winneconne Bridge Study
- Waukesha County Traffic Support, Waukesha County, WI

### Education

M.S. Civil Engineering, Transportation Focus, Texas A&M University, 1994

B.S. Civil Engineering, Marquette University, 1992

### Professional Registrations

Professional Engineer: WI, IL

Professional Traffic Operations Engineer, 2001

Road Safety Professional, 2018

WisDOT Certified Roundabout Designer

WisDOT SE Region Certified TIA Preparer



## John Bruggeman, P.E., PTOE

Traffic Engineer

John has 20 years of transportation engineering experience. His expertise includes traffic signal design, traffic impact studies, and traffic analysis. John oversees raSmith's traffic signal design efforts, which has included over 100 traffic signal designs in the last five years. He has managed intersection improvement and traffic signal retiming projects, including WisDOT Highway Safety Improvement Program (HSIP), WisDOT permit projects, and municipal projects.

### Project Experience

#### County/Municipal Traffic Signal Design

- 53rd Street and Burnham Street, West Allis, WI
- 76th Street and Wisconsin Avenue, Wauwatosa, WI
- Holy Hill Road and High Point Pass, Germantown, WI
- 68th/70th and Wisconsin, Wauwatosa, WI
- 51st and Franklin High School Driveway, Franklin, WI
- WIS 60 and Hetzel Way, Slinger, WI
- County O/Brookfield Square Mall, Waukesha County, WI
- 68th Street, Wauwatosa, WI
- WIS 60 and 12th Avenue, Grafton, WI
- Holy Hill Road and Goldendale Road, Germantown, WI
- County A and County H Traffic Signal Inspection, WI
- County O and County I, Waukesha County, WI

### Education

M.S. Engineering & Urban Planning, University of Wisconsin-Milwaukee, 2009

B.S. Civil Engineering, Marquette University, 2004

### Professional Registrations

Professional Engineer: WI, IL

Professional Traffic Engineer: CA

Professional Traffic Operations Engineer

# Project Team: Resumes



## Andy Utic, P.E.

Traffic Signals

Andy has worked as a traffic engineer with raSmith for the past 10 years. He is the technical lead for traffic signal design and offers expertise in traffic analysis and modeling. He has experience working on diverse projects, including traffic signal operations, timing optimization, traffic signal design, lighting design, traffic impact studies, and microsimulation. Andy provides traffic engineering support to WisDOT, local municipalities, and private developers. Additionally, he is proficient with traffic analysis software such as Synchro, Vissim, Sim Traffic, and HCS.

### Education

B.S. Civil Engineering, University of Wisconsin-Madison, 2015

### Professional Registrations

Professional Engineer: WI

WisDOT SE Region Certified TIA Preparer

### Professional Affiliations

American Council of Engineering Companies (ACEC) Leadership Institute, Class of 2025

### Project Experience

- Watertown Plank Road, Wauwatosa, WI
- County O/Brookfield Square Mall, Waukesha County, WI
- 68th Street, Wauwatosa, WI
- Holy Hill Road and Goldendale Road, Germantown, WI
- County A and County H Traffic Signal Inspection, Kenosha County, WI
- County KR and 90th Street Traffic Signal Inspection, Kenosha County WI
- County Q and County U Traffic Signal Inspection, Kenosha County, WI
- County O and County I, Waukesha County, WI
- Old 43rd and National Avenue Signal Modifications, Village of West Milwaukee, WI
- Village Redevelopment, City of Wauwatosa, WI
- US 51/Center Ave, City of Janesville, WI



## Tom Mortensen, PLA, ASLA

Landscape Architect

Tom Mortensen has over 35 years of experience in site design, landscape architecture and related design and construction professions. Tom has expertise in site planning, urban spaces, park and public open space design, memorials / public plazas, retail developments, restoration plans, and integrated stormwater management / green infrastructure. Tom has given presentations throughout the region at various conferences and events on topics pertaining to site design, master planning, green infrastructure, water quality, and site development. Since 2011, he has been teaching a class at the UW-Milwaukee School of Continuing Education in the Water Technology Certification program on the topic of green infrastructure and using native landscape and site design for more resilient integration of rainfall on sites.

### Professional Registration

Professional Landscape Architect: State of Wisconsin, #69

### Professional Affiliations

American Society of Landscape Architects Wisconsin Park and Recreation Association

Walker's Point Association Board Member and Business & Economic Development Committee Member

The Friends of the Mitchell Park Domes, Vice President of the Board and Education Committee Member

### Project Experience

- Breuer Park and Trails, Slinger, WI
- Appleton River Trail, Appleton, WI
- Bradford Beach All-Inclusive Access, Milwaukee
- City of Franklin, Multiple City Parks, Franklin, WI
- Gilbert Riverfront Trail, Menasha, WI
- Hidden Lake Park and Trail, Brookfield, WI
- Lemke Park, City of Mequon, WI
- Lilly Heights Park, Brookfield, WI
- Lutz Park, Appleton, WI
- Mequon Nature Preserve, Mequon, WI
- Milwaukee River Greenway Master Plan, Milwaukee, Shorewood, and Glendale, WI
- Root River Parkway Beer Garden, Milwaukee County, WI

# Project Team: Resumes



## Rob Williams, PLA, ASLA

Landscape Architect

Rob has over 20 years of experience providing site design, landscape architecture, and construction support to land development. He has leveraged his extensive design experience to successfully complete a wide variety of projects including multi-family residential, senior housing, commercial, school, industrial, mixed use, religious, and parks.

