APPROVING A LIST OF ENGINNERING FIRMS AS CONSIDERED PREQUALIFIED TO PROVIDE GENERAL ENGINEERING SERVICES FOR THE CITY OF DEKALB THROUGH 2026.

WHEREAS, the City of DeKalb (the "City") is a home rule unit of local government and may exercise any power and perform any function pertaining to its government and affairs pursuant to Article VII, Section 6, of the Illinois Constitution of 1970; and

WHEREAS, the City intermittently reviews professional qualifications of engineering services providers to prequalify engineering services providers to perform City engineering services; and

WHEREAS, the City's corporate authorities find that approving the below list of engineering firms as prequalified is in the City's best interests for the protection of the public health, safety, morals and welfare; and

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF DEKALB, ILLINOIS:

SECTION 1: The City's corporate authorities approve and authorize Staff to receive and recommend engineering services from the following list of Prequalified Engineering Service Providers: Fehr Graham & Associates LLC; Hampton, Lenzini and Renwick, Inc.; Willis Burke Kelsey Associates LLC; Kaskaskia Engineering Group LLC; Civil Engineering Services, Inc.; Engineering Enterprises Inc.; Wendler Engineering Services LLC; and Baxter & Woodman.

SECTION 2: This resolution and each of its terms shall be the effective legislative act of a home rule municipality without regard to whether such resolution should (a) contain terms contrary to the provision of current or subsequent non-preemptive state law, or (b) legislate in a manner or regarding a matter not delegated to municipalities by state law. It is the intent of the City's corporate authorities that to the extent that the terms of this resolution should be inconsistent with any non-preemptive state law, that this resolution shall supersede state law in that regard within its jurisdiction.

SECTION 3: This resolution shall be in full force and effect from and after its passage and approval as provided by law.

PASSED BY THE CITY COUNCIL of the City of DeKalb, Illinois at a Regular meeting thereof held on the 14th day of February 2022 and approved by me as Mayor on the same day. Passed by an 8-0 roll call vote. Aye: Morris, Larson, Smith, Perkins, McAdams, Verbic, Faivre, Barnes. Nay: None.

OF DEAD

COHEN BARNES, Mayor

ATTEST:

Ruth A. Scott, Executive Assistant



City of DeKalb Municipal Engineering Services

January 21, 2022





8678 Ridgefield Road, Crystal Lake, Illinois 60012 • baxterwoodman.com

January 21, 2022

City of DeKalb Public Works Zachary Gill, PE 1216 Market Street DeKalb, Illinois 60115

Subject: Municipal Engineering Services

Dear Mr. Gill:

For over 75 years, Baxter & Woodman has specialized in serving the public sector with their engineering needs. We value our clients and we have been privileged to serve the City of DeKalb for many years. We are committed to continuing our relationship and providing excellent services for the City. Our experience has taught us that a successful Municipal Engineer must have the ability to:

COLLABORATE - From reviewing plans and specifications to constructing projects designed by others, our staff has a proven history of working effectively with other consultants. We offer a balanced, impartial perspective and use sound engineering principles to suggest adaptations, if necessary.

RESPOND - The City will have direct access to all of the engineering and technology expertise you need from our Naperville, Crystal Lake, Chicago and Mokena offices. Our multi-disciplined staff is ready and available to assist you.

ADVISE - Nearly 50 communities and public agencies trust Baxter & Woodman to assist with capital improvement planning, budgeting, and funding to help manage and maintain municipal infrastructure. Our staff excels not only at designing and constructing municipal improvements, but also at finding efficiencies to maximize the use of time and financial resources. We strive to stay on top of current regulations so that we can help provide guidance to our municipal clients.

SERVE - The City will receive a firm that provides one of the most comprehensive ranges of municipal and innovative engineering services found in the Chicagoland area. We continue to refine our practices and expand our services to best meet the changing requirements of municipalities.

Our enclosed statement of qualifications details past experience on similar projects and identifies our proposed team leaders. We look forward to working together with the City on transportation, water, and bridge engineering services! I can be reached at 815-347-8545 or by email at cgrieves@baxterwoodman.com.

Sincerely,

BAXTER & WOODMAN, INC. CONSULTING ENGINEERS

Carolyn Grieves, PE

Vice President/Client Manager

1. Firm Description

Municipal Focus for Over 75 Years!

Founded in 1946, Baxter & Woodman, Inc. provides consulting engineering and technology services to municipalities, state agencies, county governments, and sanitary districts throughout Illinois, Florida, Wisconsin, and Texas. Dedicated to promoting a sustainable future, our staff of more than 325 talented engineers, surveyors, technicians, and support personnel combines innovative techniques with tried and true processes.

Our experience includes planning, design, construction and technology services for water, wastewater, stormwater and transportation facilities for municipalities, counties and state agencies and more. Environmental, geographic information systems (GIS), water and wastewater operations,

We are Infrastructure planning, design, and construction.

Roads/Highways, Water/Wastewater, Water Resources/Stormwater, Technology

and advanced technology capabilities complement the firm's civil engineering expertise. The company has several subsidiaries including ones focused on Natural Resources, Municipal Technology, and Design-Build project delivery.

Convenient Office Locations

Chicago, IL 60631 (815) 459-1260

Baxter & Woodman has 13 regional offices that provide our clients with local presence and responsive service. Staff members routinely work from various office locations to provide the specific services and expertise our clients require.

Services for the City's projects will be provided by:

Crystal Lake Office	Naperville Office	
8678 Ridgefield Rd. Crystal Lake, IL 60012 (815) 459-1260	1548 Bond St., Ste 103 Naperville, IL 60563 (815) 459-1260	
Chicago Office	Mokena Office	
8430 W Bryn Mawr Ave., Ste 400	8840 W. 192nd Street	



Carolyn Grieves, who works from our Crystal Lake office, will continue to be the City's primary contact.

Mokena, IL 60448

(815) 459-1260

Our Team

Our team offers services that stretch well beyond typical engineering consulting, as we are committed to building community value with each and every project we complete. Our combined work force totals 325+ talented individuals including wastewater, civil, transportation, mechanical, structural, electrical, and environmental engineers. The engineering staff is supported by trained technicians, licensed water and wastewater operators, licensed electricians, registered surveyors, GIS/GPS analysts, CAD operators, construction inspectors, and administrative assistants.

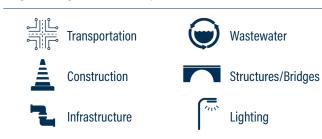
An integral part of Baxter & Woodman's history, firm founders Richard Baxter & Lorrin Woodman instilled the values of hard work, perseverance, and integrity into the fabric of the company. That legacy still lives today as we are a team of focused, committed, and service oriented professionals.

Services Provided In-house

Baxter & Woodman's staff of professionals have provided engineering services to more than 500 communities, counties, and sanitary districts for over 75 years.

The strength of the Baxter & Woodman team comes from the cohesive and cooperative work effort gained from having expertise in numerous disciplines. We offer a full range of municipal services from project inception to construction close-out. All necessary engineering services are provided in-house with the exception of geotechnical engineering and land acquisition.

Grants/Funding



Natural Resources



Public Outreach

Litigations

Case Status	Case Number	Court	Case Name	Status of Active Litigation
Active	202169574	164th Judicial Court, Harris County, TX	West Memorial MUD, Harris County, Texas vs. AEI Engineering, LLC, d/b/a AEI Engineering, a Baxter & Woodman Company; and Baxter & Woodman, Inc.	Breach of contract
Active	2018 L 3422	12th Judicial Circuit Court of Will County, IL	Raymond Miller vs. Len Cox & Sons; Baxter & Woodman; PT Ferro Co	Bicyclist fell in construction zone.
Active	2019 L 006916	2019 L 006916, Circuit Court of Cook County, IL	John Melone vs. Village of Glenview	Construction worker injury.
Inactive	CACE-19-003469	17th Judicial Circuit Court of Broward County, FL	Linda Bruno-Coffman and Richard Coffman vs. Southeastern Engineering Contractors, Inc., Murphy Pipeline Contractors, and Baxter & Woodman	Settled January 2021
Inactive	18 L 006525	Circuit Court of Cook County, IL	Robert Waghorne vs. Village of Northbrook	Settled December 2020
Inactive	18 LA 000127	22nd Judicial Circuit Court of McHenry County, IL	Andrew Farley and Amal Farley vs. Commonwealth Edison Co, Hometown Electric, Village of Lake in the Hills, and McHenry County	Baxter & Woodman dismissed from the case
Inactive	15 L 134	18th Judicial Court of DuPage County, IL	Village of Itasca vs Baxter & Woodman, Inc. and Baxter & Woodman Control Systems Integration, LLC	Amicably resolved by both parties and the case was dismissed with predudice in April, 2018.
Inactive	15 M 3345	Circuit Court of Cook County, IL	Thorn Creek Basin Sanitary District vs Baxter & Woodman, Inc.	Case was dismissed with prejudice May, 2017
Inactive	14 L 3131	Circuit Court of Cook County, IL	Richard Klein vs K-5 Construction Corp., the Village of Park Forest, and Baxter & Woodman, Inc.	Settlement Agreements May, 2016.
Inactive	14 L 747	18th Judicial Court of DuPage County, IL	Sherrie D. W. Lester vs Central Blacktop Co., et al	Settlement Agreement July, 2015
Inactive	12 LA 1934	Circuit Court of Cook County, IL	Collins vs Trine Construction Corp., USIC Locating Services, NICOR Gas Co., and Village of Park Forest	Baxter & Woodman dismissed from the case
Inactive	12 LA 99	12th Judicial Circuit, McHenry County, IL	Nichols vs Berles, Curran Contracting Co., Maintenance Coatings Co., and Baxter & Woodman, Inc.	Baxter & Woodman dismissed from the case

2. Project Team

The City of DeKalb will have the resources available from our full-service firm of 325+ professionals. Carolyn Grieves, PE will be the City's main point of contact and will stay in close contact to ensure that engineering resources and advice are available. Carolyn has 26 years of experience in the planning and design of municipal water facilities. She has been actively involved in water projects completed for the City and she brings a wealth of experience in dealing with infrastructure projects.

Below is an organizational chart outlining proposed project team leaders. Brief resumes for team leaders (*) follow the organizational chart.



Primary Point of Contact

Carolyn Grieves, PE Cell: 815.347.8545

Annual Street Maintenance

Project Advisor Jason Fluhr, PE, PTOE*

Project Engineers Luke Foresman, PE Colin McGovern Cassie Cruise

Water Supply/Distribution

Project Engineers

Sean O'Dell, PE* Lauren Schuld, PE Mark Kolczaski, PE, ENV SP Alexis Shotton

Intersection Reconstructions

Roundabouts

Project Engineers

Dan Schug, PE* Adam Woods, PE Mike Hudspeth, LC

Signals

Project Engineers

Bob Lenzini, PE Sarah Magnuson

Multi/Shared Use Paths

Project Engineers

Jay Coleman, PE* Jonathan Miller, PE Josh Harris, PE, PTOE Amanda Sramek, PE

Bridge Services

Bridge Department Manager Brandon Buzzell, PE, SE*

Senior Structural Engineers / NBIS Bridge Inspectors

Chuck Brunner, PE, SE Brian Bromley, PE, SE Adam Stec, PE, SE

Carolyn A. Grieves, PE

Client Manager



EDUCATION

M.S., Environmental Engineering University of Iowa, 1996

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

Joined Firm in 1996

Years of Experience: 26

REGISTRATIONS

Licensed Professional Engineer: Illinois

HONORS & AWARDS

2021 Women in Water Outstanding Woman Award

2017 Kenneth J. Miller Water For People Founders' Award

2017 Water Professional of the Year, Illinois Section of the American Water Works Association

ASSOCIATIONS

American Water Works Association – Illinois Section, Past Chair, Board of Directors

American Water Works Association – Illinois Section, Chair, Safety and Security Committee



Carolyn specializes in the design of water supply, treatment, and distribution systems. She serves as project manager on numerous large, complex new water treatment plants and improvements/modifications to existing facilities. She has also led our water model, water asset management, and long-term water system planning teams. Carolyn monitors rules and regulations that impact the Water industry and how they impact our communities.

REPRESENTATIVE PROJECTS

DeKalb, IL

Project Engineer for Radium Compliance Projects, including three new steel hydropillars.

DeKalb, IL

Water System Master Plan Update

Project Manager for the creation of a water system master plan update for the City to determine the improvements necessary to provide service for the projected growth occurring over the next 20 years.

DeKalb, IL

Water System Vulnerability Assessments, Risk and Resilience Assessments, And Emergency Response Plans

Carolyn has served as Project Manager for numerous Vulnerability Assessments, Risk & Resilience Assessments, and Emergency Response Plans.

Vulnerability assessments help water systems evaluate susceptibility to potential threats and identify corrective actions that can reduce or mitigate the risk of serious consequences from adversarial actions (e.g., vandalism, insider sabotage, terrorist attack, etc.). The assessments took into account the vulnerability of the water supply (both ground and surface water), transmission, treatment, and distribution systems.

Crystal Lake, IL

Water System Master Plan Update

Project Advisor for the water system master plan update for the City to determine the improvements necessary to provide service for the projected growth occurring over the next 20 years, and to meet current regulatory requirements that impact the water treatment plant processes. The Master Plan also focuses on chemical, energy, capital, and operational efficiency.

Deerfield, IL

Water System Master Plan

Project Manager for the study, review, and analysis of the Village's water system with the goal of developing an efficient, economical water system plan for operations, facilities, and the distribution system. The report outlined a systematic approach for making both short and long term capital and operational efficiency improvements to help with water loss, and decrease the number of main breaks the Village experiences every year. A new WaterGEMS* hydraulic model of the Village's water distribution system was developed and utilized to assist with verification of system pressures, fire flow capabilities, and development of water main improvements.

