

July 1, 2022



CREATIVITY BEYOND ENGINEERING



Engineering Design Services:
Village of Allouez
**2023 Street & Utility
Reconstruction Projects**

(920) 731-3499
rasmith.com

100 West Lawrence Street, Suite 412
Appleton, WI 54911-5754



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Cover Letter

July 1, 2022

Mr. Sean Gehin, P.E.
Director of Public Works
Village of Allouez
1900 Libal Street
Green Bay, WI 54301-2453



CREATIVITY BEYOND ENGINEERING

100 West Lawrence Street, Suite 412
Appleton, WI 54911-5754

RE: Request for Engineering Services Proposals
Village of Allouez 2023 Street and Utility Reconstruction Projects

Dear Mr. Gehin:

raSmith is pleased to be considered for the design of the Village of Allouez's 2023 street and utility reconstruction projects. We are excited to continue our relationship with the Village and are committed to delivering a superior quality plan to the Department of Public Works for this project. The raSmith team offers the following unmatched benefits:

Tailored approach — we have the Village's best interests in mind. We will provide a design that will always have the best long-term result in mind for the Village. For example, we will provide utility and roadway plan sheets with colored utility lines and annotations. We have the preferred color scheme and annotation text style that the Village of Allouez expects to see on their plans.

Proven experience — we have completed these projects for the Village in 2018–2019, 2020–2021, and on many similar projects. Our past design experience on urban reconstruction projects, including the 2019 and 2021 Village of Allouez street and utility reconstructions, allows us to understand the project challenges and anticipate issues before they occur. We understand the Village's expectations and goals for this project. We have aided the Village in the development of their construction details and plan sheet drafting standards. Other firms cannot match our knowledge of the Village's standards and the resulting efficiencies realized in a quality plan set, estimate, and bidding documents.

Staff availability — we are ready. The timing for the Village's 2023 street and utility reconstruction projects perfectly aligns with the availability of our staff. The Village will receive the same team from the 2021 projects led by project manager Doug Senso and project engineer Scott Lietzau. Design engineer, Robert Wielgos and drafting technician Steve Roncke also bring their experience and knowledge of the Village's drafting standards from the 2019 and 2021 projects. This team is dedicated to meeting the Village's design schedule on the 2023 projects.

The Village of Allouez's Department of Public Works needs a design team with a thorough understanding of the Village's engineering standards that is ready to meet your schedule. raSmith is that design team. We are ready to exceed your expectations on these important projects.

Sincerely,
raSmith

A handwritten signature in black ink, appearing to read "Doug Senso".

Doug Senso, P.E.
Senior Project Manager

Firm & Team Qualifications

raSmith is a multi-disciplinary consulting firm comprising civil engineers, structural engineers, traffic engineers, land surveyors, development managers, landscape architects, and ecologists. Our services are focused on our public and private sector clients' needs in design and construction including site design, structural engineering, municipal engineering, transportation and traffic, surveying, construction services, and geographic information systems (GIS). We work on projects nationwide from our seven locations. Richard A. Smith, M.S., P.E., founded raSmith in 1978. Richard A. Smith Jr., P.E., (Ricky) leads the firm as president. The firm currently employs a staff of 220.

Simply stated, raSmith offers the Village of Allouez the luxury of local design professionals with the benefit of deep and varied regional experience.

Transportation Engineering

The raSmith transportation division specializes in complex urban and rural roadway and intersection design, including traffic and safety analysis and traffic signal design. We are very familiar with the distinctive needs

and requirements of clients at both the state and local levels whether village or town, city, county or DOT. We are also very familiar with the project concerns, conflicts and challenges that arise, from design complexities to satisfying the public's project concerns. raSmith is listed on the Wisconsin Department of Transportation's Roster of Eligible Engineering Consultants. Specifically, raSmith's transportation division has designed more than 25 similar projects in the last 10 years. The projects shown are a sampling of similar projects for raSmith's project manager Doug Senso and the design team.



We have assembled an experienced, diverse design team to exceed the Village of Allouez's expectations for the 2023 street and utility reconstruction projects. Learn more about our design team in the following overviews and resumes.



Doug Senso, P.E. – Senior Project Manager

Doug has more than 29 years of experience in the design of transportation facilities for local governments and the Wisconsin Department of Transportation (WisDOT). He is an excellent communicator who will keep you

informed on the projects' progress and issues. If issues arise, you can trust Doug to identify these early on and come to you with solutions.

He has successfully managed the design of several projects similar to the Village's urban street reconstruction projects including: 2019 and 2021 Village of Allouez Street and Utility Reconstructions, Oneida Street in the City of Appleton, South Third Street in the City of Watertown and Sumner Street in the City of Hartford. These urban reconstruction projects required new storm sewer and other public utility designs and details, pavement cross slopes designed to maximize drainage and constructability, and profile adjustments to minimize bordering property impacts.