### Project Experience

#### Multi-Family / Residential

Mixed-Income Apartments at The Mayfair Collection, Wauwatosa, WI  
Tivoli Green Apartments Phase 2, Mount Pleasant, WI  
The Village at Fox River Apartments, Waukesha, WI

#### Senior Living / Assisted Care

Luther Manor Renovations, Wauwatosa, WI  
National Regency Senior Community, New Berlin, WI  
Ameira Orchids CBRF, Milwaukee, WI

#### Commercial / Corporate

Milwaukee Electric Tool Downtown Campus, Milwaukee, WI  
Car Dealerships, 15+ Sites, WI

### Education

B.S. Landscape Architecture, University of Wisconsin-Madison, 2000

Associate Degree in Horticulture / Landscape Design, Milwaukee Area Technical College, 1997

### Professional Registration

Professional Landscape Architect, State of Wisconsin, #464-14

### Professional Affiliation

American Society of Landscape Architects



## Mike Ratzburg, P.L.S.

Surveying Services Lead

With over 30 years of surveying experience, Mike brings expertise in ALTA boundary and topographic surveys, construction layout, Certified Survey Maps, and right-of-way plats. Skilled in UAS technology and complex project scopes, he combines technical precision with strong leadership to effectively manage survey crews. Mike's collaborative approach and clear communication ensure projects are delivered on time while maintaining trusted client relationships.

### Project Experience

#### Right-of-Way Plats

- WIS 11, Racine County, WI
- 4 Mile Road, Wind Point, WI
- WIS 45, Franklin, WI
- West National Ave, West Allis, WI
- WIS 36, Walworth County, WI
- WIS 113, Columbia County, WI
- WIS 47, Outagamie County, WI
- WIS 73, Columbia County, WI
- WIS 11, Racine County, WI
- WIS 59, Walworth County, WI
- W. Rawson Ave, Milwaukee County, WI

### Education

Associate Degree in Civil Technologies, Gateway Technical Institute, 1988

### Professional Registration

Wisconsin Professional Land Surveyor

### Professional Affiliations

Wisconsin Society of Land Surveyors, Member, Past State Representative

# Project Team: Resumes



## Paul Schafer, P.E.

Construction Phasing/Review

Paul has more than 25 years of experience in construction management for large development projects, street reconstructions, utilities, subdivisions, water towers, and water and wastewater facilities. His knowledge in construction management also includes preparing contracts, pay requests, cost estimating, performing quality control reviews on plans and specifications, daily project management, scheduling inspectors and surveyors, and as-built drawings and quantities.

### Education

B.S. Civil Engineering, University of Wisconsin-Platteville, 1999

### Professional Registrations

Professional Engineer: WI

### Professional Certification

PCCTec-1

### Project Experience

- Waukesha Water Utility/Great Water Alliance, Waukesha, WI
- Menomonee Falls Lead Service Replacements, Menomonee Falls, WI
- WIS 18 Water Main, Jefferson Utilities, Jefferson, WI
- Prairie View Water Main, Pleasant Prairie, WI
- Chicory Road Sanitary Sewer Replacement, Racine Sewer Utility, Racine County, WI
- Calhoun Road Reconstruction, City of New Berlin, WI
- Small Road Reconstruction, City of New Berlin, WI
- 16th Street Reconstruction and Roundabout, Village of Mount Pleasant, WI
- Emmertsen Road Reconstruction, Village of Mount Pleasant, WI
- Beres Road Reconstruction, City of New Berlin, WI
- Rogers Drive Road Reconstruction, City of New Berlin, WI
- Village Redevelopment Project, City of Wauwatosa, WI
- Buena Park Road Reconstruction, Village of East Troy, WI



## Ryan Mann

Construction Phasing/Review

Ryan brings over 24 years of expertise in construction inspection; municipal and transportation design for storm and sanitary sewers, water mains, and roadways; and site planning for private developments. His construction monitoring role for many of the projects he's designed gives him a valuable perspective on design and construction practices. Ryan's proactive approach ensures smooth, safe operations through real-time problem-solving and clear communication with contractors and clients to attain project goals.

### Education

Associate Degree in Civil Engineering, Moraine Park Technical College

### Professional Certification

PCCTec I/IA

### Software

AutoCAD Civil 3D

### Project Experience

- Hales Happiness Water Conversion, Hales Corners, WI
- Pioneer Drive Reconstruction Project, City of Muskego, WI
- County X (Genesee Road), Waukesha County, WI: Grading, storm sewer, base aggregate, structures, concrete curb & gutter, asphaltic concrete pavement, recreational-use sidewalk, traffic signals, pavement marking, traffic control, permanent signing, erosion control, restoration, and incidentals
- Pavement Evaluation Program (PASER): City of Waukesha, Village of Greendale, Village of West Milwaukee, WI
- Annual Paving Programs: Village of Nashotah, Town of Delafield, City of Muskego, Village of Greendale, Town of Wheatland, Town of Salem, Town of Raymond, Town of Ixonia, Village of Butler, WI

# Project Experience

The following case studies highlight similar projects that have been completed by the same team members, many of which were managed by Troy Hartjes. Several of the projects are similar to the scale and complexity of this effort, including large urban-to-urban reconstructions in various downtown areas, some with adjacent residential uses, and full utility and signal replacements. We also included additional case studies that demonstrate our experience with unique or less common project elements, such as underground vaults, railroad crossings, staging and phasing challenges, and coordination with fire departments.



## Wauwatosa Village Redevelopment

City of Wauwatosa, WI

The City of Wauwatosa undertook a \$25 million, four-phase redevelopment of its downtown area well known as “The Village of Wauwatosa.” This urban center is a mix of historic architecture and European character where people enjoy walking, biking, eating and shopping. Current and historic land uses include a town center, pedestrian bridge over the Menomonee River, Hart Park, Oak Leaf Trail, commercial services, heavy industry, churches, hospital, housing, restaurants, supermarkets, pharmacies and more.

At the core of the Village redevelopment project is a new curbsless plaza, allowing the roadway to be shared with pedestrians and vehicles. Distinctive to this project are the decorative bollards (lighted posts) that outline the roadway and parking lanes that create a pedestrian-friendly design. The bollards (rather than curb and sidewalk) provide a flush design and maximize space, while still providing a safe environment for motorists and pedestrians. This unique, plaza-type open space appeals to those visiting the downtown area as well as to increase opportunities for economic development.

The uniqueness of this project includes: eight blocks of roadway and utility reconstruction (urban to urban reconstruction with building at the right-of-way), intersection realignments, four traffic signal replacements and one new traffic signal, back-in parking on one-way streets, parkettes for on-street dining, two park redevelopments, a unique water feature, decorative string lighting, LED light poles, construction permits, railroad permitting, railroad pedestrian crossings, pedestrian bridges, riverbank improvements, hollow sidewalks (due to underground vaults), European-style brick pavers, wayfinding signs and kiosks, and bike racks.

raSmith provided all civil engineering, traffic and roadway planning, and construction services. Extensive project coordination was necessary to accommodate existing and new development, private developments underway during construction and local businesses remaining open during construction.