Jason J. Fluhr, PE, PTOE

Annual Street Maintenance Leader



EDUCATION

B.S., Civil Engineering, Marquette University, 1999

Joined Firm in 1999

Years of Experience: 23

REGISTRATIONS

Licensed Professional Engineer: Illinois and Wisconsin

CERTIFICATIONS

Professional Traffic Operations Engineer™, certified by the Institute of Transportation Engineers, 2007

ASSOCIATIONS

American Society of Civil Engineers

Institute of Transportation Engineers

PRESENTATIONS

"Street Improvements
Management" – APWA City
Branch/CDOT Lunch & Learn,
February 2017; APWA City
Branch/Cook County Lunch &
Learn, May 2017; APWA
Southwest Branch Lunch &
Learn, November 2017 and
APWA Annual Expo 2018



Jason leads the firm's Transportation Group. He is a Certified Professional Traffic Operations Engineer and is a Project Manager for a variety of municipal, county, and large agency transportation projects. His design and construction engineering background includes field engineer, program management, roadway reconstruction, roundabouts, streetscape, intersection improvements, bike paths, traffic studies, traffic operations, and roadway maintenance.

Jason has led several federally funded, state funded, and locally funded projects. He is adept at coordinating these complex projects with the local agencies, Illinois Department of Transportation, and through active communications with the contractors.

REPRESENTATIVE PROJECTS

From 2000 to 2020, Jason has been Project Engineer and/or Project Manager for several roadway maintenance projects with construction costs up to \$4 million, which have consisted of pavement reconstruction, widening, recycling, and resurfacing; as well as storm sewer and water main improvements, and curb and gutter repairs.

Round Lake, IL

2014 and 2019 Pavement Management Report Update

Project Manager for field evaluation of Round Lake's 53 miles of street using the PASER rating system to evaluate the pavement condition on Village streets, develop pavement improvement strategies and estimated costs for each strategy using ArcView GIS, develop a five-year maintenance program, and update the previously prepared report. Information was entered into the Village's GIS for each street section including street lengths, widths, repair costs, and linked photographs. Report findings were presented to the Village Board and ways were discussed to use the report to stretch the Village's street improvement budget.

La Grange Park, IL

Pavement Condition Report

Project Manager for a Pavement Management Report to assess the condition of the Village's pavements and develop economical and workable plans to maintain those pavements over the next several years. The study was completed using the Pavement Surface Evaluation and Rating (PASER) system to obtain an objective analysis of pavement condition. Pavement evaluation data was collected and entered into a database created with the use of Microsoft Excel with Geographical Information System software. Pavement condition was rated and rehabilitation strategies and total repair costs were developed for the 37 miles of streets and approximately 1 mile of alleys currently maintained by the Village.

Woodstock, IL

2015 Pavement Management Report

Project Manager for the pavement management report and preparation of a five-year MFT transportation maintenance plan for annual street repair and preservation. Data was collected from pavement evaluations of all the streets and alleys maintained by the City, and then entered into a database. Pavement condition was rated, and rehabilitation strategies and total repair costs were developed for the streets and alleys currently maintained by the City.

Sean E. O'Dell, PE

Water Supply/Distribution Leader



EDUCATION

B.S. Civil Engineering, Bradley University, 2002

Joined Firm in 2002

Years of Experience: 20

REGISTRATIONS

Licensed Professional Engineer: Illinois

HONORS & AWARDS

2015 APWA National Young Leader Award

2014 Young Leader Award, APWA Chicago Metro Chapter

ASSOCIATIONS

2017 President of Chicago APWA Metro Chapter

2015 Vice President of Chicago APWA Metro Chapter

2014 Treasurer of Chicago APWA Metro Chapter

2013 President, APWA Southwest Branch of Chicago Metro Chapter



Sean's focus and expertise is in the planning, design, and rehabilitation of water and wastewater infrastructure. He works closely with municipalities and sanitary districts on planning infrastructure to serve growth and redevelopment areas. Sean's experience with a variety of water, wastewater, stormwater management, and transportation projects has made him proficient in master planning, design, watershed modeling, survey, and GPS. Sean leads the firm's Global Water Group and is also a member of our Trenchless Technology Committee, which meets regularly to discuss and evaluated the industry's newest trenchless construction methods and materials. He is certified in evaluating sewer structural conditions through the PACP (Pipeline Assessment and Certification Program).

REPRESENTATIVE PROJECTS

Park Forest, IL

Water System Maintenance

QA/QC Review for the Village's water system maintenance projects utilizing both open cut, trenchless, and lining rehabilitation techniques.

Westmont, IL

Water System Maintenance Program

Infrastructure PM and QA/QC review for the Village's annual water main rehabilitation and replacement program including a combination of open cut and horizontal directional drilling (HDD).

Oak Forest, IL

Water System Performance Contract

Project Manager for an innovative private/public partnership focusing on planning, delivering, and guaranteeing cost reductions for the City's water distribution system via reduced energy consumption and streamlined operations. The project combined the best talents of Baxter & Woodman providing water system engineering operations and energy consumption expertise and incorporated them with the controls and instrumentation prowess of Johnson Controls, Inc.

Plainfield, IL

Plainfield-Naperville Road Water Transmission Main

Project Manager for the installation of approximately 16,000 feet of 24-inch water main from the Village's main pumping station south to Downtown Plainfield. The project included approximately 400 feet of steel casing pipe to be bored and jacked or rammed into place, various interconnects to the existing distribution main, and a crossing of the EJ&E Railroad. Permits were required by Plainfield Township, IDOT, EJ&E, IEPA, and Will County Highway.

Elmhurst, IL

Water Meter Replacement Program

Sean worked with the City to assist with the planning, design, and construction for their Water Meter Replacement Program. To receive funding from the Public Water Supply Loan Program (PWSLP) administered by the Illinois Environmental Protection Agency (IEPA), Baxter & Woodman had to prepare a project plan approved by the IEPA, and complete an IEPA loan application package.

Daniel J. Schug, PE

Intersection Reconstructions Leader



EDUCATION

B.S., Civil Engineering Marquette University, 2006

Joined Firm in 2006

Years of Experience: 17

REGISTRATIONS

Licensed Professional Engineer: Illinois

PRESENTATIONS

Local Roads Management – MCCOG Mayor's Caucus September, 2016

Modern Roundabouts – B&W Transportation Group Training October, 2015

CONTINUING EDUCATION

ITE Traffic Engineering & Safety Conference October, 2015

ADA/PROWAG/Pedestrian Safety Training (Baxter & Woodman, 2012 & 2014)

ITE - Roundabout Triage-Improving Roundabout Safety and Operations January, 2014



Dan is a Project Manager for a variety of municipal and IDOT transportation projects. His design and construction engineering background includes roadway reconstruction, traffic modeling, capacity analysis, roundabouts, streetscape, intersection improvements, bike paths, roadway maintenance, cost estimating, and construction inspection.

Dan has led several federally funded, MFT funded, and locally funded projects. He is adept at coordinating complex projects with the local agencies, Illinois Department of Transportation, and permitting agencies.

REPRESENTATIVE PROJECTS

DeKalb. IL

Peace Road Improvements Phase I/II

Project Engineer for the preparation of a Phase I report and Phase II design for improvements to Peace Road from IL Route 38 to Pleasant Street. The report included the entire project limits, and the design was completed for Stage 1 construction from Pleasant Street to the bridge over the Union Pacific Railroad. Improvements included rural to urban cross section, pavement widening from two to four lanes, resurfacing, new storm sewer, and curb and gutter. Intersection Design Studies were prepared for two intersections and traffic signals were replaced. Coordination was necessary with the City, DeKalb Taylor Municipal Airport, Union Pacific Railroad, IDOT District 3, DeKalb County, General Electric, and developers.

Kane County Division of Transportation, IL Fabyan/Bliss/Main Intersections

Project Engineer for Phase I and Phase II Engineering and Environmental Studies for the realignment of Bliss Road and Fabyan Parkway to create a new four-legged intersection with Main Street. The improvements combine two three-way intersections into one four-way intersection by realigning Bliss Road to intersect Main Street at Fabyan Parkway. Two intersections with traffic signals were removed and replaced with one four-way roundabout.

Elgin, IL

Summit/Waverly and Summit/Dundee Intersection Improvements

Project Engineer for the design and construction of two intersections that included roadway widening, new curb and gutter, and new traffic signals at the intersection of IL Route 58 (Summit Street) and Waverly Avenue. Design of a roundabout, realignment of one of the legs of the intersection, right of way acquisition, roadway widening, curb and gutter, lane channelization, detour routes, and multiple traffic staging plans.

Grayslake, IL

IL Route 120/Alleghany Road Intersection Improvements

Project Engineer for the intersection study, preliminary design, and final design, and provided construction engineering services for the intersection improvements. Included in the scope of work were a Location Drainage Study, Intersection Design Study, topographic survey, and geometric alternatives. The design of the improvements included traffic signals, storm sewer design, pavement marking plans, erosion control plan, permit approvals, and bidding documents.

Jay C. Coleman, PE Multi/Shared Use Paths Leader



EDUCATION

B.S., Civil Engineering, University of Illinois at Urbana-Champaign, 2000

Joined Firm in 2015

Years of Experience: 22

REGISTRATIONS

Licensed Professional Engineer: Illinois

CONTINUING EDUCATION

ITE Traffic Engineering and Safety Conference 2016 – 2020 ITE Roundabout Workshop 2020

ITE Traffic Signal Performance Measures Workshop 2019 IDOT Bureau of Local Roads and Streets Project Administration 2017 ACEC IDOT Phase I Training 2016 Jay joined Baxter & Woodman in 2015 with extensive experience in Phase I studies, Phase II design, and Phase III construction services. He has over 20 years of expertise in the preparation of plans, specifications, and cost estimates, as well as the various analyses and reports required by Phase I studies, and resident engineering responsibilities. Additionally, he continuously works the agencies involved in the review and permitting of transportation projects, and is experienced in adherence to the requirements of those agencies.

REPRESENTATIVE PROJECTS

Northfield, Wilmette, Glenview, Skokie, IL Skokie Valley Trail Multi-Use Path

Project Engineer for Phase I Engineering on behalf of the Villages of Glenview, Wilmette, Northfield, and Skokie of a 3.9 mile segment of the Skokie Valley Trail from the northern-most border of Northfield to the south side of Old Orchard Road. The 10-foot wide multi-use trail was proposed to run along a discontinued Union Pacific Railroad line corridor and ComEd right-of-way. The project consisted of preliminary design including an alternative analysis of multiple path layouts, public outreach, and coordination with regulatory agencies including IDOT and Cook County. That segment of Skokie Valley Trail completes a gap in the regional trail network, providing an uninterrupted linear connection between Lake Bluff and Chicago.

Jay led Public Involvement activities in Phase I Engineering, including multiple progress meetings with Villages, IDOT, Cook County, ComED, and Union Pacific Railroad. A Phase I public informational meeting was held to confirm a community-supported plan consistent with the project's vision and objectives. The meeting was advertised on the Village websites and newsletters of the sponsor Villages. Meeting invitations were hand delivered to properties adjacent to the project. Individual property owner correspondence was sent via certified mail for property owners from which land acquisition is proposed. Individual correspondence included public meeting inventions and details regarding the proposed parcels of land acquisition. At the meeting, attendees were greeted at a registration table and provided a project brochure. Exhibits were on display and an audio-visual presentation was continuously played. Attendees were encouraged to provide comments and speak with the design team and staff of the sponsor Villages.

Plainfield, IL

127th Street Reconstruction Phase I/II

Project Engineer for Phase I Study and Phase II Design for improvement to Federal Aid route. Design elements included widening from a two-lane rural section to a three-lane urban section, shared use path, sidewalk, storm sewer, a double 9- x 8-foot box culvert, and LED street lighting. STP and local funds were utilized for construction. Phase I scope of services included topographic survey, wetland delineation, initial utility coordination, special waste assessment, public involvement including a public meeting, BCR, PBDHR, Hydraulic Report, Local Project Development Report, and coordination with IDOT Bureau of Local Roads and Streets, IDOT Detour Committee, and FHWA.



Brandon L. Buzzell, PE, SE

Bridge Department Manager



EDUCATION

B.S., Civil Engineering, University of Illinois at Urbana-Champaign, 1998

Joined Firm in 2009

Years of Experience: 24

REGISTRATIONS

Licensed Professional Engineer: Illinois, Wisconsin, Florida, and Texas

Licensed Structural Engineer: Illinois

CERTIFICATIONS

NBIS Certified Program
Manager – Element, Illinois
Department of Transportation
and Wisconsin Department of
Transportation

TRAINING

4-Day Training Course for Fracture Critical Inspection Techniques for Steel Bridges – FHWA/NHI, 2011

10-Day Training Course for Inspection of In-Service Bridges – FHWA/NHI, 2008



Brandon has a wealth of experience in the transportation and structural engineering fields, primarily performing bridge design work for IDOT. He has served as both Project Engineer and Project Manager, and has developed a reputation as a producer of high-quality bridge plans. Brandon is a member of the ACEC-IL IDOT Bridge Committee.

Brandon is both a National Bridge Inspection Standards (NBIS) Certified Program Manager and Team Leader. He currently serves as Program Manager for the City of Lockport, and the Villages of Fox Lake, Winnetka, and Virgil.

REPRESENTATIVE PROJECTS

DeKalb County Highway Department, IL McNeal Road Bridge over South Branch Kishwaukee River

Structural Manager and Lead Structural Engineer for Phase I and Phase II engineering for the replacement of an existing three-span precast deck beam bridge, funded by the STP-Bridge program. Preliminary design presented a challenge since the existing roadway laid low in the floodplain and overtops frequently. Following normal IDOT bridge design criteria would have resulted in a large raise to the roadway profile, along with excessive ROW needs and wetland impacts. A waiver of roadway freeboard requirements was also coordinated with District 3 staff. The proposed structure is a 217-foot four-span haunched slab bridge, matching the existing road profile to minimize floodplain fill and allow the work to be completed within existing right of way. Sheet pile retaining walls were utilized around both abutments to protect the roadway embankment, while minimizing the footprint of the improvements.

South Elgin, IL

McDonald Road Bridge (SN 045-3054) over Otter Creek

Structural Engineer for the development of a Phase I Project Development Report and Phase II design for the replacement of the existing structure with an anticipated Group II Categorical Exclusion. The McDonald Drive structure consisted of a single-span concrete through girder bridge, approximately 24 feet wide. Design plans included a bioswale and a vegetated reinforced soil slope. Coordination with local agencies, including IDOT and Army Corps of Engineers, was ongoing throughout the project.