This project experience, coupled with his work with the Village on the 2019 and 2021 projects, is a perfect match for the Village of Allouez's 2023 street and utility reconstruction projects.

Doug's commitment to quality on his projects has been recognized by the WisDOT Excellence in Highway Design Awards, winning regional awards in 2009, 2010, 2011, 2012 and twice in 2016, and statewide awards in 2010 and 2011.

Doug's estimated availability is 65% from August 2022 and forward. His current commitments include:

- WIS 47, Outagamie County
- I-39/90/94 Wisconsin River Bridges, Columbia County
- WIS 57, Door County
- WIS 42 Culvert Replacement, Door County

Firm & Team Qualifications



Scott Lietzau, P.E. – Senior Project Engineer

Scott has over 20 years of experience with a wide variety of roadway designs including capacity expansions of freeways and interstates, new corridor alignments and urban street reconstructions. Similar to the Village of Allouez projects, Scott's Sumner Street project involved utility installations and roadway design within a constrained urban corridor. This project was nominated for an Excellence in Urban Highway Design award.

Scott was the design team leader on the 2019 and 2021 Village of Allouez Street and Utility Reconstruction projects. He will oversee the overall technical design efforts, relying on his highly diverse background to streamline the design and plan production processes while ensuring a sound design and high-quality deliverable consistent with Village standards.

Scott's estimated availability is 65% from August 2022 and forward. His current commitments include:

- WIS 47, Outagamie County
- I-39/90/94 Wisconsin River Bridges, Columbia County
- WIS 57, Door County
- CTH OO/French Road, Outagamie County



Robert Wielgos, P.E. – Design Engineer

Upon graduation from Marquette University in 2015, Robert joined raSmith as a Civil Engineer I in the company's rotational training program in which he spent the first 17 months working within all of the company's six engineering services: construction, survey, municipal, transportation, structures and land development. He officially joined Municipal Services in November 2016.

As a member of the municipal services team, Robert has led multiple project designs for the Village of Mount Pleasant, including: Oakes Road Reconstruction, TID #1, TID #4 - Phase 3, Annual Paving Program, and 16th Street Pavement Reconstruction. Robert has also led the design efforts for other communities such as the City of Sun Prairie Westside Building Site Redevelopment, multiple Oak Creek utility projects, Village of Allouez 2021 Street Reconstructions and UW-Waukesha Site Infrastructure Improvements.

Robert's municipal and roadway design background makes him a great fit for this project. He is proficient in our Civil 3D design software making plan adjustments quickly and efficiently.

Robert's estimated availability is 65% from August 2022 and forward. His current commitments include:

- CTH EM Resurfacing Project, Kenosha County
- Fox Road Drainage Improvements, Jefferson County
- Hornsby Business Park Lot 30 Development Review, Walworth County
- Sterling Parkway Development Review, Walworth County



Steve Roncke – Engineering Technician

Steve has more than 30 years of experience in the drafting and layout of all types of public works projects. His experience includes drafting and layout of sewer, water main, and highway rehabilitation and reconstruction. Steve is proficient in the use of the latest versions of AutoCAD and MicroStation. He is responsible for preparing record drawings for all of the communities that raSmith serves.

Steve drafted the utility plans for the Village of Allouez 2019 and 2021 projects and will apply the same formatting to the 2023 Street and Utility Reconstruction projects.

Steve's estimated availability is 80% from August 2022 and forward. His current commitments include:

- Various record drawings and plan production activities



Shane Zodrow, P.L.S., P.E. – Survey Project Manager

Shane is an important member of raSmith's experienced Survey Division. He works closely with Doug and Scott, and understands the subtleties of data collection for urban roadway reconstruction projects including the 2019 and 2021 Village's Street and Utility Reconstruction projects. Shane will coordinate and manage the topographical and utility survey services on the Village's 2023 street reconstruction projects.

Shane has 17 years of survey and engineering experience in both the public and private sectors, including experience in most aspects of civil project development. He is responsible for all facets of survey project management.

Shane's estimated availability is 60% from August 2022 and forward. His current commitments include:

- IH 794, Milwaukee County
- Wells Street, Milwaukee County
- Various Survey Master Contract Work Orders

Firm & Team Qualifications



Doug Senso, P.E.

Senior Project Manager

Doug is an adept project manager who brings excellent communication and organizational skills to his projects, resulting in quality designs and high marks from his clients.

He brings 29 years of experience on a variety of design projects, including urban and rural roadways, roundabouts, bridge and culvert replacements, and planning studies. Doug understands how to incorporate your priorities into the project yet satisfy the needs of the oversight and permitting agencies. He has successfully managed the design of projects ranging from \$200,000 to \$12.5 million in construction costs. He uses his superior writing and presentation abilities to communicate complex technical ideas into understandable concepts in environmental and design documents and at public meetings.