### Client

Village of Wauwatosa,  
Wisconsin

### Project Team

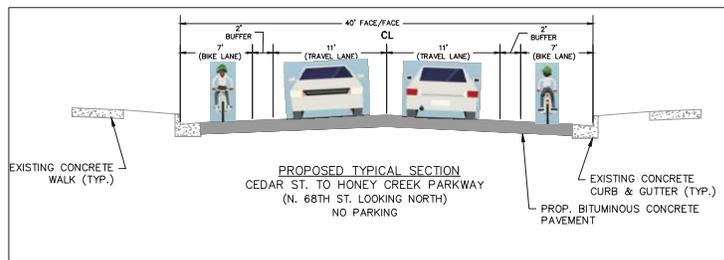
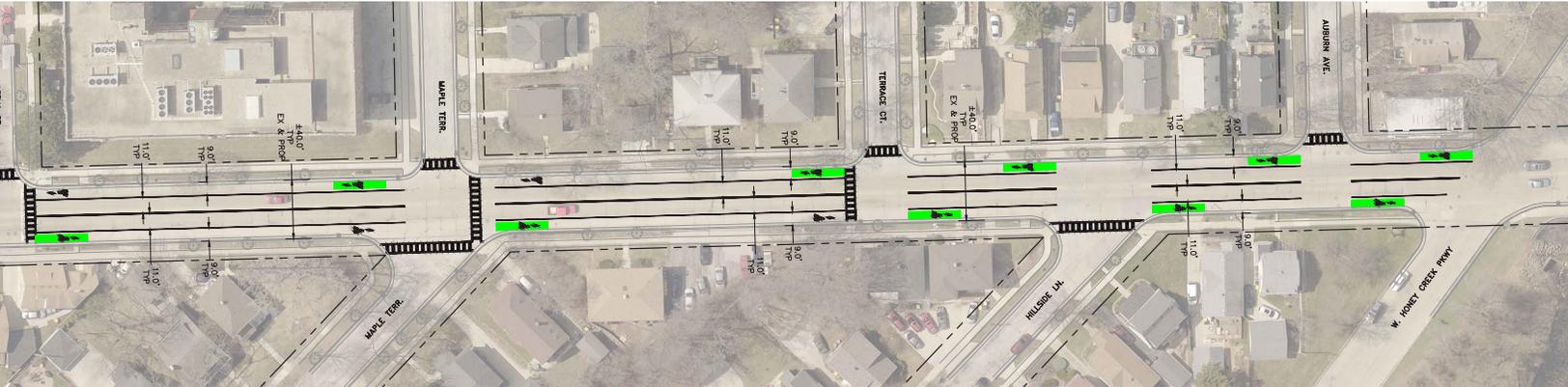
Troy Hartjes, P.E.  
Dave Reiter, P.E.  
Matt Garon, P.E.  
Ryan Mann  
John Bruggeman, P.E., PTOE

### Contact

Mike Steiner, P.E.  
Assistant City Engineer  
City of Wauwatosa  
(414) 479-8900  
msteiner@wauwatosa.net

# Project Experience

TWO DEDICATED BIKE LANES/W NO PARKING  
(CEDAR ST. TO HONEY CREEK PKWY)



## N. 68th Street (W. Wisconsin Avenue to W. Honey Creek Parkway)

Wauwatosa, WI

raSmith designed the reconstruction of N. 68th Street between W. Wisconsin Avenue and W. Honey Creek Parkway in the city of Wauwatosa. raSmith developed typical section layouts for two distinct business and residential areas along the project corridor. The two-lane typical sections were developed to consider on-street parking and bicycle needs while maintaining traffic flow and prioritizing safety. Pedestrian improvements such as high-visibility crosswalks, curb extensions, and rectangular rapid flashing beacons (RRFB) were included in the project. In addition, the link between the Oak Leaf Trail, the existing multi-use trail through their business and Hart Park complex and the integration of these two facilities and the juncture of 68th Street was also reviewed. Concepts for future layouts and connection of the bike lanes along 68th Street and future corridors under consideration were analyzed with concepts and cross-sections developed to use in future designs. The final design included a full urban to urban reconstruction with bike lanes, bump-outs for separated parking locations, intersection improvements, and raised pedestrian crosses, including improvements to the intersections at the adjacent elementary school to help with traffic flows at drop-offs. The final bid documents included the incorporation of sanitary and water main design completed by the City.

**Client**  
City of Wauwatosa

**Project Team**  
Troy Hartjes, P.E.  
Dave Reiter, P.E.  
John Bruggeman, P.E.,  
PTOE

**Contact**  
Mike Steiner, P.E.  
Assistant City Engineer  
City of Wauwatosa  
(414) 479-8900  
msteiner@wauwatosa.net

# Project Experience



## E. Wells Street Reconstruction, N. Broadway to N. Van Buren Street Milwaukee, WI

The City of Milwaukee faced several challenges with the existing E. Wells Street roadway, including heavily deteriorated pavement, a lack of safe pedestrian and bicycle facilities, and obsolete traffic signal and street lighting equipment. raSmith was retained for this connecting highway project to prepare a design that accommodates projected vehicular traffic volumes while greatly improving the pedestrian and bicyclist experience in this urban setting, which is home to many restaurants, businesses, condominiums, and festivals. The "road diet" approach to the project reduced the number of travel lanes while providing increased public space for enjoyment of the many destinations along the corridor, including the expansion of outdoor seating and dining areas.

Integrated into the holistic design of the public space is a raised cycle track, which is a separated bicycle lane in the terrace area between the curb & gutter and sidewalk to provide maximum safety benefits to bicycle users. The implementation of the raised cycle track is one of the first few in the state of Wisconsin and demonstrates the City of Milwaukee's cutting-edge vision for promoting safe multi-modal transportation for all users. The project will employ green bicycle pavement markings and bike boxes to delineate safe zones for cyclists.