Kirkland, IL

Hortense Street Bridge Over Bull Run Creek

Lead Structural Engineer for the Phase I and Phase II design of the Hortense Street Bridge. The project had an expedited schedule, with design and construction completed in seven months. The Phase I Report and Phase II design were completed concurrently to meet the tight schedule.

McHenry County Division of Transportation, IL Graf Road Over Lawrence Creek (SN 056-3111)

Lead Structural Engineer for Phase I and Phase II design services for the complete replacement of a two-span PCC deck beam structure.

3. Scope of Services Experience

Annual Street Maintenance

Baxter & Woodman provides planning, design, construction inspection, and project close-out of annual street rehabilitation programs for numerous communities, most of which are funded by MFT, STP, or local funding sources. This experience results in our ability to meet your community's needs and confirm your project is in compliance with funding requirements.

Baxter & Woodman has completed multi-year transportation and infrastructure projects involving replacement of pavement, curb and gutters, sidewalks, ADA-compliant ramps, and bike paths for many

Our solid relationship with District One Local Roads Field Engineers provides a level of trust from IDOT in our work that helps Baxter & Woodman process reviews more quickly and with an appropriate balance between local interests and Local Roads policies.

communities. Due to the success and continuity we bring to these types of projects, we have developed long-standing relationships with our clients. We stress open and frequent communication to facilitate the design and planning process, which results in projects that exceed our clients' expectations.

Below is a list of Illinois communities who have trusted us with their annual street improvement program:

Village of Beecher Village of Buffalo Grove

Village of Bull Valley
Village of Carpentersville

Village of Cary

City of Country Club Hills

City of DeKalb

Village of Downers Grove

Village of Fox River Grove

Village of Glenview Village of Glen Ellyn Village of Gilberts Village of Grayslake

Village of Hazel Crest

City of Highwood

Village of Hillcrest Village of Huntley

Village of Island Lake

Village of Kenilworth

Village of Kirkland

Village of La Grange

Village of Lake Barrington

Village of Lakemoor

Village of Lakewood Village of Lincolnshire

Village of Lincolnwood

Village of Maple Par

Village of Maple Park
City of Marengo

City of McHenry

Village of Mokena

City of Momence

Village of North Barrington

City of Oak Forest

Village of Oakwood Hills Village of Olympia Fields Village of Orland Park Village of Park Forest Village of Plainfield

Village of Prairie Grove

City of Prospect Heights

Village of Richton Park

Village of Round Lake Village of Shorewood

Village of South Barrington

Village of South Chicago Heights

Village of South Elgin

Village of West Dundee

Village of Wheeling

Village of Winthrop Harbor

City of Wood Dale

Village of Vernon Hills

Village of Villa Park

Village of Virgil

City of Zion

MFT AUDITING SERVICES

In addition to regularly assisting commutaties with MFT documentation, we have assisted several communities with MFT audits: Lakewood, South Elgin, Round Lake, Winthrop Harbor, Kenilworth, Vernon Hills, Plainfield, La Grange, Genoa, and Fox River Grove.



Village of Lincolnshire 2019-2021 Street Improvements



Baxter & Woodman completed design and construction engineering services for improvements to more than 5.9 miles of commercial and residential roadways, bike paths and parking lots. Existing pavements were in various failed conditions. Rehabilitation strategies for each road varied depending on condition, ranging from full depth HMA replacement to 2-inch milling and resurfacing. Part of the design engineering consisted of evaluating the condition of the Village's pavement. Baxter & Woodman assessed the Village's pavement data and prepared a 10-year pavement rehabilitation plan that positions the Village on an 18-year rehabilitation cycle. The three projects used various funding sources including MFT, Rebuild Illinois, and Village.

Village of Glenview
2008-2021 MFT Street Improvements



Baxter & Woodman has been providing design and construction engineering services for the Village of Glenview's annual MFT street improvement program since 2008. The most recent 2021 project consisted of approximately 3.5 miles of HMA pavement resurfacing/rehabilitation, curb and gutter spot repairs, minor sanitary and storm sewer repairs, ADA ramp replacements, and driveway and parkway restorations. In addition to design and construction engineering, services also included Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) and Cook County Department of Transportation & Highways (CCDOTH) permitting for sanitary repairs and ADA ramp design & resurfacing within CCDOTH right-of-way. The project was coordinated with and approved by the IDOT Bureau of Local Roads & Streets for the use of MFT funds.

Village of South Elgin 2017 Street Improvements



Baxter & Woodman provided design and construction engineering services for \$3.2 million in improvements to nearly four miles of roadways in several residential neighborhoods. Improvements included hot-mix asphalt surface removal, pavement removal and patching, spot curb and gutter removal and replacement, sidewalk removal and replacement to meet ADA requirements, new storm sewers, preparation of aggregate base, hot-mix asphalt binder and surface course, adjustment of drainage structures, sign replacement, parkway restoration, and other incidental and miscellaneous items of work.

City of Wood Dale
FY20-21 and FY21-22 Street
Improvements



Baxter & Woodman provided design and construction engineering services for the City's FY20-21 and FY21-22 Street Improvements, as recommended in the Street Sufficiency Study completed by Baxter & Woodman for the City in 2019. To stretch the City's budget dollars, Baxter & Woodman suggested the City seek Federal Aid funding for two of the streets scheduled for improvement, Central Avenue and Foster Avenue. In parallel with the STP funding application, we completed preliminary engineering for both projects to capture additional project scoring points. Because of the additional "project readiness" points, both streets were selected to receive a total of \$886,000 in STP Federal funding, which allowed the City to improve additional streets due to the cost savings. Both street improvement programs consisted of curb and driveway repair, ADA ramp replacement, and pavement resurfacing or reconstruction.

Water Supply/Distribution

The Baxter & Woodman water group is committed to protecting and preserving the water supply. Staffed by recognized experts in the field of water supply, treatment, and source protection, the water group specializes in long-term system planning, design, construction, and operation of water supply, treatment, storage, and distribution systems.

Baxter & Woodman Specializes in:

- Finding Funding
- Promoting Conservation
- Understanding New Regulations
 - Protecting Community Health



SUPPLY

Water System Modeling with GIS integration
Water System Master Planning
Groundwater Resources Management/Investigations
Source Water Quality Management
Wellhead Protection
Test Well Drilling Programs
Deep and Shallow Aquifer Water Supply Wells
Pilot Studies

TREATMENT

Energy Analysis

Safe Drinking Water Act Compliance and Aesthetic Improvements with:

Air Stripping and Aeration
Chemical Coagulation and Flocculation
Sedimentation and Filtration
Ion Exchange and Absorption
Hydrous Manganese Oxide
Biological Filters

Membrane Separation
Chemical Oxidation

Disinfection

Radium and Barium Residuals

Management

DISTRIBUTION

Booster Stations
Transmission and Distribution Mains

TRENCHLESS TECHNOLOGIES

Water Main Lining Directional Drilling Pipe Bursting

LEAD SERVICE REPLACEMENT PLANS

RESERVOIRS AND ELEVATED STORAGE TANKS

SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) SYSTEMS

CORROSION CONTROL SECURITY

Knowledge of all facets of a water system provides a solid foundation for performing a distribution study that effectively evaluates the existing components and enhances planning for future improvements, Baxter & Woodman completes over 200 water engineering projects per year. Below is a list of communities for which we have provided many years of multiple water system engineering services. We will gladly supply the City with examples of previously completed studies upon request.

- Bedford Park, IL
- Buffalo Grove, IL
- Carpentersville, IL
- Cherry Valley, IL
- Crystal Lake, IL
- County Club Hills, IL
- Deerfield, IL
- Dekalb, IL
- Elmhusrt, IL
- Gilberts, IL
- Glenview, IL
- Highwood, IL
- Island Lake, IL
- Joliet, IL
- Kenilworth, IL
- Lakewood, IL

- Lake in the Hills, IL
- Mundelein, IL
- Northbrook, IL
- Oak Brook, IL
- Oak Forest, IL
- Oak Park,
- Palatine, IL
- Palos Park, IL
- Park Forest, IL
- Plainfield, IL
- Round Lake, IL
- Schaumburg, IL
- South Elgin, IL
- Sycamore, IL
- Western Springs,

Woodstock, IL

City of Joliet

5-Year Water Distribution System Rehabilitation Program



The City hired Baxter & Woodman to conduct a thorough review of their water system with the goal of developing a five-year capital improvement program to be funded by an IEPA low-interest loan. Projects were prioritized by analyzing water main breaks and criticality, existing fire flows, and number of customers. Twenty-three projects were selected for the five-year program with a total estimated cost of nearly \$37 million.

Baxter & Woodman prepared a project planning report and obtained IEPA approval for the 23 projects. The scope of services also included a review of the City's existing GIS system and a memo summarizing recommended improvements to the City database

City of Joliet 2022 Water Main Improvements



The 2022 Water Main Improvements project includes the replacement of more than 21 miles of water main distributed across fifteen project areas. The proposed water mains range in size from 6-inch to 16-inch, in addition to jacking and boring a 36-inch casing for a Canadian National Railway crossing. The project includes the replacement of rear-yard water services as well as public and private lead service lines.

The overall project requires coordination with IDOT and Will County DOT, Canadian National Railway, and ComEd for work within dedicated right-of-way, planning with Pace Suburban Bus for project areas along bus routes, and cooperation with businesses and special interest groups.

Village of Plainfield 2019-2020 Underground Utility & Roadway Improvements



Baxter & Woodman provided design and construction engineering services for a multi-year Utility and Roadway Improvement Program in the Village's Central Business District. The project included the CIPP lining of nearly 6,000 lineal feet of 8-inch to 24-inch sanitary sewer, including 4,000 lineal feet of 6-inch CIPP sanitary service lining and new cleanout installation for approximately 130 sanitary services; replacement of approximately 650 lineal feet of 8-inch to 10-inch sanitary sewer; replacement of approximately 5,100 lineal feet of 8-inch water main, including over 100 lead water service replacements from the new water main to the water meters inside each house; design and installation of approximately 4,000 lineal feet of storm sewer ranging in size from 12-inch to 42-inch diameter; and roadway reconstruction with new HMA pavement, curb and gutter, driveway aprons and sidewalk, and decorative lighting installation.

Extensive communication with residents was necessary to access houses for field inspections and survey, and coordination of lead water service replacement work. Baxter & Woodman assisted with several public hearings. A detailed water service replacement matrix was developed to assist with lead water service replacements.

Village of Westmont
Annual Water System Maintenance



Baxter & Woodman has been providing the Village of Westmont with engineering services for over 50 years including countless Water System projects such as:

- North Adams and North Grant Water Main Replacements
- Cass Avenue Road & Water Main Improvements
- North Lincoln Water Main Replacement
- West and East Burlington Avenue Water Main Replacement
- 55th Street Water Main Replacement
- 60th Street Water Main Replacement

Intersection Reconstruction

Baxter & Woodman's design and construction engineering experience includes reconstruction projects involving both intersection signalization and roundabout design. We focus on enhancing traffic flow, providing a safer roadway for all users, providing cost effective solutions, and understanding community concerns and sensitivity to environmental issues. The following project examples reflect our experience with signalized and roundabout intersections we have designed and provided construction engineering services for:

City of DeKalb
Peace Road from IL 38



Baxter & Woodman prepared Phase I report and Phase II design for improvements to Peace Road from IL 38 to Pleasant Street. Improvements included rural to urban cross section, pavement widening from 2 to 4 lanes, resurfacing, new storm sewer, and curb and gutter. Intersection Design Studies were prepared for two intersections and traffic signals were replaced. Coordination was necessary with the City, DeKalb Taylor Municipal Airport, Union Pacific Railroad, IDOT District 3, DeKalb County, General Electric, and developers.

Village of Schaumburg
Plum Grove Road Phase I



Baxter & Woodman provided Phase II design services and right-of-way acquisition services for improvements to Plum Grove Road between Higgins Road and Golf Road, a high-volume roadway that links the residential area south of Higgins with the commercial area to the north. The project was funded through the federal Surface Transportation Program.

The improvements included five-lane roadway reconstruction, resurfacing, lighting, culvert headwall improvements, sidewalk and bike path improvements, new storm sewer, and water main improvements.

The improvements also included one new signalized intersection and replacement/modifications to three traffic signals - two IDOT and one new Village traffic signal. Traffic signal and extensive underground infrastructure improvements required coordination with existing underground and overhead utilities. Proactive communication, including field meetings was needed to enable timely relocation of utilities ahead of the reconstruction work, including working with ComEd to protect a buried high-pressure electrical transmission line.

Village of Grayslake Lake Street Improvements



Baxter & Woodman completed Phase I and II design and Phase III construction engineering services for STP-funded improvements that consisted of widening IL 120 to allow a left turn lane at Lake Street in both directions as well as a right turn lane for eastbound IL 120. Lake Street was improved to provide left turn lanes as well as a southbound right turn lane onto westbound IL 120. These improvements increased the flow of traffic to/from the downtown area as well as through the congested corridor. New traffic LED signals were installed with decorative poles to enhance the downtown area and highlight the adjacent Nordic Park. The signals were updated for pedestrian crossings, and sidewalks were upgraded to ADA standards to allow access to the park and the adjacent middle school.

Storm sewer and underground improvements were completed, as well as installation of curb and gutter, HMA pavement widening, and HMA surface placement along the project limits.

Village of Glenview

Patriot Boulevard at Costco Roundabout



The Village of Glenview is implementing a compact roundabout at this intersection to improve traffic operations and to make the conditions safer for pedestrians, cyclists and motorists. Baxter & Woodman provided design services for the roundabout and will be the engineer during construction in 2022.

A new compact roundabout will be installed at the intersection of Patriot Boulevard and the Costco Access Roadway. A southbound right turn lane will also be added at this location to address existing traffic queuing during peak hours of business operations. Decorative colored concrete islands, new decorative street lighting, and landscaping are also be included to enhance this business corridor within The Glen.