Education

B.S. Civil Engineering, Marquette University, Milwaukee, 1992

M.S. Civil Engineering, University of Illinois at Urbana-Champaign, Urbana, 1994

Professional Registrations

Professional Engineer: WI, IL

Wisconsin Department of Transportation
Certified Roundabout Designer,
Level 1

Professional Affiliations

Engineers Foundation of Wisconsin,
Trustee

Wisconsin Society of Professional
Engineers, Fox Valley Chapter

Institute of Transportation Engineers (ITE)

Awards

WIS 26, Fond du Lac County

- 2016 WisDOT Excellence in Highway Design for Consultant Rural Design

WIS 145: 2011 WisDOT Excellence in Highway Design for Consultant Rural Design, ACEC of Wisconsin Best of State, 2011 ACEC National Recognition Award

Calhoun Road, City of Brookfield

- 2010 WisDOT Excellence in Highway Design for Consultant Urban Design
- 2010 APWA, Wisconsin Chapter, Public Works Project of the Year
- 2010 ACEC of Wisconsin, State Finalist, Engineering Excellence Award

Project Experience

Urban Roadway and Intersection Project Experience

- Village of Allouez 2019 and 2021 Street and Utility Reconstructions, Brown County
- 18th Avenue, West Bend
- WIS 55, Outagamie County
- WIS 42, Door County
- WIS 28, Sheboygan County
- WIS 101, Forest County
- County CB/Oakridge Road Roundabout, Winnebago County
- Oneida Street, City of Appleton, Outagamie County
- County P/County PV Roundabout, Washington County
- WIS 26, Fond du Lac County
- WIS 145, Washington County
- WIS 142 Roundabout, Racine County
- WIS 32/Happy Lane Roundabout, Sheboygan County
- WIS 22/WIS 32 Roundabout, Oconto County
- WIS 16/WIS 71 Roundabout, Monroe County
- WIS 23/County G Roundabouts, Fond du Lac County
- Calhoun Road and I-94 Bridge Replacements, Waukesha County
- WIS 20/WIS 75 Roundabout, Racine County
- North Central Region Wide Culvert Replacement Projects, Various Counties
- WIS 60, City of Hartford, Washington County
- Packard Avenue, City of St. Francis
- South Third Street, Jefferson County
- WIS 21/WIS 116 Intersection, Winnebago County
- Tayco Street, Winnebago County

raSmith

CREATIVITY BEYOND ENGINEERING

Firm & Team Qualifications



Scott Lietzau, P.E.

Senior Project Engineer

Scott has over 20 years of experience in design and construction inspection. He has served as the design leader on some of the largest, most complex projects in the raSmith transportation division including new and reconstructed bypass freeways, interstate expansion, several interchanges, and multiple road realignments.

Scott leads the transportation division's quality assurance program at raSmith as our technical services leader and brings this detailed approach to the Village of Allouez's 2023 Street and Utility Reconstruction Projects. He is one of our technical design experts.

Education

B.S. Civil Engineering, University of Wisconsin-Platteville, 2001

B.S. Environmental Engineering, University of Wisconsin-Platteville, 2001

Professional Registration

Professional Engineer: WI

Professional Affiliation

American Society of Civil Engineers

Continuing Education

"Urban Drainage Design," FHWA & WisDOT, 2010

"Freeway and Interchange Geometric Design," ITE, 2006

"Stormwater Best Management Practices," University of Wisconsin Madison, 2004

"Introduction to MicroStation," Milwaukee Area Technical College, 2002

"Urban Street Design," University of Wisconsin-Madison, 2002

Project Experience

Roadway Design

- Village of Allouez 2019 and 2021 Street and Utility Reconstructions, Brown County
- 18th Avenue, Washington County
- I-94, Jefferson County
- WIS 101, Forest County
- WIS 42, Door County
- I-39/90, Rock County
- North Central Region Wide Culvert Replacements, Various Counties
- I-794 (Hoan Bridge), Milwaukee County
- County T, Marinette County
- WIS 26 (Fort Atkinson Bypass), Jefferson County
- WIS 26 (Watertown Bypass), Jefferson/Dodge Counties
- WIS 32, Bayside, Milwaukee County
- WIS 21/WIS 116 Intersection, Winnebago County
- WIS 60, City of Hartford, Washington County

Construction Management

- WIS 26, Rosendale, Fond du Lac County: one-mile, two-lane divided and undivided urban reconstruction.
- WIS 32/Sheridan Road, Kenosha, Kenosha County: concrete pavement, storm sewers, grading, traffic signals and lighting
- I-94 and County SS, Pewaukee, Waukesha County: concrete pavement, curb and gutter, sidewalks, crushed aggregate, open grade base course, storm sewer, retaining walls, pavement marking and signing

Safety Study

- WIS 33/County I Road Safety Audit, Ozaukee County: intersection safety study documenting existing conditions, traffic volumes and crashes with short- and long-term improvement recommendations

Firm & Team Qualifications



Robert J. Wielgos, P.E.