A detailed construction staging and pedestrian accommodation plan was prepared to maximize safe access during construction. The plan included a construction schedule that allowed for the full roadway opening during the Republican National Convention and the popular Bastille Days festival in mid-summer in which thousands of people descend upon the Cathedral Square Park area adjacent to the project.

raSmith's traffic services on the E. Wells Street project included a transportation management plan (TMP) and traffic signal design.

### Clients

City of Milwaukee

Wisconsin Department of  
Transportation

### Project Team

John Elkin, P.E.

Jim Blackwood, P.E.

John Bruggeman, P.E., PTOE

### Contact

David Tapia, P.E.

City of Milwaukee

(414) 286-2453

[dtapia@milwaukee.gov](mailto:dtapia@milwaukee.gov)

# Project Experience



## 7th Avenue Reconstruction

West Bend, WI

The City of West Bend made improvements to 7th Avenue within their downtown area to improve drainage and the failing concrete road conditions while replacing the utilities. The work consisted of a half mile of urban to urban road reconstruction with new curb and gutter, sidewalk spot replacement, intersection improvements, review and consideration for new pedestrian routes, new storm sewer, new water main, and new sanitary sewer. With a mixed use of residential, commercial, institutional, and the fire department, access during construction (including construction permits) and a staging plan were critical and were required as part of the final construction documents.

Final plans included a concrete roadway, all utility relays and staging and phasing plan through downtown and in conjunction with the Main Street reconstruction that was completed the following year.

### Client

City of West Bend

### Project Team

Troy Hartjes, P.E.  
Matt Garon, P.E.

### Contact

Max Marechal  
City Engineer  
City of West Bend  
1115 S. Main Street  
West Bend, WI 53095  
(262) 335-5130  
marecham@ci.westbend.wi.us

# Project Experience



## Watertown Plank Road

Wauwatosa, WI

raSmith staff prepared a utility and paving design for the reconstruction of Watertown Plank Road in the City of Wauwatosa, covering approximately half a mile of urban-to-urban corridor improvements. The project converted a four-lane roadway into a two-lane corridor, enhancing multimodal transportation with the addition of a bike lane, sidewalk, and a multi-use path. The scope also included improvements along 115th and 116th Streets, featuring sanitary sewer relays and water main relays ranging in size from eight to 24 inches.

A comprehensive stormwater management plan was developed to address existing storm sewer limitations and flooding concerns. Storm sewer infrastructure was increased from a 60-inch pipe to an 8-foot by 9-foot box culvert. raSmith completed detailed storm modeling using HEC-RAS for Underwood Creek, WinSLAMM for water quality assessment, and PCSWMM 2D modeling for floodplain analysis across the corridor.

The project also included lighting enhancements, the installation of new traffic signals, and a detailed traffic control plan. Improvements were coordinated through multiple permitting agencies, including WisDOT, MMSD, and the DNR. Wetland delineations were performed to guide environmental compliance and support permitting related to watercourse connections and wetland impacts. Two railroad crossings required extensive coordination and engineered solutions to accommodate utility placement and safety standards.

**Client**  
City of Wauwatosa

**Project Team**  
Troy Hartjes, P.E.  
John Bruggeman, P.E., PTOE  
Andy Utic, P.E.  
Riley Stone, P.E., CFM  
Dave Reiter, P.E.  
Paul Arend, P.E.  
Erica Pergande, PWS

**Contact**  
Mike Steiner, P.E.  
Assistant City Engineer  
City of Wauwatosa  
(414) 479-8900  
msteiner@wauwatosa.net

# Project Experience



## W. National Avenue (STH 100 to Lincoln Avenue)

West Allis, WI

raSmith is currently designing the reconstruction of W. National Avenue from STH 100 to W. Lincoln Avenue in the city of West Allis. Although the project is currently in design, the project included the upfront evaluation of the cross-section to be used that would incorporate the needs for multi-modal transportation, including pedestrians, vehicular traffic (both through and local), and buses. Several typical sections were analyzed and presented to the City and public for consideration and input. These typical sections included four-lane divided, two-lane divided, and a three-lane two-way left-turn lane (TWLTL). Sub-alternatives presented included on-street bike lanes or off-street cycle tracks with or without on-street parking. The final selection of a typical section will carry the project into the final design phase of the project. This \$12 million dollar reconstruction project is planned for 2026 construction.

**Client**  
City of West Allis

**Project Team**  
John Bruggeman, P.E., PTOE

**Contact**  
Traci Gengler  
Principal Engineer  
City of West Allis  
(414) 302-8372  
TGengler@westalliswi.gov

# Project Experience



## Potter Road & 109th Street

Wauwatosa, WI

raSmith staff prepared a utility and paving design for N. 109th Street between Potter Road and Wisconsin Avenue as well as for Potter Road between Underwood Elementary and the Union Pacific Railroad in the city of Wauwatosa. The City wished to complete the urban to urban reconstruction but had concerns about the utilities, including sanitary sewer, storm sewer, and water main. The sags at Potter Road and 109th Street both flood during large rain events, which blocks access for emergency vehicles and affects nearby residential properties. In addition to the storm and water main design, a sanitary sewer relay, the construction of a multi-use path, and the repaving of the Oak Leaf Trail were also included as part of this project.

To evaluate the existing storm sewer system, a regional watershed study was completed for a 132-acre watershed using 1D/2D computer modeling within PCSWMM. Areas of flooding concerns were identified while the design aimed to improve these areas as well as convey the 500-year, 24-hour rain event. The improvements consisted of a 10-foot wide by 5-foot high box culvert at the discharge point of the watershed to Underwood Creek. The box storm sewer continued upstream, transitioning to smaller sizes and eventually round pipe, totaling approximately 4,500 lineal feet.