Illinois Department of Transportation

PTB 181/05, Phase II Engineering Services, FAP 525 (U.S. 20 at West Union Road; at East Coral Road and at Marengo/Beck/South Union Road, District Ones



Baxter & Woodman provided Phase II Engineering for this 2.7 mile, \$11M project, which consisted of various improvements along U.S. Route 20. U.S. Route 20 is a northwest-southeast Other Principal Arterial and Strategic Regional Arterial (SRA 511). The roadway is classified as a Class II Truck Route and is maintained by the IDOT. The improvements included:

- A 5-leg roundabout at U.S. Route 20 and Marengo Road (FAS 35)/Beck Road/South Union Road (FAS 34A)
- Channelization improvements and widening at U.S. Route 20/Coral Road and U.S. Route 20/West Union Road
- Resurfacing of U.S. Route 20 outside reconstruction and widening areas

All intersection improvements were designed for staged construction with two-way traffic maintained at all times on U.S. Route 20

Kane County DOT
Bliss/Main/Fabyan Roundabout



Bliss Road and Fabyan Parkway both intersect Main Street separately, approximately 1,000 feet apart. The predominant north-south movement in the area is along Bliss Road and Fabyan Parkway, with a jog along Main Street, which causes traffic inefficiencies and safety concerns. This Federally funded project involved Phase I Engineering and Environmental Studies and ongoing Phase II Design for the realignment of Bliss Road and Fabyan Parkway to create a new 4-legged intersection with Main Street including:

- Evaluating traffic signals and a roundabout for intersection control
- Completing Preliminary and Final design for the preferred intersection treatment of a roundabout

The preferred alignment of the realigned Bliss Road was developed through an alternatives analysis that considered project constraints, geometric design criteria, right-of-way acquisition, environmental considerations, detention requirements, access management, cost, and safety. Public involvement helped develop a community-supported plan consistent with the project's vision and objectives.

City of Country Club Hills
Pulaski Road/Crawford Avenue
Reconstruction



Baxter & Woodman completed Phase I Preliminary Engineering for 3.2 miles of roadway corridor improvements and Phase II Design Services for intersection improvements at Pulaski Road and 183rd Street. This multi-stage corridor project includes widening and resurfacing 3.2 miles of Pulaski Road with replacement of existing traffic signals at all signalized intersections. As part of Stage 1, Baxter & Woodman completed Phase II Design Engineering for the Pulaski Rd/Crawford Ave at 183rd Street intersection improvements project, which was completed in 2021.

Multi/Shares Use Paths

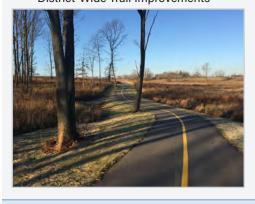
We develop multi/shared use path designs based on approaches that combine sound engineering practices with design flexibility while protecting and preserving each site's natural resources. Our pre-qualifications for multi/shared use path design and construction, along with our full range of engineering services, will be used to develop creative, yet practicable, solutions for your multi/shared use path projects. Your projects will receive hands-on attention from an experienced team whose expertise aligns well with the City's needs. A sample of the many multi/shared used paths we have provided design and construction services for include:

McHenry County Conservation District
Ridgefield Trace Shared-Use Path



Baxter & Woodman assisted with Phase I/II design and Phase III construction engineering services for a \$2 million federally funded shared-use path between the cities of Crystal Lake and Woodstock. The path spans over nine miles and provides a connection with the Conservation District's 26-mile Prairie Trail and other trail networks. The path crossed several wetland areas, roadways under various jurisdictions, railroad-roadway crossings, and is located immediately adjacent to several home sites and cemeteries. The trail included installation of a Pedestrian Hybrid Signal at Walkup Road, and a pedestrian railroad crossing.

Forest Preserves of Cook County
District-Wide Trail Improvements



Kickapoo Trail, George Dunne Trail, 40 Acre Woods, 40 Acre Woods Underpass, Dan Ryan Woods Trail, North Branch Trail, Sand Ridge Boardwalk

Baxter & Woodman provided design and construction services for multiple trails in a diverse mix of environmentally sensitive Forest Preserves areas. The work included new trail construction at seven different locations throughout the County along with various engineering tasks as determined by the District. This project included trail crossing designs in accordance with Forest Preserve standards and AASTHO design guidelines.

The work included initial needs assessment, cost estimates, and improvement prioritization. The path construction terrain included floodplain encroachment, several different types of wetlands, open prairies, dense forests, existing trail modifications, and forest reclamation areas.

Village of Skokie Howard Street Bike Path



Baxter & Woodman completed a concurrent Phase I/Phase II design and observed Phase III construction for an ITEP-funded bicycle trail extension to connect existing on-street lanes on Howard Street to the North Shore Channel Trail. The work included widening and re-striping to accommodate bike lanes with the existing two through lanes and parking lanes in a tree-lined urban residential block and installation of an off-street asphalt bike path in an open parkway along the fenceline of treatment plant.

Design aspects included minimizing impacts to trees in the residential block, maintaining parking and driveway access, coordinating relocation of utility poles and pedestals, obtaining permanent easement to accommodate the path.

City of Crystal Lake US Route 14 at Virginia Road



The intersection of US Route 14 and Virginia Rd. is a 3-leg intersection with non-standard geometric layout due to the horizontal curve of Route 14 at the intersection. The intersection has caused inefficiencies and safety concerns for several years. Baxter & Woodman completed Phase II design engineering of the project, which included pavement widening to provide new auxiliary lanes and a larger turn radius to accommodate trucks, and new traffic signals.

The City's bike lane plan included Virginia Road as a future bike route; therefore, the project also included revising the pavement markings on 3,400 feet of Virginia Road to include bike lanes on both sides of the road.

Villages of Glenview and Northbrook Shermer Road Multi-Use Path Improvements



Baxter & Woodman completed Phase I Preliminary Engineering, Phase II Design Engineering, and Phase III Construction Engineering for the federally funded Shermer Road shared-use path within the Villages of Glenview and Northbrook. The 1.2 mile path is a vital link for regional bicycle and pedestrian connectivity between Glenview and Northbrook and the surrounding communities.

Design work included evaluating alternative path locations on both sides of the road in order to try and utilize existing ROW and avoid removals & relocations of existing trees and above grade utilities. After evaluating alternatives, Baxter & Woodman assisted with necessary Land Acquisition and Plat of Highways.

Village of Plainfield



Baxter & Woodman assisted the Village with Phase I, II, and III Engineering and Environmental Studies for the reconstruction of 127th Street. The improvements consisted of:

- Right-of-Way (ROW) acquisition and floodplain compensatory storage;
- 3,400 feet of shared-use path on the south side of 127th Street including installation of rapid rectangular flashing beacons (RRFBs); and
- Approximately 3,400 of roadway lighting on the south side of 127th Street.

Village of Lakewood Huntley Rd/Lakewood Rd/Lake Ave Bike Lanes



Baxter & Woodman worked with the Village to secure federal Surface Transportation Program (STP) funding for three separate bike path projects over a 7-year period (the final phase was constructed in spring 2017). Because Lakewood is a well-established community, public sentiment was not in favor of disturbing front yards to construct off-road bike paths. As an alternative, Baxter & Woodman proposed to widen the roads by 4-feet on both sides to provide on-street bike lanes on both sides of the road, which proved to be much less intrusive to residents.

The project included extensive public involvement, pavement widening and resurfacing, drainage improvements, guardrail installation, wetland delineation, and coordination with the Crystal Lake Park District. The three projects added 4.2 miles of on-street bike lanes at a total cost of approximately \$3.1M, of which 80% was paid by federal STP funds.

Bridge Services

Safety and function are top priorities for our bridge engineers, who specialize in bridge design, maintenance, rehabilitation, inspection and upgrades. Baxter & Woodman has bridge inspectors on staff to confirm compliance with any aspect of structure review during the study and design. We have four NBIS-certified Program Managers who are also licensed Structural Engineers. Our team has the technical expertise and experience necessary to recommend any necessary repairs for the City's vital infrastructure.

Capabilities

- NBIS Bridge Inspection
- Pedestrian Bridge Inspection
- Load Rating Analysis
- STP-Bridge Funding Assistance
- Bridge & Culvert Design
- Bridge & Culvert Hydraulics
- Bridge Construction Engineering
- Decorative Facades
- Retaining Wall Design
- Bridge Lighting Design
- Bridge Maintenance







NBIS Local Program Bridge Manager

Baxter & Woodman serves as the designated NBIS Program Manager for numerous local communities with jurisdiction over 50 structures, including a variety of structure types, from precast box culverts, to prestressed concrete, to steel structures:

- Barrington
- Lockport
- Bull Valley
- Oak Forest
- Elwood
- Park Forest
- Forest View
 Home Owners
 Association
- Prairie GroveRound LakeSouth Elgin
- Fox Lake
- Virgil
- Greenwood
- Wheeling
- Island Lake
- Winthrop
- Lake in the
- Harbor
- Hills
- Winnetka
- Lakewood

Our managers are responsible for performing both routine and special feature inspections. During routine inspections, they observe and take measurements, as needed, to determine the physical and functional condition of the bridge, to identify any changes from initial or previously recorded conditions, and to confirm that the structure continues to satisfy present service requirements. Their inspections include observations and measurements necessary to determine the physical condition of a bridge.

City of Lockport

Second Street Bridge Replacement



Baxter & Woodman provided Phase I/II design and Phase III construction engineering services for the STP funded replacement of Second Street Bridge over the Illinois & Michigan (I&M) Canal. The City's Second Street Bridge provides access to the I&M Canal Trail, Heritage Village Park, and the planned Star Business Park. The new Second Street bridge accommodates the expected increase in traffic volume, helps maintain efficient traffic flow, and improves safety for motorists, bicyclists and pedestrians. Project highlights: Federal funding, Phase I/II/III, Historic corridor, Customized form liners, Extensive regulatory agency coordination.

Kane County Division of Transportation

Silver Glen Road Bridge Replacement



Baxter & Woodman is provided Phase I and Phase II engineering services for the replacement of Silver Glen Road Bridge over Otter Creek (S.N. 045-3122). The bridge was severely load restricted in 2016, and Kane County began the federal funding process for replacement with the goal of completing the project in three years. Our team found a design solution that kept the project footprint within the existing right of way, eliminating the need for property acquisition. The main bridge is a three-span concrete slab structure, and the adjacent single-span pedestrian bridge shares the same abutments.

Village of South Elgin

McDonald Drive Bridge Replacement



The Village of South Elgin applied for and received federal STP-Bridge funding assistance for the bridge, which was classified as Functionally Obsolete due to its narrow width. Baxter & Woodman provided Phase I/II design and Phase III construction engineering services for the replacement of the single span structure. The new bridge included a pedestrian underpass, thereby completing the north-south connection in a safe location under the roadway. Stairways were added at the east end of the bridge to connect the bridge directly to the trail.

DeKalb County Highway Department

McNeal Road over South Branch Kishwaukee River



Baxter & Woodman recently completed Phase I and Phase II Design engineering services for replacement of the McNeal Road bridge in DeKalb County. The variable-depth concrete slab bridge was selected to provide a durable superstructure while crossing the South Branch with four spans. Sheet pile walls were constructed around both abutments to provide additional scour protection for the approach roadway.

4. Engineering Service Model(s)

Today's municipal engineers must provide more than traditional engineering design and construction services. In our rapidly changing environment, your engineering consultant must be forward thinking and serve as someone you turn to for advice based on trust and respect. With Baxter & Woodman, the City will receive a firm that provides one of the most comprehensive ranges of municipal engineering and technology services found in the Chicagoland area. We continually refine our practices and expand our services to best meet the changing requirements of municipalities.

The City of DeKalb and Baxter & Woodman have a history of successful projects, having served you since the early 1990's. We have provided your community with a variety of municipal engineering services including transportation, water, infrastructure, GIS, and much more. We are proud of our history with the City, and we want to prove to you how Baxter & Woodman can continue to fit your engineering needs. Our firm has grown and expanded over the years and we are excited to bring new ideas, new approaches and new faces to the City.

Baxter & Woodman has provided municipal engineering services for many communities for over the past 75 years. The key to success has been flexibility in our approach to the services provided and recognition of the budget constraints faced by all communities. Achieving your goals will be a direct result of a partnership with City staff combined with our team's strengths, including:

- Providing Timely, Reliable, and Responsive Service
- Helping You Save Time, Energy, and Money
- Reducing Costly Surprises
- Acting in Your Best Interests
- Providing Communication and Accountability to Promote Success

Timely, Reliable, and Responsive Service

Baxter & Woodman has specialized in serving the public sector and their engineering needs since 1946. Our municipally focused team has the developed staff, resources, and training to provide the full range of engineering services required by today's municipalities. Carolyn Grieves will continue to serve as the City's main point of contact. Carolyn's previous experience assisting communities with engineering, management, operations, and maintenance makes her a great fit to fill this role. Carolyn is an effective communicator and will work closely with City staff to confirm we are exceeding your expectations for quality service.

Our project team is supported by over 325+ professionals who work together daily providing the expertise and quality of service you require.

Helping You Save Time and Money

Baxter & Woodman advocates for sustainable infrastructure and continually educates our staff and clients, innovates processes, and integrates solutions that provide a responsible balance of economic, environmental, operational, and social value. Baxter & Woodman has embraced the concept of Asset Management and sustainability.

The City values cost-conscious solutions that help demonstrate your fiscal responsibility to the public and your residents. Our staff works from project initiation on tracking costs (engineering, construction, right-of-way, etc.) and understands our municipal clients have limited resources.

Baxter & Woodman performs life-cycle cost analyses to provide proof that investments in sustainable design

can save you money in the long run. The City needs a team with a wide range of experience providing municipal engineering services, as well as a team that seeks cost-effective solutions. We proactively recommend alternative design strategies that save time, energy, resources, and money while maintaining a high level of quality.

The following is a partial list of sustainable strategies that we implement regularly:



MATERIALS RECYCLING - For low volume roads, parking lots, bike paths, we recommend using "Murphy Mix." The "Murphy-Mix" provides a more pliable surface course, which has resulted in longer lasting surface courses for low volume roads.