Project Engineer

Upon graduation from Marquette University in 2015, Robert joined raSmith as a Civil Engineer I in the company's rotational training program in which he spent the first 17 months working within all of the company's six engineering services: construction, survey, municipal, transportation, structures and land development. He officially joined Municipal Services in November 2016.

As a member of the Municipal Services team, Robert has led multiple project designs for the Village of Mount Pleasant, including: 16th Street Reconstruction, Oakes Road Reconstruction, TID #1, TID #4 - Phase 3, Annual Paving Program, and 16th Street Pavement Reconstruction. Robert has also led the design efforts for other communities such as the City of Sun Prairie Westside Building Site Redevelopment, multiple Oak Creek utility projects, Village of Allouez 2021 Street Reconstructions and UW-Waukesha Site Infrastructure Improvements.

Robert has also undertaken the role of mentoring the company's employees in the rotational program by providing technical guidance and overall support. His involvement also includes assistance with recruiting, interviewing, and hiring new candidates for the company's rotational engineer program. He is additionally responsible for AutoCAD Civil 3D software training for the rotational engineers.

Education

B.S. Civil Engineering, Marquette University, 2015

Professional Registrations

Professional Engineer: Wisconsin

Professional Affiliations

American Public Works Association (APWA)

2021 APWA Emerging Leaders Academy Member

Software Proficiency

AutoCAD Civil 3D

HydroCAD

Hydraflow

Flow Master

Culvert Master

Project Experience

Municipal Services

- 2021 Street Reconstructions, Village of Allouez, Brown County
- 16th Street Reconstruction, Oakes Road to Green Bay Road, Village of Mount Pleasant
- Oakes Road Reconstruction, 16th Street to Washington Avenue, Village of Mount Pleasant
- TID #1, Village of Mount Pleasant
- TID #4, Phase 3, Village of Mount Pleasant
- Westside Building Addition, City of Sun Prairie
- Water Main Relays and Extensions, City of Oak Creek
- Paving Program, Village of Mount Pleasant
- County B Water Main Relay, Village of Genoa City
- Jewell Street Sanitary Sewer, City of Oak Creek
- Site Infrastructure Improvements, University of Wisconsin-Waukesha
- 16th Street Pavement Reconstruction - 90th Street to Willow Road, Village of Mount Pleasant

Firm & Team Qualifications



Steve Roncke

Engineering Technician

Steve has more than 30 years of experience in the drafting and layout of all types of public works projects. His experience includes the drafting and layout of sewer, water main, and highway rehabilitation and reconstruction. Steve has also served in a construction observation role for many of the recent projects he's designed, giving him valuable perspective on design and construction techniques.

Steve is proficient in the use of the latest versions of AutoCAD and Microstation. He is responsible for the quality control of all projects that leave the office and prepares record drawings for all of the communities that raSmith serves.

Education

Education

A.A., Civil Engineering Technology,
Milwaukee Area Technical College, 1986

Professional Affiliations

Milwaukee Area Technical College Advisory
Board

Trustee on the Hale Park Water Trust

Member of City of Muskego Board of
Review and other City committees

Project Experience

- Village of Allouez 2019 and 2021 Street and Utility Reconstructions, Brown County
- St. Francis 2018 and 2019 Street and Utility Reconstructions, Milwaukee County
- Village of West Milwaukee 2019 Street and Utility Reconstructions, Milwaukee County — Design and Construction Inspection
- Village of Nashotah Annual Road Improvement Program (2013 to present) — Design and Construction Inspection
- Town of Delafield Annual Road Improvement Program (2013 to present) — Design and Construction Inspection
- Drexel Avenue Reconstruction, Oak Creek
- Town of Raymond, 2013 Road improvement Program Hilltop Sanitary Sewer, Germantown
- Franksville Interceptor Sewer, Caledonia Quick Drive Sanitary Sewer, Caledonia
- Hoods Creek Lift Station and Force Main, Caledonia Prairie Crossing Sanitary Sewer Relay, Caledonia Maple Avenue, Town of Delafield
- WIS 26 (Fort Atkinson Bypass), Jefferson County
- WIS 59 Bypass Design, City and Town of Waukesha
- County ES (National Avenue), Waukesha County
- WIS 164 Reconstruction, Waukesha County
- WIS 175 Reconstruction, Fond du Lac County
- County C Reconstruction, Racine County
- WIS 181 Rehabilitation, City of Milwaukee

Firm & Team Qualifications



Shane Zodrow, P.L.S., P.E.

Survey Project Manager

Shane has 17 years of survey and engineering experience in both the public and private sectors, including experience in most aspects of civil and infrastructure project development. Both field and office experience include areas such as computer aided drafting, surveying, construction layout, engineering design, construction inspection, LiDAR scanning, and 3D modeling. Most recently, Shane has been responsible for all facets of survey project management. Shane is also an adjunct instructor at the UW-Milwaukee School of Continuing Education.