### Highlighted services provided:

- Hydrologic and hydraulic analysis
- Regional stormwater planning
- Cost estimating
- Construction permits
- Railroad coordination
- Multi-jurisdictional with Milwaukee County, MMSD, and WisDOT serving as approved agencies

### Client

City of Wauwatosa

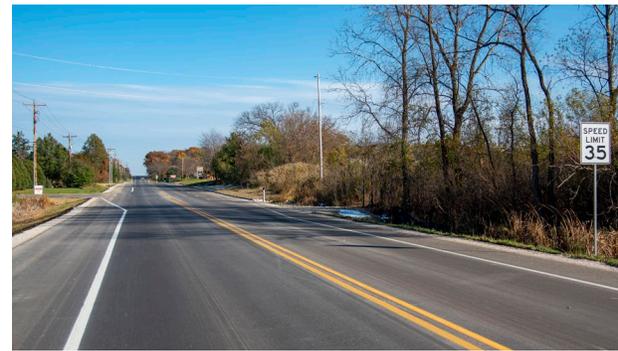
### Project Team

Brad Hartjes, P.E., CFM  
Troy Hartjes, P.E.  
Paul Arend, P.E.  
Riley Stone, P.E.  
Dave Reiter, P.E.

### Contact

Mike Steiner, P.E.  
Assistant City Engineer  
City of Wauwatosa  
(414) 479-8900  
msteiner@wauwatosa.net

# Project Experience



## Lincoln Avenue Reconstruction

New Berlin, WI

The City of New Berlin made improvements on Lincoln Avenue to enhance drainage road conditions. The work consisted of rural to rural and urban road reconstruction with new curb and gutter, ditching, intersection improvements, new storm sewer, and a new box culvert. The road was built over and through wetlands and very poor subsoils. Based on a life-cycle cost analysis using a pavement design report, the road design included multiple typical cross-sections to bridge the bad soils with various depths of pavement and geotechnical reinforcements included in the final roadway plans. raSmith worked with the DNR to design a new structure crossing a navigable waterway that addressed the eroding side banks adjacent to the roadway along with wetland permitting, including mitigation.

### Solution Overview

Approximately 8,200 feet of roadway was reconstructed with ditches and new curb and gutter to alleviate drainage issues and improve the failed pavement. The project included traffic signal design at the intersection of Lincoln Avenue and Calhoun Road. An extensive amount of wetlands needed to be disturbed due to the widening of the existing roadway to meet current City standards and an old, failing box culvert was replaced. The design team worked with the Department of Natural Resources (DNR) to obtain all necessary permits for wetlands and waterway disturbance. Other permitting included stormwater management for MMSD which involved bio-swale design to meet water quantity and quality requirements.

### Key Components

- Road reconstruction
- Prepared stormwater management plan
- Prepared state and MMSD permits
- Traffic signal design
- New storm sewer and culverts
- Box culvert design
- Pavement marking
- Right of way plats
- Public informational meetings

### Client

City of New Berlin

### Project Team

Troy Hartjes, P.E.  
Matt Garon, P.E.  
John Bruggeman, P.E.,  
PTOE  
Riley Stone, P.E.  
Paul Schafer, P.E.

### Contact

Tamara Simonson, P.E.  
City Engineer  
City of New Berlin  
(262) 797-2445  
tsimonson@newberlin.org

Lucas Pichler, P.E.  
Project Engineer  
City of New Berlin  
(262) 797-2453  
lpichler@newberlin.org