GREEN INFRASTRUCTURE - From Stormwater Best Management Practices to permeable pavement, we actively seek out opportunities to include Green Infrastructure that promotes quality and sustainability.



TRENCHLESS TECHNOLOGY - Baxter & Woodman is the Regional Leader in Water Main Lining: 15 projects designed, 9 projects constructed, 10 feasibility studies, and 12 presentations.



MOBILE APPLICATION - Our Spatial Technology group can develop custom mobile applications to allow you to collect and update data in the field, with less error and more efficiency than traditional data collection methods.



ASSET MANAGEMENT- Baxter & woodman uses GIS to develop sophisticated data storage, analysis, and visualization capabilities to help municipalities work smarter.



FUNDING - Assisting you with finding creative solutions that facilitate building your needed improvements that save resources, while using capital improvements planning and recognizing Shared Services and Joint Bidding.

Reducing Costly Surprises

Baxter & Woodman has a proven history of creating defined scopes of services and delivering projects on time and within budget. We have developed efficiencies when collecting data using state of the art survey equipment and GIS collector applications. We recently developed a web-based data collection application for DeKalb Sanitary District that allowed mobile access to input manhole inspection information from the field into their GIS.

We have been on the forefront of GIS-centric asset management programs that will help your public works departments operate more effectively and efficiently through the proactive maintenance planning of City infrastructure. A well maintained GIS-centric asset management system can save money by implementing powerful analysis tools to help evaluate municipal utilities, track improvements, and create annual programs.

Acting in Your Best Interest

We will work on behalf of the City when dealing with adjacent communities and other jurisdictional entities. Baxter & Woodman regularly coordinates with local residents, businesses, utility companies, and regulatory agencies when

needed for a project. Agencies such as the Illinois Environmental Protection Agency (IEPA), Illinois Department of Natural Resources, and are familiar with our staff and the high quality of our work – resulting in quick responses to questions and timely review/approvals. Additionally, we do not work for developers so we do not anticipate conflicts of interest when it comes to representing you.

Baxter & Woodman has worked with the IEPA in recent years to obtain their acceptance of water main lining, which for certain projects saves municipalities money and is environmentally friendly. We've served over 20 of your municipal peers with this innovative approach to infrastructure rehabilitation. Our experience and long term relationships with IEPA staff makes us familiar with their procedures and permits, which will help the City expedite the permitting process.

Communication and Accountability

There is no doubt that efficient and effective communication promotes project success and demonstrates a consultant's accountability for the services they provide. We tailor our project management to fit your needs. At project startup, communication will be a critical component while identifying project limits, infrastructure replacement elements, maintenance of traffic strategy and identifying coordination requirements. An effective method to begin any project is to conduct a scoping meeting with City staff. During this meeting, we will determine and document the limits of the study or design, as well as information on key stakeholders, environmental attributes, historical data, etc. Cost and potential impacts to residents will be identified early in the planning process to meet budget and maintenance goals.

Project communication is a priority throughout our shared relationship. We utilize numerous tools to communicate effectively such as collaboration software (eg Basecamp® and SharePoint) and Project Status Reports.

Let us prove we are your Engineering partner dedicated to making every City project a success!

5. Completed Work References

We encourage you to contact the references listed below to obtain their assessment of our services and satisfaction with our work on similar projects.



Village of Plainfield 14400 Coil Plus Dr. Plainfield, IL 60544

Mr. Allen Persons Director of Public Works Tel: 815-436-3577 E: apersons@goplainfield.com



Village of Glenview 2500 East Lake Avenue Glenview. IL 60026

Ms. Adriana Webb Engineering Division Manager Tel: 847-904-4414 E: awebb@glenview.il.us



City of Lockport 17112 S. Prime Blvd. Lockport, IL 60441

Mr. Brent Cann
Director of PW & Engineering
Tel: 815-838-0549 x2313
E: bcann@lockport.org



Statement of Qualifications City of DeKalb

Engineering Services

Prepared for: City of DeKalb





January 20, 2022

City of DeKalb 1216 Market Street DeKalb, IL 60115

Attention:

Mr. Zachary Gill, P.E.

City Engineer

Dear Mr. Gill:

I am pleased and proud to present our Statement of Qualifications for the City of DeKalb Engineering Services.

Enclosed please find one (1) original hard copies and a PDF copy on a USB drive.

A review of our submittal will show that my firm and staff members have the experience and technical skills necessary to provide DeKalb with the professional engineering services indicated in your RFQ. Our professionals deliver a unique combination of experience and energy to meet the challenges and opportunities that every project presents.

I guarantee that we will retain your trust and satisfaction; we don't lose clients once they have partnered with us.

I welcome the opportunity to personally discuss our qualifications in greater detail. Please feel free to contact me if you have any questions.

Respectfully, C.E.S. Inc.

Kevin C. Bunge, P.E.

President

Section 1 C.E.S. Inc. – Firm Description

C.E.S. Inc.
700 W. Locust St.
Belvidere, IL 61008
815-547-8435
815-544-0421 (fax)
Kevin.bunge@civilideas.com
Kevin Bunge, P.E., President

C.E.S. Inc. 228 Page St. Sycamore, IL 60178 815-547-8435 815-544-0421 (fax) C.E.S. Inc. dba Survey-Tech 104A Maple Ct. Rochelle, IL 61068 815-562-8771

C.E.S. Inc. was formed in 1992 with the mission of providing expert and cost effective Civil Engineering Services to public and private clients. C.E.S. Inc. currently has offices in Belvidere, Sycamore and Rochelle serving clients in thirteen Northern Illinois counties and over 40 communities. We purchased three firms over the last 30 years that extend our legacies with three of these communities back to 1979, 1984 and 1986 respectively.

We are the appointed (or sole source) Municipal Engineers for the Village of Cherry Valley, the Village of Rockton, the Boone County Highway Department, the City of Genoa, the Village of New Milford, the Village of Timberlane and the Village of Creston. We provide "ad-hoc" Engineering services for the City of DeKalb, City of Rockford, City of Belvidere (95% sole source) and the City of Rochelle. We are extremely proud of the fact that we have never lost a municipal client.

C.E.S. Inc. is wholly owned by Kevin C. Bunge, P.E. Our annual volume in engineering fees on Municipal Engineering services is approximately \$1,200,000.

We have a staff of seventeen highly trained, motivated and dedicated team members including three Professional Engineers, a Professional Surveyor, three E.I.T.s, two full-time survey crews, a construction supervisor, expert CAD personnel, and highly trained and efficient support staff. We will provide the City of DeKalb with a customized and identified team for each project to ensure an accurate and expedited response to your project needs.

C.E.S. Inc. very purposefully takes a common sense and <u>frills-free</u> approach to infrastructure design. We make sure we have a complete understanding of the client's needs and provide a design that meets those needs in the most efficient and economical manner. We pride ourselves on our commitment that the best possible design has been achieved. We are a firm that does not believe in leaving design elements "to be determined in the field" — a mindset that is way too prevalent in the Engineering field today. On every project, our goal is to <u>eliminate</u> unknowns (and thus change orders) during construction through a process of careful planning and review. We are not afraid to rip a project apart partway through design if a better way comes to light because we are obsessed with getting the best possible project from the construction dollar.

We also recognize that today, more than ever, time is critical; we will always obtain the necessary permitting approvals on the quickest possible schedule. It is common that we will start the clearance and/or permitting process on the day our services commence.

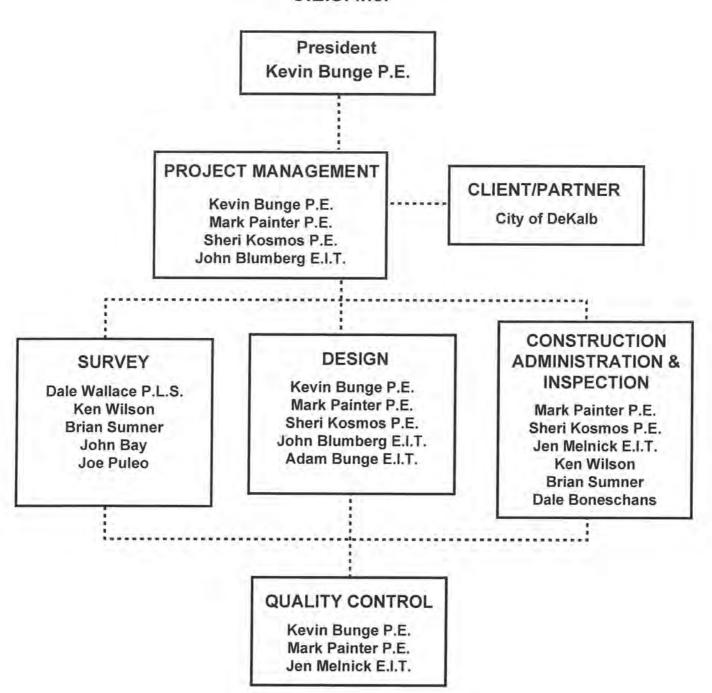
Neither our firm nor any staff members have been involved in litigation or had complaints filed against them for improper practices with the Illinois Department of Professional Regulations.

Our staff is qualified for and has the resources needed to excel in the following categories listed in your RFQ:

- Annual Street Maintenance including ADA improvements
- Water Supply/Distribution, maintenance and expansions
- Intersection Reconstructions, signalized or round-about
- Multi/Shared Use Paths

Section 2 Resumes and Organization

City of DeKalb
Statement of Qualifications
Organizational Chart for
C.E.S. Inc.



Section 2

Resumes

Kevin C. Bunge, P.E., President C.E.S. Inc.

As owner of C.E.S. Inc. since 1992, Kevin C. Bunge has acquired extensive civil engineering experience working on projects ranging from Municipal Engineering to design and management of public and private developments in a thirteen county area of Illinois. He has worked as Lead Designer, Manager and/or Coordinator for numerous multi-million dollar construction projects including both new construction and rehabilitations. He has been the Village Engineer for various Illinois communities since 1992. He has experience with FmHA, ITEP, SRTS and CDAP grant applications. He has coordinated with Local, State and Federal agencies in expediting permit approvals for various projects.

B.S., Civil Engineering, University of Illinois-Champaign/Urbana 1985

Traffic Control, Signalization, and Traffic Capacity, Northwestern University, Evanston, IL

Various Special Assessment, M.F.T., Construction and Documentation Seminars, I.D.O.T. – Dixon & Springfield, IL

Licensed Professional Engineer: 1990 Illinois #062-045735 & 2013 Iowa #21548

Sheri R. Kosmos, P.E.

Sheri has experience in a variety of land development and municipal projects. Her projects have included the design of roadways and water mains within various proposed developments. Sheri has been a Project Manager for these projects for the past 26 years. This experience has encompassed multi-site projects involving numerous regulatory agencies where she has acted as the Designer, Manager and/or Coordinator. These projects ranged from multi-million dollar new construction projects and roadway rehabilitations.

B.S. Agricultural Engineering, University of Illinois-Champaign/Urbana 1992

M.S. Agricultural Engineering, University of Illinois-Champaign/Urbana 1994

IDOT Certifications: PCC Level II, HMA Level I and Documentation of Contract Quantities

Licensed Professional Engineer: 1999 Illinois #062-052798, 2009 Wisconsin #40686-6, 2009 Colorado #43678

Mark L. Painter, P.E.

Mark has extensive civil engineering experience working as Design Engineer and Project Manager for transportation, storm drainage and water engineering projects. Mark has established a broad technical base on which to resolve client project needs. Mark has also been responsible for coordination, cost control, and scheduling of

projects. His experience includes preparation of planning documents and reports, boundary and topographic surveys, design, bidding services, construction administration, preparation of property and easement acquisition documents, preparation of permit applications, wetland and floodplain considerations. Mark has worked on City of Rockford projects since 1984.

B.S., Civil Engineering, University of Wisconsin-Plattville, 1981

Licensed Professional Engineer: 1985 Illinois #062-042946, 1990 Wisconsin #E-27070, 1990 Iowa #11873 & 1990 Ohio #54782

John A. Blumberg, E.I.T.

John has been a staff engineer at C.E.S. Inc. since 2005. He is responsible for the design of public and private improvements, topographical surveying, inspection and AutoCad drafting. His design responsibilities include roadways, sanitary sewers, water mains, drainage, detention facilities and coordination with permitting/review agencies as necessary. He is an expert user of computer software including AutoCad, HEC – Ras, Land Development Desktop, Excel, Word and various other engineering programs.

B.S., Civil Engineering, Michigan State University, East Lansing, MI 2005 E.I.T.

Adam C. Bunge, E.I.T.

Adam has been working as a Project Designer at C.E.S. Inc. since 2019. He is responsible for the design of public and private improvements, topographic surveying, inspection and AutoCad drafting. His design responsibilities include roadways, sanitary sewers, water mains, drainage, detention facilities and coordination with permitting/review agencies as necessary.

B.S., Mechanical Engineering, University of Illinois-Champaign/Urbana 2017 2021 E.I.T.

Section 3

Scope of Services Experience

Annual Street Maintenance

C.E.S. Inc. is the sole or main Municipal Engineering firm for 11 communities, with lineage back to 1986. Some of these communities have typical annual Roadway budgets of \$500,000 to \$2,000,000. As a firm with a significant number of municipal clients, we provide the services DeKalb is interested in on an annual basis, year after year, and have done so since our inception. One of the firms that we bought 20 years ago had been providing municipal engineering (only) since the late 1970s.

We provide design and construction services for these communities annually funded by local funds, road tax funds, MFT funds, various grants and FAU or STU funding. Recent projects have ranged from \$25,000 patching projects to \$5 Million reconstruction projects.

Below please find a sampling of our recent projects.

New Afton Road - DeKalb

Project consisted of design and construction oversight of 1 mile of a new City Road, related to the Facebook development.

9th Street and Brooke Roads - City of Rockford

C.E.S. Inc. is currently designing a \$2.5 Million reconstruction of 6,500 feet of urban local roads.

Salem, Race and Center Streets - Village of Rockton

Rockton invests approximately \$1 Million per year in road work via a 1% sales tax road fund. C.E.S. Inc. is currently designing a reconstruction of \$1.5 Million of three local roads in the middle of old town Rockton.