Shane has field experience utilizing the latest survey technology including GPS, robotic total station, and LiDAR scanning equipment. Shane also has extensive office experience creating and coordinating deliverables utilizing various software platforms including unmanned aircraft systems, LiDAR scanning, and 3D modeling for construction. Survey projects have ranged from boundary, ALTA/NSPS Land Title, land subdivision, certified survey map, easement/property exhibits, legal descriptions, topographic, engineering, as-built, construction staking, electric/gas utility, hydraulic, right-of-way, 3D modeling, and LiDAR scanning surveys. Shane also contributed to the development of ATC's Ground Based LiDAR for Substations Guide.

Education

B.S. Civil Engineering, Magna cum Laude,
University of Wisconsin-Milwaukee, 2005

Professional Registrations

Professional Land Surveyor: Wisconsin,
Number S-2869

Professional Engineer: Wisconsin, Number
E-40471

Courses Instructed

Civil Engineering – Surveying, UWM
School of Continuing Education,
2018-Present

Surveying (CE Refresher Course),
UWM School of Continuing Education,
2016-Present

Professional Affiliations

Wisconsin Society of Land Surveyors

National Society of Professional Surveyors

American Society of Civil Engineers

Awards

2016 - ACEC-WI Leadership Institute

2008 - 3rd Place, WSLS Annual Map/Plat
Competition

2007 - 2nd Place and 3rd Place, WSLS
Annual Map/Plat Competition

Publications

"(The Need For) The Changing Face
of Surveying Education," Wisconsin
Professional Surveyor, June 2007

Presentations

"UAS in Conventional Survey Projects,"
2019 WSLS Institute

"Advanced Survey Technology," 2016
ASCE WI Technical Conference

"3D Modeling for Infrastructure," 2014
WSLS Institute

"LiDAR Data Scanning – Data Collection
and Real World Uses," 2014 WSLS

Project Experience

Topographical and Utility Surveys

- 2019 and 2021 Allouez Street and Utility Reconstruction Projects, Brown County
- WIS 101, Forest County
- WIS 55, Outagamie County
- 18th Avenue, Washington County
- I-94 N-S Freeway, Milwaukee/Racine/Kenosha Counties
- I-94 Aerial targeting, Dane/Jefferson/Waukesha Counties
- Zoo Interchange, Milwaukee County
- Hoan Bridge and Lake Freeway, Milwaukee County
- Mitchell Interchange, Milwaukee County

Bridge Rehabilitation Surveys

- WIS 20 Willow Road/UPRR Bridges, Racine County
- WIS 181, Milwaukee County
- WIS 36, Racine County

Right-of-Way Plat Development

- WIS 55, Outagamie County
- WIS 28/County EE, Sheboygan County
- Calhoun Road, Waukesha County
- WIS 50 200-Plus parcel TPP, Kenosha County
- Emmertsen Road, Racine County
- County K, Kenosha County US-12, Sauk County
- WIS 47, Outagamie and Shawano Counties

raSmith

CREATIVITY BEYOND ENGINEERING

Similar Projects



Location

Village of Allouez, WI

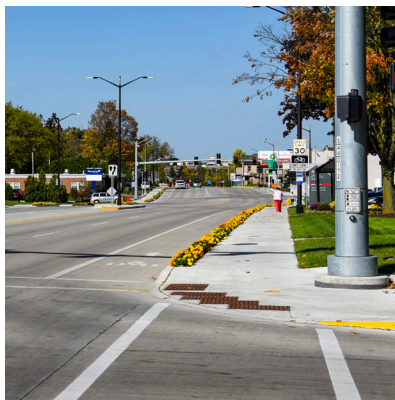
raSmith Manager

Doug Senso, P.E.

2019 and 2021 Street and Utility Reconstruction

raSmith provided street design, utility design and limited surveying services for the reconstruction of Oakwood Avenue, E. Oakhill Drive, E. Summit Street, Longview Avenue, W. St. Joseph Street, Roselawn Boulevard, Beaumont Street, and Kalb Street in the Village of Allouez from 2018-2021. These projects included the removal and replacement of the existing pavement, curb and gutter, sanitary sewer, water main, storm sewer and laterals. New sidewalk and curb ramps were also included on the reconstruction on some roadways.

This project included plans with color utility lines developed as the Village of Allouez's new drafting standard. This color scheme and text annotation style is required on the 2023 projects for consistency. The raSmith design team worked closely with new Village staff to develop design and drafting standards and completed the design of these street and utility reconstruction projects. During construction, the contractor commented on the high quality of the design plans for these projects.



Location

City of Appleton, WI

raSmith Manager

Doug Senso, P.E.