# Man-Hours Matrix/Level of Effort

Franklin Street Reconstruction: South 6th Street to 21st Street Engineering Desing Services City of Manitowoc	Project Manager/Quality Assurance - Hartigan, P.E.	Lead Roadway Design Reiter, P.E.	Lead Utility Engineer/Assistant Roadway Galon, P.E.	Utility Coordination/RR Galper, P.E.	GIS Mapping/Blasitt	Stormwater Stone, P.E.	Engineering Technician Staff	Traffic Lead/Public Outreach Hawley, P.E.	Traffic Engineer/Signals Bruggeman, P.E.	Sign Design Uric, P.E.	Landscape Architect Lead Morrison, P.L.A.	Landscape Architect Williams	Constructability Review Schaller, P.E.	Construction Permits Mann	Lead Survey Ratzburg PLS	Survey Technician/Crew	Administrative	TOTAL	
	Hourly Rate	\$190	\$179	\$175	\$159	\$159	\$171	\$138	\$190	\$159	\$158	\$190	\$150	\$190	\$160	\$167	\$200	\$125	
Task, Through Bidding																			
<b>Task 1: Data Collection, Survey</b>																			
Data Gathering/Past Reports/As-built Reviews/Storm Basins and Data	1	2	2																5
Survey Coordination/Diggers/QC Survey/RR Coordination (Survey)			2												8	4			14
Topographic Survey/Field Survey Including All Utilities: Building to Building and RR		2														110			112
Control/Benchmarks															2	8			10
<b>Task 2: Preliminary Design/Layouts/Analysis</b>																			
Base Mapping/Survey Drafting (not plan and profile sheets)	1	2			2		16								2	2			25
Sanitary Sewer Review and Evaluations (work with City on past televising reports and reviews)	2		12																14
Coordination with City for Preliminary Storm Sizing/Review Basins/Flooding Areas	2		1			14													17
Prelim Drawings/Coordination/Sharing with MPU for Water Design	2		4		2														8
GIS Base Mapping with Right-of-Way; Merge with Survey	1	4			8														13
Concepts/Renderings for Franklin St. Corridor w/ Bike/Ped Considered (Assume 3-4 Sections Over Corridor)	2	4					16	4	12										38
Typical Sections/Layout for Project Corridor		4						4	1	2		8							19
Preliminary Plan Geometrics w/ Parking (Narrowed Down to 1-2 and Review with City)	2	4						2	16	2	1								27
Final Concepts with Typical Cross-Sections/Intersection Layouts with LA Located (for initial PIM)		2							4		2	8	1						17
Preliminary Plan Profile/Cross-Sections (First Run with Profile)	1	3	3				40												47
Impacts/Pros/Cons (Upon Concept Chosen)	1	2	4				2												9
Pavement Design Report, Confirm Cross-Section	1	5																	6
Prelim Storm Sizing/Design and Sanitary Design (Prelim for 30% Plans)			28			28													56
Prelim Design-30% with Layouts/Utility Conflicts (Taking Input from Stakeholders/Staff Post PIM)	4	24							4										32
Cost Estimates with Updates at 30%/60%/Final	1	8	8			2				2									21
60% Design, with Profiles/Cross-Sections and Updates from 30% Review	2	24	24				24			6									80
Final Storm Sizing/Layout with Storm Laterals	2					16													18
Final Sanitary Design with Laterals (Potential Lining/Open Cut, Assume All Sanitary Replaced)	2		16																18
Staging/Phasing/Traffic Control	4	2											8						14
Pavement Marking	2	4		1					4										11
Jointing Plan/Concrete Pavement	2	12							2										16
Final Landscape Layout/Plans											4	18							22
Erosion Control						2	4												6
Preliminary Details (Sections/SDD's)							16												16
Preliminary Lighting Coordination and Layout (from MPU)	2	2	4										2						10
Preliminary Signal Design (Timing/Updates and new at 21st Street)	2	4							20	80									106
Incorporate MPU Water Design; Review for Conflicts		2	8				20												30
Intersection Details with Turning Movements		4							8										12
Quality Control/Constructability	22												24	2					48
<b>Task 3: Project Management/Agency and Utility Coordination/ Public Outreach/ Meetings/Easements</b>																			
Kick-off Meeting-Roles/Steps/Team/Budget and Design/Implementation Schedule (Pre-Survey)	4		4																8
Environmental Resources and Coordination with Stantec for Phase I	2		6			2													10
Post Survey Meeting: Review Data/Survey and Utility Evaluations (Confirm Final Scope Items)	4	4																	8
Status Meetings: Bi-Weekly Virtual with Monthly In-Person (Assume 10 Months Worth, Plus a Couple Extra)	36	18	18			4		2	2										80
Public Infrastructure Committee (Pre PIM)	2	2						2			2								8
Public Informational Meeting (Assume One (1) for now at 30% plan)	4	4						4			4								16
RR Coordination (Initial/On-Going/Final Permitting)	6	4	4	32											4				50
Utility Coordination (Initial/On-Going/Final Notices)	1		1	18										4					24
Construction Permits (no TLE), Assume Exhibit and Construction Permit for Matching Outside Right-of-Way	2	4				8								30		8			52
DNR and Other Agency Coordination	1		4	4															9
Permitting: DNR Sanitary Sewer, Watermain and NOI			12																12
General Project Management-Oversight/Coordination/Questions/Scheduling (Through Bidding)	40																		40
<b>Task 4: Final Construction Plans/Specs/Bid Documents/Bidding (ASSUMED 2 BIDS; SEE NOTE BELOW)</b>																			
Final Plans with all Details/Cross-Sections (as Noted in RFP and Noted Above in Prelim. Design)(90%)	4	8	12			8	24		2	8									68
Bid Form/Schedule			12							2									20
Preliminary Technical Specifications (Prelim) to Incorporate into Front End	4		16							6									42
Final Plan Updates Based on 90% Review/Utility Coordination/DNR Comments	2	8	8			8	8			2									36
Final Specification Updates, Coordinate with Front Ends/Merge	2		6																12
Compile Bid Documents (Spec/Plan); Disburse Bound Copies for City		2	4																10
Final Cost Estimate for Bidding			6																6
Bid Advertisement/Notices(Trade Publications/Local Papers); Utilize Quest for Online Bidding			4																10
Bidding (Calls with Contractors)	4	6	6							4									20
Bid Opening and Letter of Recommendation/Bid Tab	4		2																8
<b>Total Hours</b>	183	180	241	55	12	84	182	15	76	112	13	36	33	36	16	132	40		1446
<b>Total Cost</b>	\$34,770	\$32,220	\$42,175	\$8,745	\$1,908	\$14,364	\$25,116	\$2,850	\$12,084	\$17,696	\$2,470	\$5,400	\$6,270	\$5,760	\$2,672	\$26,400	\$5,000		\$245,900

## ASSUMPTIONS

Total project limits is about 1 mile.

All costs include mileage and reimbursable fees such as printing/advertisements/affidavits (required for LRIP); permit fees to be reimbursed by City, which would include NOI and any RR permit fee (unknown at this time).

Site survey assumed survey from building to building in many cases with a minimum 20' into right-of-way; always pick up RR line where adjacent and 15' past; assume no snow on ground at time of survey.

No right-of-way platting; assume utilizing GIS, City mapping and plans, and located iron pipe.

Meetings assume all travel time and minutes after meeting; assume first status meeting will be in March (after KO and survey).

Water main designed by MPU (redlines), and we will draft into plans and confirm conflicts/updates.

No right-of-way acquisitions required; we will prepare construction permits for any grading outside of r/w; costs at this point assume 20 construction permits.

RR coordination includes calls/permits/coordination and assumes work within r/w permit and plan updates to account for RR in City right-of-way; does not include any r/w acquisitions or verifications and assume no OCR or new crossings (pedestrian or vehicle).

Final bid docs and bidding assumes bid through Quest. We will provide a PDF of the final bid sets, answer bidders' questions, and prepare addenda as necessary; assume one bid package (no phased bidding).

Storm design assumes new CB, leads throughout, and confirms sizing of existing and relay of mainline piping within the corridor.

Sanitary design assumes new replacement of existing lines throughout (18" thru 42") and includes analysis of construction means and could include open cut and/or lining or pipe bursting.

Rates are based upon work in 2026 for this project, but will be held throughout the project assuming a second bid at end of 2027.

Our costs assume no private utility locates or potholing of the existing water main or water services; this may be required as we determine the existing water location and depths (helps to know and for potential pulling of services. Cost would be approximately \$20,000, depending on the # of cores.

The cost for the public outreach assumes all notices and invites and mailers sent by the City; we will provide letter (word docs) for mailing; assumes no individual meetings in-person but will coordinate construction permits via email and virtual meetings.

Concrete pavement assumed throughout but will analyze with pavement design report and look at costs/life cycle.

**Task 4, bidding, assumes creating final bid plans/specs/documents for each phase and includes time and costs for 2 bidding package; also includes Phase 2 plan updates based on the construction and findings during Phase 1.**

# Standard Terms and Conditions



## PROFESSIONAL SERVICES AGREEMENT BETWEEN CLIENT AND PROFESSIONAL

THIS IS AN AGREEMENT effective as of \_\_\_\_\_ ("Effective Date") between \_\_\_\_\_ ("Client") and R.A. Smith, Inc. ("Professional").