Village of Cherry Valley

Cherry Valley invests approximately \$500,000 per year on road work via Mall sales tax revenue. Two years ago, construction completed on the rebuilding of two blocks of downtown including "streetscape" features. C.E.S. Inc. designed this project and provided construction management. C.E.S. Inc. also designed the reconstruction of Harrison Avenue at the Mall entrance. This is an ongoing \$1 Million project.

City of Belvidere

Belvidere has an annual budget of \$500,000 to \$1 Million through general funds and a utility tax. C.E.S. Inc. currently is in the P.E. 1 phase for their Irene Road relocation at Route 20 for truck rerouting and a MAJOR development on the southwest side of Belvidere.

City of Genoa

Genoa recently issued \$2.5 Million of bonds for a street and brought C.E.S. on as their new Municipal Engineers to design and manage the package. C.E.S. Inc. has designed all of the roads within this program and 75% of them have been successfully built to date. Construction also just completed on a \$750,000 reconstruction of Hill Street utilizing STU and MFT funds.

Village of New Milford

The Village of New Milford has an annual street/seal coat program of \$75,000.

Village of Creston

The Village of Creston has a small seal coat program of \$50,000 every other year.

Various Communities

C.E.S. Inc. has provided design for hundreds of miles of new urban roadways as part of Subdivision developments across a 13 county area.

Water Supply/Distribution, Maintenance & Expansions

C.E.S. Inc. has been involved in our 11 communities replacing older water mains, extending existing water mains, designing wells and water towers in addition to providing planning and construction oversight. Several of our communities have annual valve and hydrant replacement programs that we design and manage as well. We have been providing design, permitting and construction management of water projects in our communities since our inception.

Below please find a sampling of our recent projects.

Village of Rockton

C.E.S. Inc. successfully completed the design and oversight of a \$5.5 Million water main replacement project including a new water tower, via the IEPA Revolving Loan fund. 80% of this project was thru "old town" and required working around and thru older streets and every utility known to man.

C.E.S. Inc. also successfully completed the design of the replacement of 50 year old water mains on Salem Street.

The Village of Rockton also has an annual valve and hydrant replacement program that C.E.S. Inc. designs and manages.

Village of Cherry Valley

C.E.S. Inc. is designing an "Eastern Water Loop" in old town to close a long planned loop that will significantly increase water quality and safety throughout an entire section of Cherry Valley.

C.E.S. Inc. designed and managed the construction of CV Well #5 a few years ago and is now in the preliminary stages of a new well to be placed downtown.

City of Harvard

C.E.S. Inc. successfully completed the design and oversight of the Harvard Industrial Subdivision which including \$550,000 of water mains and appurtenances. The design and the infrastructure was partially funded by the City and the State of Illinois.

City of Belvidere

C.E.S. Inc. is currently in Preliminary Engineering for the 5th and Allen Street Reconstruction project which includes about \$300,000 of water main replacement and modernization.

We also successfully completed the Columbia Road reconstruction project which included \$250,000 in water main and service replacement.

City of Sycamore

C.E.S. Inc. successfully completed the water system design for the Old Mill South development project for a private client wherein every square foot of ground was spoken for. The water component of the 48 unit townhome development had a cost of \$225,000.

Intersection Reconstructions

C.E.S. Inc. assists each of our communities (and our private clients) with intersection projects including signalization and channelization. We also have very successful partnerships with two national Traffic Engineering firms for projects that are larger than C.E.S. is comfortable handling. These partnerships work well as they allow the field and design work to be done by a local quality firm while the computational work is done anywhere.

Below please find a sampling of our recent projects.

Lawrenceville and Poplar Grove Roads - B.C.H.D. & City of Belvidere

C.E.S. Inc. successfully completed the design and management of this non signalized, complete reconstruction which included channelization and widening.

Armer Drive at Perryville Rd - Village of Cherry Valley and Winnebago County

We successfully completed the design and management of this new and signalized intersection for access to a new school.

Mount Hunger & Route 23 - City of Sycamore & IDOT

C.E.S. Inc. designed the upgrading of this intersection including new signals, revamped islands, channelization and crosswalks to accommodate two new developments for which we are also the Engineer. We were also the original designers of the upgraded intersection almost 20 years ago.

Cherryvale North & Pawlisch Drive - Village of Cherry Valley

We designed and managed the complete reconstruction of the intersection including signal modernization.

Rockton Road & Quail Trail - Village of Rockton

C.E.S. Inc. successfully completed the design and management of this intersection reconstruction including new turn lanes for underutilized and vacant commercial lots.

Van Epps at Business 20 - City of Belvidere & IDOT

C.E.S. Inc. is in the planning stages of this project at the western edge of Belvidere which will add a fourth signalized leg to a prior 3 leg intersection to accommodate a large planned development for which we are also the Engineer. The difficulty of this project is amplified by the fact that the 3 leg intersection never even considered the addition of a 4th leg, even though it seems obvious now. We are working closely with IDOT because this section of the highway is in their 5 year plans for widening and reconstruction.

Multi-Shared Use Paths

C.E.S. Inc. has long been a provider of design and management services for Multi-Use Paths. Our prior work has included grant writing and grant coordination along with both preliminary and final designs and construction management.

Below please find a sampling of our recent projects.

Prairie Springs Rec Path - Village of Malta

C.E.S. Inc. designed and managed the 4,900 lineal foot recreational path around a large lake in Malta.

ITEP Multi-Use Path - Village of Rockton

We completed the design and construction management of the 6,500 lineal foot recreational path along Rockton Road including urban and commercial frontage. The grant for this ITEP path was awarded to Rockton via a grant application written and managed by C.E.S. Inc.

Baumann Park Rec Path - Village of Cherry Valley

C.E.S. Inc. successfully completed the design and construction oversight of the reconstruction and ADA upgrading of this 8,000 lineal foot recreational path (which we first designed 25 years ago).

Swanson Park Rec Path - Village of Cherry Valley

We recently completed the design and oversight of the reconstruction of this 5,200 lineal foot recreational path (which we originally designed 20+ years ago).

South Piscasaw Creek Connection Rec Path - Belvidere, Boone County & B.C.C.D.

C.E.S. Inc. recently submitted the design of this new 6,500 lineal foot recreational path along City streets, across an IDOT highway, and thru an ag field as a joint project by the City of Belvidere, Boone County and the Conservation District.

ITEP Old River Road Multi-Use Path - Village of Rockton

C.E.S. Inc's grant application was successful and the Village was awarded \$800,000 for this project. Preliminary design is underway. This project connects a middle school to athletic fields and downtown, following a county highway and railroad tracks, and crossing IDOT highways.

Section 4

Engineering Service Model

How services are delivered is a critical factor in whether a consultant – and thus the project - will ultimately be successful and effective. Communication between the City and consultant is of utmost importance and will entail frequent meetings, telephone conferences and ongoing and evolving email threads to ensure that all progress and decisions are known and understood by all involved. Since we are a locally owned, operated and staffed company, we are able to respond quickly and accurately to the needs of the City and address any changes, updates, or new criteria virtually immediately. Throughout all phases of the project, we will deliver weekly status reports and have weekly status reviews that evaluate progress, as well as identify risks and issues.

Kevin prides himself on having built a firm that is willing to shred prior work if a better way, method, or design comes to light. If we're doing a 50% review and new information shows that a better and more cost effective design is available, we'll quickly back up, incorporate the new, and move forward again. Pride does NOT get in the way of producing the best possible project for our client. It is all too apparent today that many firms are having the CAD staff "design" the project or letting the software handle decisions that it shouldn't be. We will always have experienced eyes and hands doing the design work.

In a kickoff meeting that we organize for every project, we'll discuss – at a minimum - the following: Project Background, Goals, and History; Roles and Responsibilities; Priorities; Property and Infrastructure/Utility Owners; Review Agencies and Required Approvals; Communication Channels; Success Criteria; Budgetary Constraints; Funding Sources; Target Timeframes; Identify 25/50/90/100 Review Benchmarks; Predetermined Design Parameters; and Review of the C.E.S. Master Project Planning Checklist.

Success begins with building a team of experts who understand your project vision. You need to know there are clear, mutually understood project standards, as well as measurable and definable data upon which to demonstrate progress. You also need the flexibility to evolve requirements as the project progresses — and a partner with the adaptability and flexibility to quickly adjust course. From project conception to final hand-off, the staff at C.E.S. Inc. addresses those needs as well as valuing your success and protecting your budget as our own. Our flexibility and willingness to bend and change and grow and consider options is a hallmark of C.E.S. Inc.

We'll keep the City engaged in all aspects of project planning, design, construction management, and final acceptance, keeping you apprised of progress and eliciting your feedback throughout the process. The main point of contact for the City of DeKalb will be Kevin C. Bunge, P.E., owner, founder, and President of C.E.S. Inc.

Kevin's commitment to the area is total – he lives within 15 minutes of downtown DeKalb and is thus readily available at any and all hours for meetings, field reviews, emergency services, etc. Kevin is deeply vested in the community through his many local positions such as past DeKalb County Board Member, Board Member of Habitat for Humanity of DeKalb County, Member of the DeKalb County Stormwater Management Committee, Member of DeKalb County Community Champions, and Board member of the DeKalb County History Center. Additionally, Kevin's four sons attended local schools and five C.E.S. staff members reside right here in DeKalb County.

Section 5 References

Danny Anderson
City of Belvidere
Sewer\Water\Street Superintendent
(815) 544-9256
danderson@ci.belvidere.il.us

Dan Barber
Village of Rockton
Director of Public Works
(815) 624-7600
barber@rocktonvillage.com

Steve Sumner
City of Rockford
Project Manager of Streets
(779) 348-7645
steven.sumner@rockfordil.gov





QUALIFICATIONS:

PROFESSIONAL ENGINEERING CONSULTING SERVICES

JANUARY 21, 2022





630.466.6700 · www.eeiweb.com



SUBMITTAL LETTEREngineering Enterprises, Inc.

January 21, 2022

Mr. Zachary Gill, PE City Engineer City of DeKalb 1216 Market Street DeKalb, IL 60115

Re: Request for Statement of Qualifications: Professional Engineering Consulting Services

Dear Mr. Gill,

Engineering Enterprises, Inc. (EEI) is pleased to present the enclosed Statement of Qualifications for the above-referenced program. Upon review of our submittal, we are confident you will conclude the following:

EEI has Substantial and Relevant Project Experience – The requested prequalification categories align with EEI's core competencies. EEI has completed several significant projects in each of the requested prequalification categories. We are currently working for several clients in nearby communities including **Burlington, Elburn, Hampshire, Rockford.**

EEI Staff are Highly Qualified – EEI has a long history of excellence in municipal engineering. Part of our success is due to our high level of commitment to provide continuous learning and training opportunities for our staff. We recognize that communication is one of the key elements in a successful project and we constantly train our staff on this.

EEI is Committed to Serving DeKalb – We understand and appreciate the high level of service that is required to serve the business owners and residents of the City. This level of service is in line with our core values, and you have our firm commitment that we will excel in this matter.

Our planned main point of contact will be Tim Holdeman (tholdeman@eeiweb.com; (630) 466-6738) who brings over 30 years of public sector operations and management experience. Tim will provide outstanding client service by being accessible, responsive, and alert to your needs. Our team members will be available upon notice to proceed and will work continuously to ensure that tasks are completed in an efficient and timely manner.

Please do not hesitate to contact us should you have any questions regarding this submittal. We look forward to the opportunity to serve you and the Public Works Department on behalf of the residents of DeKalb.

Respectfully submitted,

ENGINEERING ENTERPRISES, INC.

Bradley P. Sanderson, PE COO / President / Principal-In-Charge

Timothy G. Holdeman
Business Development Director / Client Manager

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Company Overview Project Team Scope of Services

- Transportation
 - Annual Street Maintenance
 - o Intersection Reconstructions
 - Multi/Shared Use Paths
- Water
 - Water Supply / Distribution

References

CONTACT INFORMATION



FIRM	Engineering Enterprises, Inc.		
CONTACT	Timothy G. Holdeman		
POSITION	Business Development Director		
EMAIL	tholdeman@eeiweb.com		
GENERAL : (630) 466-6700		CELL PHONE : (815) 762-8537	FAX: (630) 466-6701
DIRECT: (630) 466-6738			

MAIN OFFICE	52 Wheeler Road, Sugar Grove, IL 60554
BRANCH OFFICE	124 North Water Street, Rockford, IL 61107

EEI, ownership, management and employees have not been involved in litigation or had complaints filed for improper practices with the Illinois Department of Professional Regulations or any other state or federal regulatory authority.



COMPANY OVERVIEW

ngineering Enterprises, Inc. (EEI), founded in 1974, is an award-winning consulting engineering firm providing services to public agencies throughout northern Illinois. Over 50 experienced firm members including licensed professional civil engineers, land surveyors, and support team members provide a full range of services for planning, design, and construction of infrastructure projects, plus grant and funding assistance.

EEI is led by a team of talented individuals:

- Peter G. Wallers, PE, CFM, Chairman
- Jeffrey W. Freeman, PE, CFM, LEED AP, Chief Executive Officer
- Bradley P. Sanderson, PE, Chief Operating Officer / President
- Denise M. Migliorini, Chief Financial Officer / Vice President
- Stephen T. Dennison, PE, Senior Project Manager / Principal
- Julie A. Morrison, PE, Senior Project Manager / Principal
- Michele L. Piotrowski, PE, LEED AP, Senior Project Manager / Principal

As part of our business philosophy, we are committed to quality, service, and value and employ a team approach from project initiation and completion. Each project is assigned a project manager and a team with experience and qualifications that match the needs of the project and client. However, whenever necessary, other specialists are available for additional assistance. Our current staffing levels will ensure a well-qualified project team will be dedicated for the entire duration of your projects.

Our expertise includes water, wastewater, transportation, floodplain and stormwater



management, construction management, land development review, land surveying, GIS and mapping and municipal consulting.

Given the fact that we are a multi-disciplinary firm we have the ability to perform multiple functions in-house thus resulting in potential cost savings and uniformity for your Agency.