Oneida Street Reconstruction, City of Appleton

raSmith designed this \$6 million urban reconstruction of a 1.1-mile section of Oneida Street that begins just south of Hoover Avenue and continues to the Skyline Bridge in the City of Appleton. Oneida Street is a four-lane urban roadway that connects WIS 441 to downtown Appleton. The concrete pavement on Oneida Street was deteriorating quickly and beyond routine maintenance repairs. Its pedestrian facilities were below current standards, and there were no bicycle accommodations.

This project included a new concrete pavement. Similar to the Village of Allouez's street reconstruction projects, the Oneida Street improvements consisted of replacing the storm sewer system, pavement, new sidewalk and curb ramps, and curb and gutter in a tight urban environment, and enhancing the overall operations and safety of the roadway. Additionally, five signalized intersections were upgraded with new traffic signal installations.

Similar Projects



South Third Street, City of Watertown

Similar to the Village of Allouez's street reconstruction projects, this \$2.4 million urban reconstruction project included 0.5 miles of South Third Street and 0.3 miles of five side streets between South Third Street and South Fourth Street in the City of Watertown.

The project's challenges included slightly widening the roadway within the existing right-of-way while preserving nearly two-thirds of the terrace trees. Aesthetic treatments such as decorative street lighting and brick paver terraces were incorporated in the design of the project. Additionally, numerous Phase 2 hazardous material sites were present. Like the Village's street reconstructions, a new storm sewer system was designed to minimize utility relocations and accommodate future system upgrades by the City. Water main and sanitary sewer plans were also included in the design of the project. Finally, sidewalks and curb ramps were designed and installed to meet ADA standards.

Sumner Street (WIS 60), City of Hartford

Downtown Hartford's main thoroughfare, Sumner Street (WIS 60) was constructed in 1963 and sorely in need of replacement to meet current safety and capacity requirements. raSmith completed the design for the reconstruction of this 1.1-mile, two-lane urban roadway to a four-lane urban roadway through the heart of the City of Hartford.



The project's primary challenge was to meet the future capacity and safety needs of the main arterial of the City while minimizing impacts and disruptions to residents and businesses along the route. Locating the new storm sewer system into a crowded right-of-way corridor that included up to three sanitary sewer lines and three water mains was another major challenge. raSmith designed a four-lane roadway cross section within the existing constrained corridor with minimum right-of-way acquisition by working with the City to consolidate numerous public utility lines. To improve the slope of driveways and minimize impacts to front yards, raSmith designed a unilateral cross slope along a portion of the roadway. This technique may be utilized to address similar issues on the Village of Allouez's street reconstruction projects. raSmith also enhanced the aesthetics of the corridor by incorporating colored crosswalks, decorative lighting and landscaping into the design.

This project was nominated by the WisDOT SE Region for Excellence in Highway Design for Urban Roadway Design Award.

Location

City of Watertown, WI

raSmith Manager

Doug Senso, P.E.

Location

City of Hartford, WI

raSmith Manager

Doug Senso, P.E.

Project Schedule

Village of Allouez 2023 Street and Utility Reconstruction Design

Task	2022					2023							
	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Notice to Proceed ¹	●												
Kickoff Meeting ²	●												
Topo/Utility Survey	■												
Topo & Utility Survey Meeting ³	●												
Preliminary Design		■	■	■	■								
60% Preliminary Plan Submittal ⁴				●									
60% Preliminary Plan Review Meeting ⁵				●									
Final Design				■	■	■	■						
90% Plans, Special Provisions & Estimates ⁶					●								
90% Plan Review Meeting ⁷					●								
Final Plan Submittal ⁸						●							
Advertise Project ⁹							●						
Construction											■	■	■

● Milestone Date

¹ August 1, 2022

² August 4, 2022

³ August 31, 2022

⁴ November 18, 2022 (suggest moving to November 1 for additional review and final plan preparation time)

⁵ November 29, 2022 (suggest moving up to November 15, 2022)

⁶ December 13, 2022

⁷ December 20, 2022

⁸ January 20, 2023

⁹ Week of February 14, 2023

Scope/Cost

PROJECT AL-2023-01 (1 of 4)