Client's Project, of which Professional's services under this Agreement are a part, is generally identified as follows:

\_\_\_\_\_  
("Project").

Professional's services under this Agreement are generally identified as follows:

\_\_\_\_\_  
("Services").

Client and Professional further agree as follows:

### 1.01 *Basic Agreement and Period of Service*

- A. Professional shall provide or furnish the Services solely for the benefit of Client as set forth in this Agreement and in the attached proposal. If authorized by Client, or if required because of changes in the Project, Professional shall furnish services in addition to those set forth above ("Additional Services").

### 2.01 *Payment Procedures*

- A. *Invoices:* Professional shall prepare invoices in accordance with its standard invoicing practices and submit the invoices to Client on a monthly basis. Invoices are due and payable within 30 days of invoice date. If Client fails to make any payment due Professional for Services, Additional Services, and expenses within 30 days after receipt of Professional's invoice, then (1) the amounts due Professional will be increased at the rate of 1.0% per month (or the maximum rate of interest permitted by law, if less) from said thirtieth day, and (2) in addition Professional may, after giving seven days written notice to Client, suspend Services under this Agreement until Professional has been paid in full all amounts due for Services, Additional Services, expenses, and other related charges. Client waives any and all claims against Professional for any such suspension.
- B. *Payment:* As compensation for Professional providing or furnishing Services and Additional Services, Client shall pay Professional as set forth in this agreement. If Client disputes an invoice, either as to amount or entitlement, then Client shall promptly advise Professional in writing of the specific basis for doing so, may withhold only that portion so disputed, and must pay the undisputed portion.

### 2.02 *Basis of Payment*

- A. Client shall pay Professional for Services in the amount and manner provided in the attached proposal.
- B. *Additional Services:* Unless specified in the attached proposal, for Additional Services, Client shall pay Professional an amount equal to the cumulative hours charged in providing the Additional Services by each class of Professional's employees, times standard hourly rates for each applicable billing class; plus reimbursement of expenses incurred in connection with providing the Additional Services and Professional's consultants' charges, if any.

### 3.01 *Suspension and Termination*

- A. The obligation to continue performance under this Agreement may be suspended:
  - 1. *By Client:* Client may suspend the Project for up to 90 days upon seven days written notice to Professional.
  - 2. *By Professional:* Professional may, after giving seven days written notice to Client, suspend services under this Agreement if Client has failed to pay Professional for invoiced services and expenses, as set forth in this Agreement.
- B. The obligation to continue performance under this Agreement may be terminated:
  - 1. For cause,
    - a. By either party upon 14 days written notice in the event of substantial failure by the other party to perform in accordance with the Agreement's terms through no fault of the terminating party. Failure to pay Professional for its services is a substantial failure to perform and a basis for termination.
    - b. By Professional:
      - 1) upon seven days written notice if Client demands that Professional furnish or perform services contrary to Professional's responsibilities as a licensed professional; or
      - 2) upon seven days written notice if the Professional's Services are delayed for more than 90 days for reasons beyond Professional's control, or as the result of the presence at the Site of undisclosed Constituents of Concern.
    - c. By Client, for convenience, effective upon Professional's receipt of written notice from Client

# Standard Terms and Conditions



- d. Professional shall have no liability to Client on account of a termination for cause by Professional.
  - e. Notwithstanding the foregoing, this Agreement will not terminate as a result of a substantial failure under this section if the party receiving such notice begins, within seven days of receipt of such notice, to correct its substantial failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of notice; provided, however, that if and to the extent such substantial failure cannot be reasonably cured within such 30 day period, and if such party has diligently attempted to cure the same and thereafter continues diligently to cure the same, then the cure period provided for herein shall extend up to, but in no case more than, 60 days after the date of receipt of the notice.
- C. In the event of any termination under this section, Professional will be entitled to invoice Client and to receive full payment for all Services and Additional Services performed or furnished in accordance with this Agreement, plus reimbursement of expenses incurred through the effective date of termination in connection with providing the Services and Additional Services, and Professional's consultants' charges, if any.
- 4.01 *Successors, Assigns, and Beneficiaries*
- A. Client and Professional are hereby bound and the successors, executors, administrators, and legal representatives of Client and Professional are hereby bound to the other party to this Agreement and to the successors, executors, administrators, and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements, and obligations of this Agreement.
  - B. Neither Client nor Professional may assign, sublet, or transfer any rights under or interest (including, but without limitation, money that is due or may become due) in this Agreement without the written consent of the other party, except to the extent that any assignment, subletting, or transfer is mandated by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement.
  - C. Unless expressly provided otherwise, nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by Client or Professional to any Constructor, other third-party individual or entity, or to any surety for or employee of any of them. All duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of Client and Professional and not for the benefit of any other party.
- 5.01 *General Considerations*
- A. **Standard of Care**

The standard of care for all professional engineering and related services performed or furnished by Professional under this Agreement will be the care and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time and in the same locality. Professional makes no warranties, express or implied, under this Agreement or otherwise, in connection with any services performed or furnished by Professional. Subject to the foregoing standard of care, Professional and its consultants may use or rely upon design elements and information ordinarily or customarily furnished by others, including, but not limited to, specialty contractors, manufacturers, suppliers, and the publishers of technical standards.
  - B. **Design Without Construction Phase Services**

Professional shall not at any time supervise, direct, control, or have authority over any Constructor's work, nor shall Professional have authority over or be responsible for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, or the safety precautions and programs incident thereto, for security or safety at the Project site, nor for any failure of a Constructor to comply with laws and regulations applicable to such Constructor's furnishing and performing of its work. Professional shall not be responsible for the acts or omissions of any Constructor. Professional neither guarantees the performance of any Constructor nor assumes responsibility for any Constructor's failure to furnish and perform its work.
  - C. **Opinions of Cost**

Professional's opinions (if any) of probable construction cost are to be made on the basis of Professional's experience, qualifications, and general familiarity with the construction industry. However, because Professional has no control over the cost of labor, materials, equipment, or services furnished by others, or over contractors' methods of determining prices, or over competitive bidding or market conditions, Professional cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by Professional. If Client requires greater assurance as to probable construction cost, then Client agrees to obtain an independent cost estimate. Professional shall not be responsible for any decision made regarding the construction contract requirements, or any application, interpretation, clarification, or modification of the construction contract documents other than those made by Professional or its consultants.
  - D. **Use of Documents**