PROJECT TEAM

ROLES AND RESPONSIBILITIES



ngineering Enterprises, Inc. (EEI) is proposing a Project Team that is well-qualified and has extensive related local road program, annual street maintenance, intersection reconstructions and multi/shared use path project experience. The Project Team is available upon notice to proceed and will work continuously to ensure that tasks are completed in an efficient and timely manner within the City's schedule.

Transportation Group

Joe Cwynar, PE leads EEI's Transportation Group. He brings over 26 years of experience in the planning, design, and construction administration of a variety of transportation projects. He has successfully managed all phases of transportation projects ranging from Joseph W. Cwynar, PE

Christopher J. Ott, PE
CPII

Ryan M. Sikes, PE,
PTOE

local road programs, intersection reconstructions, as well as multi/shared use paths.

Chris Ott, PE, CPII has over nine years of experience designing local road programs for the Village of Montgomery, Village of North Aurora, Village of Schaumburg, among many others. In addition, he has extensive experience with developing pavement management plans that incorporate various strategies. Chris also has a tremendous amount of construction engineering experience, including on federally funded projects, which brings value to the City on any transportation related project.

Ryan Sikes, PE, PTOE brings over nine years of experience in the planning, design, and construction administration of a variety of transportation projects. He has worked on numerous Phase I and II projects located within the region. He is assisting with the *Lincoln Highway Lane Reconfiguration*.

Water Group

Julie Morrison, PE leads EEI's Municipal Group. She brings over 22 years of experience in the planning, design, and construction administration of a variety of water distribution projects. Her background and experience enable her to efficiently design infrastructure projects and communicate effectively with project stakeholders and residents when necessary.

Steve Dennison, PE leads EEI's Environmental Group. He has over 19 years of experience in the planning, design, and construction administration of variety of water / wastewater projects. He possesses an advanced knowledge of water wells, water treatment, water distribution systems and hydraulics.

Kyle Welte, PE, CPII brings 14 years of experience in the planning, design, and construction on multiple infrastructure projects, including underground utilities, elevated water storage tanks, pumping stations, shared-use paths and local road improvement programs

Water Supply / Distribution





ANNUAL ROAD PROGRAM



SCHAUMBURG STREET IMPROVEMENT AND CONCRETE REPAIR PROGRAM (MULTI-YEAR)

CLIENT: VILLAGE OF SCHAUMBURG

REFERENCE: JAMES VINCOLESE, ENGINEERING INSPECTOR, (847) 923-6647

Project Manager: Julie Morrison, PE

		Street Improvement	Concrete Repair Program	
Year	Project Cost	Resurfacing Miles	Reconstruction Miles	Project Cost
2018	\$ 3,683,000	5.19	1.03	\$ 1,332,000
2019	\$ 3,697,000	5.96	0.62	\$ 1,397,000
2020	\$ 3,050,000	5.89	0.68	\$ 1,005,000
2021	\$3,135,090	4.28	0.78	\$1,585,000 (est.)

Road Program Scope of work:

- Design and construction engineering services
- Preparation of plans, specifications and cost estimates
- Roadway resurfacing and reconstruction
- Evaluation of existing pavement condition and sidewalk for ADA compliance
- Extensive coordination with Village staff and residents
- Construction layout and observation
- Tracking Customer Service Request (CSR) system

Concrete Repair Program Scope of work:

- Phase II and III engineering services
- Village wide concrete removal and replacement
- Extensive coordination with Village staff and residents
- Tracking Customer Service Request (CSR) system



NORTH AURORA ANNUAL ROAD PROGRAM

CLIENT: VILLAGE OF NORTH AURORA

REFERENCE: JOHN LASKOWSKI, PUBLIC WORKS DIRECTOR, (630) 897-8228

DATE (YEAR): 2020 – 2021 Project Manager: Joe Cwynar, PE

Scope of work:

- Design and construction engineering services
- Preparation of plans, specifications and cost estimates
- Project permitting
- Field evaluations of existing pavement condition
- Field evaluations of existing curb & gutter & ADA sidewalk compliance
- Assistance during the bidding process
- Removal and Replacement of:
 - Deteriorated sections of sidewalk and curb and gutter
 - Replacing sidewalk ramps to comply with ADA standards
 - Structure reconstructs and replacements
 - o Proof rolls and undercuts for any base that needed to be remediated

Year

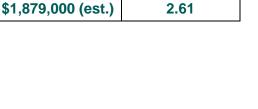
2020

2021

Project Cost

\$ 993.486.04

- New paving, milling, patching, and resurfacing
- Construction management and inspection
- Field Layout
- Daily field documentation, Pay Estimates & Project closeout
- Coordination with Elm/Maple Watermain Improvements



Miles

Resurfacing

1.83



ANNUAL ROAD PROGRAM



MONTGOMERY INFRASTRUCTURE ROAD PROGRAM (MULTI-YEAR)

CLIENT: VILLAGE OF MONTGOMERY

REFERENCE: MARK WOLF, DIRECTOR OF PUBLIC WORKS, (331) 212-9041

Project Manager: Joe Cwynar, PE

Scope of work:

- Design and construction engineering services
- Preparation of plans, specifications and cost estimates
- Use of Motor Fuel Tax (MFT) Funds
- Reconstruction of some roadways
- Reconstruction of all alleys located in the downtown sector of the Village
- · Design of new shared use paths
- Installation of new storm sewers
- Village wide concrete removal and replacement
- Sidewalk ADA compliance
- Project permitting
- Field evaluation of pavement condition
- Coordination with Village staff and utilities

Year	Project Cost	Resurfacing Miles
2016	\$ 1,400,000	4.00
2017	\$ 2,900,000	7.50
2018	\$ 2,600,000	5.55
2019	\$ 2,900,000	8.30
2020	\$ 3,200,000	8.06
2021	\$ 2,688,000	6.53

LISLE ANNUAL STREET REHABILITATION PROGRAM

CLIENT: VILLAGE OF LISLE

REFERENCE: JASON ELIAS, PUBLIC WORKS DIRECTOR, (630) 271-4171

Project Manager: Joe Cwynar, PE

- Phase II engineering services
 - o Use of Motor Fuel Tax (MFT) Funds
 - Preparation of plans, specifications and cost estimates.
 - Roadway resurfacing and reconstruction
 - Structure reconstructs and adjustments
 - o Project Permitting
 - Sidewalk ADA compliance
 - Coordination with DuPage County DOT and IDOT
- Phase III engineering services
 - Hot-mix asphalt surface removal
 - Hot-mix asphalt paving
 - o Pavement patching
 - Combination concrete curb and gutter removal and replacement
 - Sidewalk removal and replacement (conditional and ADA requirements)
 - Pavement markings
 - o Detector loop replacement
 - Epoxy crack injection
 - Deck slab repair

Year	Project Cost	Resurfacing Miles
2016	\$ 1,490,450	3.31
2017	\$ 1,523,374	3.45
2018	\$ 1,567,976	3.64
2019	\$ 1,647,925	4.39
2020	\$ 1,417,659	3.38
2021	\$ 1,302,000 (est.)	2.74



ENGINEERING SERVICE MODEL:

ANNUAL ROAD PROGRAM



ngineering Enterprises, Inc. (EEI) EEI's ideal service delivery model for the City of DeKalb's Annual Street Maintenance Program consists of five primary areas of emphasis as shown in the graphic below.

1) Review Annual Road Program

EEI collaborates with City staff to finalize the list of streets and maintenance activities for the Annual Road Program. We endeavor to understand the City's reasoning for their preferences and provide an objective viewpoint with respect to any potential challenges.

2) Data Collection

EEI obtains, reviews and inventories existing utility, roadway, right-ofway, ownership, soil data, and other information as needed to complete a preliminary plan for each street segment in the program.

Roadway Design Elements:

- Mill & Overlay
- Sidewalk Replacement
- ADA Ramps
- · Curb & Gutter
- Driveway Aprons

Other Design Considerations:

- Drainage Improvements
- · Sidewalk Configurations
- Structure Adjustments
- Landscaping

EEI typically uses maps from Google Earth or local GIS for estimating the quantities needed for bid documents. EEI survey crews create profiles or perform topographic surveys, as needed.

3) Coordination of Geotechnical Testing Services

EEI evaluates the need for geotechnical site data, including pavement cores, for each street segment using existing information. We develop the scope of services for geotechnical data collection and coordinate the activities of the geotechnical contractor. Once the cores and soil borings are complete, EEI determines the proper and most cost-effective rehabilitation technique to correct the issues on each street. EEI will also coordinate the required CCDD testing and completion of the required IEPA LPC-662 and 663 forms.

4) Preparation of Plans and Specifications

EEI generates plans and specifications as needed for bidding and contract documents. EEI prepares the base plans from existing CADD drawings, GIS, aerial maps, and atlases obtained from the City. EEI performs a field investigation to determine the proposed improvements required on each street which includes the limits of sidewalk and curb and gutter removal and replacement, driveway apron replacement, ADA ramp removal and replacement, manhole reconstruction, among other items.

EEI provides any survey required to complete the plans and contract documents. A plan sheet will be provided for each street. Plan sets will include the following:



ENGINEERING SERVICE MODEL:

ANNUAL ROAD PROGRAM

- Title/Cover Sheet
- General Notes
- Summary of Quantities
- Typical Sections

- Plan-Profile Sheets
- Maintenance of Traffic
- Cross Sections (as required)
- Detail Sheets

5) Construction Inspection

Meetings - EEI coordinates and leads a pre-construction meeting to 1) establish a clear line of communication with the contractor, 2) clearly state City objectives, goals, and expectations, 3) highlight any particular project challenges, and 4) outline the scope of work for the project.

EEI coordinates and leads weekly status meetings with the contractor and other stakeholders to discuss progress and/or potential challenges throughout the project. EEI generates and distributes meeting minutes to summarize the understanding of all topics of each meeting.

Construction Management - EEI provides an experienced full time Resident Engineer (RE) to manage construction inspection and documentation. The RE ensures that the project is built according to plan documents and to City and IDOT standards. The RE will provide IDOT level of documentation, including daily diary entries, digital photographs, and field books, and will provide oversight of other inspectors as well as material inspection/testing in adhering to IDOT standards and requirements. EEI will also take preconstruction videos to document the existing conditions to help protect the City's interests and any future disputes during construction.

Construction Quantities - The Resident Engineer maintains continuous tight control of the construction budget by maintaining running total of construction quantities. IDOT level of documentation in field books will be utilized to record measurements and track cost changes or overages in completed work. This level of documentation facilitates quick and accurate generation of pay estimates and preparation for approval of extra work.

Public Relations - Customer satisfaction is a primary indication of a project's success, and EEI is the primary point of contact in the field with residents and businesses. Both the Resident Engineer and Project Manager are available to speak directly with customers and address their concerns. The Resident Engineer maintains continuous contact with Public Works personnel and contacts residents directly. Customer requests and corrective actions are documented and communicated to the City. The Project Manager conducts follow-ups as necessary and documents the outcome for the City's records. Should any inquiry involve additional apron removal and replacement, the Resident Engineer will document the request as necessary and submit to the City for consideration.



INTERSECTION RECONSTRUCTIONS



CHICAGO STREET FROM CENTER STREET TO LIBERTY STREET (STP)

CLIENT: CITY OF ELGIN

REFERENCE: MIKE PUBENTZ, PE, PUBLIC WORKS

DIRECTOR, (847) 931-5968

PROJECT COST: \$8,020,730 (Federal Funds)

DATE (YEAR): 2016 - 2020

Project Manager: Julie Morrison, PE

- Phase I, II and III engineering services
- Federally funded reconstruction of approximately 3,500 feet of roadway
- Design elements
 - o PCC pavement
 - o Concrete curb and gutter
 - o PCC sidewalk
 - 6,300 feet of storm sewer up to 54inches in diameter
 - o Water main replacement
 - Sanitary sewer decombining
 - Sanitary sewer pipe and manhole lining
 - o Ornamental roadway lighting
 - o Traffic signal modifications
- Construction engineering services
 - Weekly progress meetings
 - Shop drawing review
 - Staking
 - o Inspection
 - o ICORS Documentation
 - o Quality assurance
 - Pay Estimates
 - Contract management
 - o Compliance with NPDES permit
 - Resident coordination







INTERSECTION RECONSTRUCTIONS



BLISS ROAD AND IL ROUTE 47 INTERSECTION IMPROVEMENTS (STP)

CLIENT: VILLAGE OF SUGAR GROVE

REFERENCE: ANTHONY SPECIALE, PE, DIR OF

PUBLIC WORKS, (630) 391-7230

PROJECT COST: \$1,540,000 DATE (YEAR): 2014-2020

Project Manager: Joe Cwynar, PE Resident Engineer: Chris Ott, PE, CPII

- Phase I, II and III engineering services
- Federally funded intersection improvements
- Design elements
 - HMA pavement reconstruction and widening
 - o PCC sidewalk
 - Traffic signal and interconnect modifications
 - Storm sewer installation
 - o Utility adjustments
 - o HMA shared use path
- Construction engineering services
 - Weekly progress meetings
 - o Shop drawing review
 - o Inspection
 - o ICORS Documentation
 - Coordination with IDOT and Kane County
 - Resident coordination









INTERSECTION RECONSTRUCTIONS



GALENA ROAD AND KENNEDY ROAD INTERSECTION IMPROVEMENTS

CLIENT: KENDALL COUNTY HIGHWAY DEPARTMENT

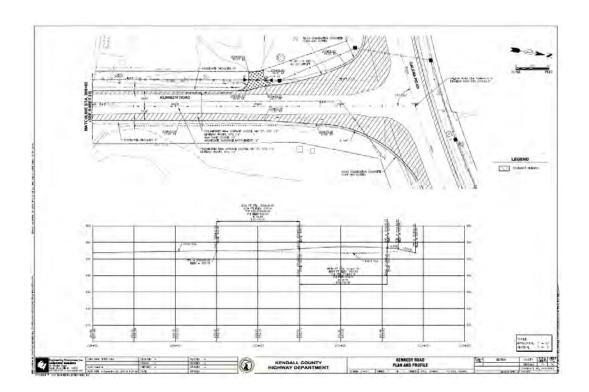
REFERENCE: FRAN KLAAS, COUNTY ENGINEER, (630) 553-7616

PROJECT COST: \$1,805,875 (Local Funds)

DATE (YEAR): 2019-2020

Project Manager: Joe Cwynar, PE

- Phase II engineering services
- New traffic signals with flashing yellow arrow design
- Traffic monitoring system
- Pavement design consisted of:
 - Widening
 - New turn lanes
 - o Intersection radii improvements
 - Superelevation correction
 - Drainage design
 - Maintenance of traffic and permitting
- Coordination with Kendall County Highway Department, Kendall County and utilities
- Survey
- Geotechnical
- Stormwater management and floodplain permitting
- Plats and legal descriptions for Right-of-Way acquisition





ENGINEERING SERVICE MODEL:

INTERSECTION RECONSTRUCTION



ngineering Enterprises, Inc.(EEI) service model for the City of DeKalb's intersection reconstruction projects consists of three phases:

- Phase I Preliminary Engineering
- Phase II Design Engineering, Bidding and Contracting
- Phase III Construction Engineering

In some instances, Phases I and II may be combined.