ROSELAWN BOULEVARD SCOPE (1,900 ft)	STAFF TYPE AND BILLING RATES					Fee
	Project Manager \$160.00	Project Engineer \$125.00	Design Engineer \$100.00	Technician \$90.00	Surveyor \$105.00	
Utility Field Survey and Office Drafting	0	0	0	0	75	\$7,875.00
Plan Preparation (noted scales are 11x17)						
Title Sheet	0	0.5	1	2	0	\$342.50
General Notes	0	0.5	1	1	0	\$252.50
Typical Sections [1 sheet]	0.5	1	1	1	0	\$395.00
(1) Construction Details [5 sheets]	0.5	2	4	6	0	\$1,270.00
(2) Curb Ramp Details [assume 1 ramp, 1 sheet]	0.5	1	3	2	0	\$685.00
(3) WisDOT Standard Detail Drawings [10 sheets]	0	2	4	4	0	\$1,010.00
Erosion Control [2 sheets at 40-scale, stacked views]	0	2	4	8	0	\$1,370.00
(4) Utility Plan and Profile [6 sheets at 40-scale]	2	12	30	50	0	\$9,320.00
(5) Roadway Design / Plan and Profiles [4 sheets at 40-scale]	2	8	30	36	0	\$7,560.00
(6) Corridor Modeling / Cross Sections [30 sheets at 2/5 scale]	1	12	56	8	0	\$7,980.00
60% Level Quantities and Cost Estimate	0.5	1	4	2	0	\$785.00
90% Level Quantities and Cost Estimate	0.5	4	6	2	0	\$1,360.00
Bid Proposal	0.5	2	0	0	0	\$330.00
* Kickoff Meeting	3	3	0	0	0	\$855.00
* Topo / Utility Review Meeting	3	3	0	0	0	\$855.00
* 60% Review Meeting	3	3	0	0	0	\$855.00
* 90% Review Meeting	3	3	0	0	0	\$855.00
Hours by Staff Type	20	60	144	122	75	421

Total Roselawn Boulevard Fee	\$43,955.00
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Notes:

- (1) Assumes same number and similar details to AL-2021-01/02 plans plus any new details provided by Village.
- (2) One curb ramp at the Webster Avenue intersection.
- (3) Assumes same number and similar SDD's to AL-2021-01/02 plans.
- (4) Assumes Village provides design markups, raSmith to CAD in sheets, use colored utility lines and annotations from AL-2021-01/02 plans. Separate sheet for inlet lead profiles.
- (5) Includes color storm trunk line in plan view only.
- (6) Show existing R/W and existing buried utility ticks.
- * Assumes each meeting includes all project streets.

Scope/Cost

PROJECT AL-2023-01 (2 of 4)

KAREN LANE SCOPE (1,100 ft)	STAFF TYPE AND BILLING RATES					Fee
	Project Manager \$160.00	Project Engineer \$125.00	Design Engineer \$100.00	Technician \$90.00	Surveyor \$105.00	
Utility Field Survey and Office Drafting	0	0	0	0	40	\$4,200.00
Plan Preparation (noted scales are 11x17)						
* Title Sheet	0	0	0	0	0	\$0.00
* General Notes	0	0	0	0	0	\$0.00
Typical Sections [1 sheet]	0.5	1	1	2	0	\$485.00
* (1) Construction Details [5 sheets]	0.5	0	0	0	0	\$80.00
* (2) WisDOT Standard Detail Drawings [10 sheets]	0	0	0	0	0	\$0.00
Erosion Control [1 sheet at 40-scale, stacked views]	0	2	4	6	0	\$1,190.00
(3) Utility Plan and Profile [3 sheets at 40-scale]	1	8	24	36	0	\$6,800.00
(4) Roadway Design / Plan and Profiles [2 sheets at 40-scale]	2	8	24	20	0	\$5,520.00
(5) Corridor Modeling / Cross Sections [15 sheets at 2/5 scale]	1	10	30	10	0	\$5,310.00
60% Level Quantities and Cost Estimate	0	1	2	2	0	\$505.00
90% Level Quantities and Cost Estimate	1	2	4	6	0	\$1,350.00
* Bid Proposal	0	0	0	0	0	\$0.00
* Kickoff Meeting	0	0	0	0	0	\$0.00
* Topo / Utility Review Meeting	0	0	0	0	0	\$0.00
* 60% Review Meeting	0	0	0	0	0	\$0.00
* 90% Review Meeting	0	0	0	0	0	\$0.00
Hours by Staff Type	6	32	89	82	40	249

Total Karen Lane Fee \$25,440.00

Notes:

- (1) Assumes same number and similar details to AL-2021-01/02 plans plus any new details provided by Village.
 - (2) Assumes same number and similar details to AL-2021-01/02 plans.
 - (3) Assumes Village provides design markups, raSmith to CAD in sheets, use colored utility lines and annotations from AL-2021-01/02 plans. Separate sheet for inlet lead profiles.
 - (4) Includes color storm trunk line in plan view only.
 - (5) Show existing R/W and existing buried utility ticks.
- * Included in overall project AL-2023-01 plan set effort. Assumes each meeting includes all project streets.
- Curbs ramps at Libal Street/Karen Lane intersection assumed to be completed with the future Libal Street project and not included here.