All documents prepared or furnished by Professional are instruments of service, and Professional retains an ownership and property interest (including the copyright and the right of reuse) in such documents, whether or not the Project is completed. Client shall have a limited license to use the documents on the Project, extensions of the Project, and for related uses of the Client, subject to receipt by Professional of full payment due and owing for all Services and Additional Services relating to preparation of the documents and subject to the following limitations:

    - 1. Client acknowledges that such documents are not intended or represented to be suitable for use on the Project unless completed by Professional, or for use or reuse by Client or others on extensions of the Project, on any other project, or for any other use or purpose, without written verification or adaptation by Professional;

# Standard Terms and Conditions



2. Any such use or reuse, or any modification of the documents, without written verification, completion, or adaptation by Professional, as appropriate for the specific purpose intended, will be at Client's sole risk and without liability or legal exposure to Professional or to its officers, directors, members, partners, agents, employees, and consultants;
3. Client shall indemnify and hold harmless Professional and its officers, directors, members, partners, agents, employees, and consultants from all claims, damages, losses, and expenses, including attorneys' fees, arising out of or resulting from any use, reuse, or modification of the documents without written verification, completion, or adaptation by Professional; and
4. Such limited license to Client shall not create any rights in third parties.

## E. Liability

To the fullest extent permitted by Laws and Regulations, and notwithstanding any other provision of this Agreement, the total liability, in the aggregate, of Professional and Professional's officers, directors, employees, and Consultants, to Client and anyone claiming by, through, or under Client for any and all injuries, claims, losses, expenses, costs, or damages whatsoever arising out of, resulting from, or in any way related to the Project, Professional's or its Consultants services or this Agreement from any cause or causes whatsoever, including but not limited to the negligence, professional errors or omissions, strict liability, breach of contract, indemnity obligations, or warranty express or implied of Professional or Professional's officers, directors, employees, or Consultants shall not exceed the total amount of \$100,000 or the total compensation received by Professional under this Agreement, whichever is less.

## F. Indemnification

To the fullest extent permitted by Laws and Regulations, Client shall indemnify and hold harmless Professional and Professional's officers, directors, employees, and Consultants from and against any and all claims, costs, losses and damages (including but not limited to all fees and charges of Professionals, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to the Project, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of the Client or Client's officers, directors, members, partners, agents, employees, consultants, or others retained by or under contract to the Client with respect to this Agreement or to the Project.

## G. Dispute Resolution

Client and Professional agree to negotiate each dispute between them in good faith during the 30 days after written notice of dispute. If negotiations are unsuccessful in resolving the dispute, then the dispute shall be mediated. If mediation is unsuccessful, then the parties may exercise their rights at law. The venue for all disputes shall be the state of Wisconsin. Attorney fees will be borne by the non-prevailing party.

## H. Governing Law

This Agreement is to be governed by the law of the state of Wisconsin.

## 6.01 Agreement

- A. This Agreement (including any expressly incorporated attachments), constitutes the entire agreement between Client and Professional and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument. Nothing in this Agreement between Professional and Client shall create a contractual relationship between either Professional and Client and an outside third party.

## 7.01 Lien Notice

- A. As required by the Wisconsin construction lien law, Professional hereby notifies Client that persons or companies performing, furnishing, or procuring labor, services, materials, plans, or specifications for the construction on Client's land may have lien rights on Client's land and buildings if not paid. Those entitled to lien rights, in addition to the undersigned Professional, are those who contract directly with the Client or those who give the Client notice within 60 days after they first perform, furnish, or procure labor, services, materials, plans, or specifications for the construction. Accordingly, Client probably will receive notices from those who perform, furnish, or procure labor, services, materials, plans, or specifications for the construction, and should give a copy of each notice received to the mortgage lender, if any. Professional agrees to cooperate with the Client and the Client's lender, if any, to see that all potential lien Professionals are duly paid.

# Standard Terms and Conditions

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement, the Effective Date of which is indicated on page 1.

Project Name: \_\_\_\_\_

Client: \_\_\_\_\_

Professional: R.A. Smith, Inc.

By: \_\_\_\_\_

By: \_\_\_\_\_

Print name: \_\_\_\_\_

Print name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date Signed: \_\_\_\_\_

Date Signed: \_\_\_\_\_

Address for Client's receipt of notices:

Address for Professional's receipt of notices:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

R.A. Smith, Inc.  
16745 West Bluemound Road  
Brookfield, WI 53005

Client's Phone: \_\_\_\_\_

Professional's Phone: \_\_\_\_\_

Client's Email: \_\_\_\_\_

Professional's Email: \_\_\_\_\_

# Cost Proposal/Final Fee Summary

Franklin Street Reconstruction: South 6th Street to 21st Street Engineering Design Services Estimated Design Fees City of Manitowoc	
Task - See Level of Effort and Scope for Inclusions	Fee
Engineering Design, Through Bidding (2 bids)	\$245,900.00
<b>Total Cost Design (first bid in 2026, second bid in 2027)</b>	<b>\$245,900.00</b>
<b>Potential Items Needed</b>	
Geotechnical Investigations/Report (Soil Borings)	\$15,000.00
Water Main Design (if MPU cannot complete)	\$20,000.00
Phase 2 Environmental	\$15,000.00
Lighting Design (Completed by Subconsultant, if necessary)	\$15,000.00
<b>Total Potential Project Cost, Set-up Through Construction Completion</b>	<b>\$310,900.00</b>

**Notes:**

The Total Design Fee is an estimate, recognizing that various utilities and/or other items may be added/removed, and that items such as construction permits and RR requirements may not be finalized at this time. In addition, some tasks within the level of effort may fluctuate based on outcomes from the concept plan, including landscaping, lighting, intersection improvements, bike lane accommodations, and stakeholder requests. We understand that a project at this stage needs to be flexible. We will work with the City to negotiate the fee as noted or provide a phased approach and a fee per stage if desired.