Scope/Cost

PROJECT AL-2023-01 (3 of 4)

ALLOUEZ TERRACE SCOPE (975 ft)	STAFF TYPE AND BILLING RATES					Fee
	Project Manager \$160.00	Project Engineer \$125.00	Design Engineer \$100.00	Technician \$90.00	Surveyor \$105.00	
Utility Field Survey and Office Drafting	0	0	0	0	35	\$3,675.00
Plan Preparation (noted scales are 11x17)						
* Title Sheet	0	0	0	0	0	\$0.00
* General Notes	0	0	0	0	0	\$0.00
Typical Sections [1 sheet]	0.5	1	1	2	0	\$485.00
* (1) Construction Details [5 sheets]	0.5	0	0	0	0	\$80.00
* (2) WisDOT Standard Detail Drawings [10 sheets]	0	0	0	0	0	\$0.00
Erosion Control [1 sheet at 40-scale, stacked views]	0	1	4	6	0	\$1,065.00
(3) Utility Plan and Profile [3 sheets at 40-scale]	1	5	20	30	0	\$5,485.00
(4) Roadway Design / Plan and Profiles [2 sheets at 40-scale]	1	5	20	16	0	\$4,225.00
(5) Corridor Modeling / Cross Sections [12 sheets at 2/5 scale]	1	8	22	6	0	\$3,900.00
60% Level Quantities and Cost Estimate	0	1	2	2	0	\$505.00
90% Level Quantities and Cost Estimate	1	1	2	2	0	\$665.00
* Bid Proposal	0	0	0	0	0	\$0.00
* Kickoff Meeting	0	0	0	0	0	\$0.00
* Topo / Utility Review Meeting	0	0	0	0	0	\$0.00
* 60% Review Meeting	0	0	0	0	0	\$0.00
* 90% Review Meeting	0	0	0	0	0	\$0.00
Hours by Staff Type	5	22	71	64	35	197

Total Allouez Terrace Fee \$20,085.00

Notes:

- (1) Assumes same number and similar details to AL-2021-01/02 plans plus any new details provided by Village.
 - (2) Assumes same number and similar details to AL-2021-01/02 plans.
 - (3) Assumes Village provides design markups, raSmith to CAD in sheets, use colored utility lines and annotations from AL-2021-01/02 plans. Separate sheet for inlet lead profiles.
 - (4) Includes color storm trunk line in plan view only.
 - (5) Show existing R/W and existing buried utility ticks.
- * Included in overall project AL-2023-01 plan set effort. Assumes each meeting includes all project streets.

Scope/Cost

PROJECT AL-2023-01 (4 of 4)

JACKSON STREET SCOPE (450 ft)	STAFF TYPE AND BILLING RATES					Fee
	Project Manager \$160.00	Project Engineer \$125.00	Design Engineer \$100.00	Technician \$90.00	Surveyor \$105.00	
Utility Field Survey and Office Drafting	0	0	0	0	15	\$1,575.00
Plan Preparation (noted scales are 11x17)						
* Title Sheet	0	0	0	0	0	\$0.00
* General Notes	0	0	0	0	0	\$0.00
Typical Sections [1 sheet]	0.5	1	1	2	0	\$485.00
* (1) Construction Details [5 sheets]	0.5	0	0	0	0	\$80.00
* (2) WisDOT Standard Detail Drawings [10 sheets]	0	0	0	0	0	\$0.00
Erosion Control [1 sheet at 40-scale, stacked views]	0	1	2	4	0	\$685.00
(3) Utility Plan and Profile [3 sheets at 40-scale]	1	4	12	18	0	\$3,480.00
(4) Roadway Design / Plan and Profiles [2 sheets at 40-scale]	1	4	12	12	0	\$2,940.00
(5) Corridor Modeling / Cross Sections [6 sheets at 2/5 scale]	1	6	16	4	0	\$2,870.00
60% Level Quantities and Cost Estimate	0	1	2	2	0	\$505.00
90% Level Quantities and Cost Estimate	1	1	2	2	0	\$665.00
* Bid Proposal	0	0	0	0	0	\$0.00
* Kickoff Meeting	0	0	0	0	0	\$0.00
* Topo / Utility Review Meeting	0	0	0	0	0	\$0.00
* 60% Review Meeting	0	0	0	0	0	\$0.00
* 90% Review Meeting	0	0	0	0	0	\$0.00
Hours by Staff Type	5	18	47	44	15	129

Total Jackson Street Fee	\$13,285.00
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Notes:

- (1) Assumes same number and similar details to AL-2021-01/02 plans plus any new details provided by Village.
 - (2) Assumes same number and similar details to AL-2021-01/02 plans.
 - (3) Assumes Village provides design markups, raSmith to CAD in sheets, use colored utility lines and annotations from AL-2021-01/02 plans. Separate sheet for inlet lead profiles.
 - (4) Includes color storm trunk line in plan view only.
 - (5) Show existing R/W and existing buried utility ticks.
- * Included in overall project AL-2023-01 plan set effort. Assumes each meeting includes all project streets.

PROJECT AL-2023-01 FEE SUMMARY	
Roselawn Boulevard	\$43,955.00
Karen Lane	\$25,440.00
Allouez Terrace	\$20,085.00
Jackson Street	\$13,285.00
Total	\$102,765.00