Phase I Engineering

EEI delivers outstanding professional engineering services as necessary to define the best possible alternative for the improvement. To accomplish this EEI will work closely with City of DeKalb staff and the City Council to:

- Define the "Purpose and Need" for the Improvement
- Conduct Studies and Analyses (intersection design studies, HCS modeling, Synchro modeling, etc.)
- Develop a Set of Reasonable Alternatives
- Identify the Preferred Alternative
- Prepare and Submit Phase I Documents and Plans for Approval



Intersection of Lincoln Highway and Fourth Street

During Phase I, EEI will work closely with the City to engage with all key stakeholders. Our experience indicates that establishing expectations for the project early in the process is imperative for public approval of the project.

Phase II Engineering

EEI prepares detailed plans, specifications and cost estimates required to:

- 1) facilitate accurate bidding of the project,
- 2) keep the project within the budget by reducing change orders, and
- 3) ensure timely completion of construction.

EEI will work closely with City staff and the required governmental agencies to address any design challenges encountered during Phase II. This will include developing innovative approaches, soliciting City input, and implementing the agreed upon approach.



ENGINEERING SERVICE MODEL:

INTERSECTION RECONSTRUCTION



EEI's typical Intersection Improvement approach is shown on the flow chart below.

Traffic Counts Signalized Public/Stakeholder **Prepare Contract** Geometric/Traffic Analysis Phase I Engineering Phase II Engineering Data Collection Coordination Intersection w/ Plans and Crash Data Channelization vs. **Specifications** Develop Design for **DSATS Projections** Roundabout (IDS) Preferred Option Pavement Design **Topographic Survey** Crash Analysis **Utility Coordination Cost Estimate Utility Atlases ROW Analysis** Submit for Finalize Permitting **Existing Plans Cost Analysis** Environmental/ Utility/Stakeholder Cultural Clearances Geotechnical Data QC/QA Coordination **Develop Project** Special Waste/CCDD **Propose Options to ROW Acquisition (if** Schedule Permitting City needed) QC/QA QC/QA

Phase III - Construction Engineering

EEI delivers excellent construction engineering services during intersection reconstruction. Below are some of the keys for a successful construction phase.

Communication – EEI establishes clear lines of communication with the contractor and conveys the City's goals and expectations.

Challenges – Unique challenges associated with construction are discussed and innovative approaches are developed with the contractor.

Shop Drawing Review – EEI will perform a review of all the Contractor's shop drawings to ensure that the products that the contractor plans to install on the project meets the project specifications.

Construction Management – EEI provides an experienced full-time Resident Engineer to manage construction inspection and documentation.

Documentation – including daily diary entries, preconstruction videos, digital photographs, and field books.

Material Testing - EEI, in conjunction with the geotechnical engineer, will perform material testing in accordance with IDOT QA/QC procedures.

Traffic Control – EEI ensures contractor adheres to all traffic control requirements.

Lay-Outs - EEI can provide all survey required for layout of construction work.

Construction Quantities – EEI's RE maintains continuous tight control of the construction budget by maintaining running total of construction quantities.

Public Relations – Customer satisfaction is a primary indication of a project's success, and EEI will be the primary point of contact in the field with residents and businesses.

Weekly Status Meetings – with the contractor, City, and other stakeholders to discuss progress and/or potential challenges throughout the project.



MULTI / SHARED USE PATH



KENNEDY ROAD BIKE PATH FROM ILLINOIS ROUTE 47 TO MILL ROAD (ITEP)

CLIENT: UNITED CITY OF YORKVILLE

REFERENCE: ERIC DHUSE, PUBLIC WORKS DIRECTOR, (630) 553-4370

PROJECT COST: \$800,000 (Federal Funds)

DATE (YEAR): 2014-2017

Project Manager: Brad Sanderson, PE

Scope of work:

- Phase I, II and III engineering services
- Federally Funded
- **3.1 miles** of **10-foot** wide HMA asphalt bike path through residential and rural areas
- Project Development Report (PDR)
- Land acquisition
- Wetlands analysis and tree survey
- Topographic survey



ANDERSON ROAD AND KESLINGER ROAD IMPROVEMENTS

CLIENT: VILLAGE OF ELBURN

REFERENCE: JOHN NEVENHOVEN, VILLAGE ADMINISTRATOR, (630) 387-8726

PROJECT COST: \$1,095,900 DATE (YEAR): 2015-2020

Project Manager: Julie Morrison, PE

- Phase I, II and III engineering services
- Federally Funded
- Installation of exclusive right-turn lane
- Extension of Anderson Road for approximately 600 feet south of the intersection
- Resurfacing
- Traffic signal modification
- Sidewalk and bike path installation
- Drainage improvement
- Grading and landscaping



ENGINEERING SERVICE MODEL:

MULTI / SHARED USE PATH



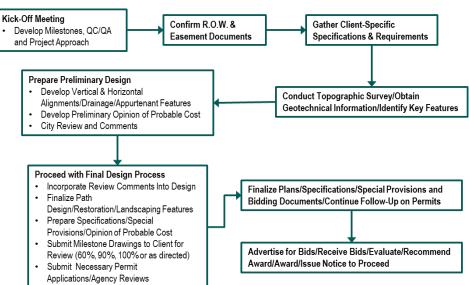
ngineering Enterprises, Inc. (EEI) develops a specific approach for each project undertaken. A general service model for the Multi / Shared Use projects, which is a starting point for these projects, is described below.

Phase I / II Engineering

EEI works with the City to define the project requirements and develop the necessary QA/QC Plan to ensure that all design criteria, documents, and studies are consistent with project requirements.

EEI coordinates with regulatory agencies, properties owners, utilities, and other stakeholders throughout the project.

EEI performs topographic surveys and prepares required base maps; conducts field surveys to verify the topographic survey and obtain additional information relative to site conditions, including photographic inventories.



EEI applies engineering expertise in the design the preliminary alignment and plan and profile; provides detailed construction cost estimates; and identifies any permit requirements.

EEI initiates and continues coordination with regulatory agencies and utilities, making adjustments to the preliminary plan as appropriate.

EEI prepares the necessary permit applications for the project and Preliminary (60%), Pre-Final (90%) Plans, and Final (100%).

EEI prepares Final Engineer's Estimate prior to letting and Pre-Final (95%) and Final (100%) Specifications to be reviewed by the City and regulatory agencies and included in the Bidding Documents.



ENGINEERING SERVICE MODEL:

MULTI / SHARED USE PATH



Phase III Engineering

Communication – EEI communicates with the City, contractor, residents, businesses, and other entities as necessary to minimize disruptions and ensure coordination with adjacent residents and commercial establishments. Methods that we have successfully employed on recent projects include conducting project public meetings, weekly contractor meetings, weekly updates provided via project website or other means, detailed project fliers (handouts) and direct individual communication.

Utility Coordination – EEI organizes a pre-construction coordination meeting with the utilities that are within the project limits. Prior to the meeting, we request the contractor to process a J.U.L.I.E. locate request of all existing utilities within the project limits. EEI attempts to minimize potential conflicts during construction by reviewing grades and locations with the contractor in advance of installation. Our goal is to be several steps ahead of the contractor.

Maintaining Traffic – EEI ensures proper signage is installed at the beginning, end, and at all roadway crossings to prevent any pedestrians or bicyclists from entering the work zone. EEI ensures the contractor installs advance signage prior to work commencing. EEI provides weekly updates to the various parties involved with the project, which may include the police and fire departments.

Construction Documentation – EEI documents the contractor's daily activities and quantities on a routine basis. Accurate documentation is required for contractor payment, project acceptance and close-out. In addition, the following services are provided as required by the City:

- Construction Administration Consisting of Preparation of Pay Estimates, Change Orders and Other Project Related Documentation, Reviewing of Shop Drawings and Submittals, Monitoring and Reviewing of Construction Schedules, Coordination Between Various Local Agencies and Residents, Attendance to and Recording of All Construction Conferences
- Inspection Services Consisting of Resident Engineering, Construction Inspection and Reporting as to Acceptability of Work and Conformance to the Contract Documents, Material Testing, Performance of Regular Traffic Control Inspections, and Provision and Verification of Layout/Staking
- Project Documentation All Project Documentation Fully Compliant with IDOT Requirements
- Project Closeout/Record Drawings Prepare Punch Lists and Ensure Project Completion and Acceptance with the City, Prepare Closeout Documentation and Record Drawings

WATER SUPPLY / DISTRIBUTION



CLAYTON CIRCLE AND MANOR CIRCLE WATER MAIN DESIGN

CLIENT: VILLAGE OF SCHAUMBURG

REFERENCE: MICHAEL HALL, DIR OF ENG AND PUBLIC WORKS, (847) 895-4500

PROJECT COST: \$1,830,000 DATE (YEAR): 2019 – 2021

Project Manager: Julie Morrison, PE

Scope of work:

- Design and construction engineering services
- Replacement of 6,100 feet of 8-inch water main
- Existing residential subdivision with numerous multi-family units
- 236 new water services will be installed
- Extensive rear-yard and side-yard water main currently servicing the residents
- Permitting with IEPA
- Additional coordination with multiple utilities
- Public outreach and coordination for affected residents

BOULDER HILL WATER MAIN REPLACEMENT

CLIENT: VILLAGE OF MONTGOMERY

REFERENCE: MARK WOLF, DIRECTOR OF PUBLIC WORKS, (331) 212-9041

PROJECT COST: \$6,600,000 DATE (YEAR): 2012 – 2015

Project Manager: Julie Morrison, PE

Scope of work:

- Design and construction engineering services
- Installation of 23,000 feet of 6-inch and 8-inch water main
 - o Directional drilling of HDPE pipe
- Multi-jurisdictional coordination

- Public outreach for affected residents
 - o Project website
 - Public open house and Informational flyers
- IEPA Low-Interest Loan Fund

COUNTRYSIDE STREET AND WATER MAIN IMPROVEMENTS

CLIENT: UNITED CITY OF YORKVILLE

REFERENCE: ERIC DHUSE, PUBLIC WORKS DIRECTOR, (630) 553-4370

PROJECT COST: \$5,400,000 DATE (YEAR): 2016 – 2017

Project Manager: Julie Morrison, PE

- Design and construction engineering services
- Replacement of 16,000 feet of 8-inch and 12-inch water main within an existing residential subdivision
- 2.4 miles of full roadway reconstruction
- Public outreach for affected residents



WATER SUPPLY / DISTRIBUTION



NEW DEEP WELL CONSTRUCTION PROJECTS

CLIENT: MUNICIPALITIES HAMPSHIRE (HA), HINCKLEY (HI), MINOOKA (MI), MONTGOMERY

(MO), SUGAR GROVE (SG) AND YORKVILLE (YO), ILLINOIS

REFERENCE: HA – MARK MONTGOMERY, WATER/WASTEWATER SUPERVISOR, (847) 683-2181

HI – NANCY NELSON, VILLAGE PRESIDENT, (815) 286-3836

MI – RYAN ANDERSON, SUPERINTENDENT OF PUBLIC WORKS, (815) 467-8868

MO - JEFF ZOEPHEL, VILLAGE ADMINISTRATOR, (331) 212-9002

SG – ANTHONY SPECIALE, DIRECTOR OF PUBLIC WORKS (630) 391-7235

YO – ERIC DHUSE, DIRECTOR OF PUBLIC WORKS, (630) 553-4370

New Construction: Hampshire Wells 9, 10, 12, and 13; Hinckley Well 5; Minooka Wells 8 and 9; Montgomery Wells

14 and 15; Sugar Grove Wells 9, 10, and 11; Yorkville Wells 7, 8, and 9

WELL REHABILITATION PROJECTS

CLIENT: MUNICIPALITIES BATAVIA (BA), ELBURN (EL), ELK GROVE VILLAGE (EGV) HAMPSHIRE (HA), HINCKLEY (HI), LIBERTYVILLE (LV), MONTGOMERY (MO), PINGREE

GROVE (PG), SUGAR GROVE (SG) AND YORKVILLE (YO), ILLINOIS

REFERENCE: BA - GARY HOLM, DIRECTOR OF PUBLIC WORKS, (630) 454-2300

EL – JOHN NEVENHOVEN, VILLAGE ADMINISTRATOR, (630) 387-8751

EGV – BRYAN GRIPPO, SUPERINTENDENT OF UTILITIES, (847) 734-8048

HA – MARK MONTGOMERY, WATER/WASTEWATER SUPERVISOR, (847) 683-2181

HI - NANCY NELSON, VILLAGE PRESIDENT, (815) 286-3836

LV - MARTY WITTROCK, STREETS AND UTILITIES SUPERINTENDENT, (847) 362-3434

MO – JEFF ZOEPHEL, VILLAGE ADMINISTRATOR, (331) 212-9002

PG - PAT DOHERTY, PUBLIC WORKS DIRECTOR, (847) 464-5533

YO - ERIC DHUSE, DIRECTOR OF PUBLIC WORKS, (630) 553-4370

Rehabilitation: Batavia Wells 6, 7, and 8; Elburn Well 3; Elk Grove Village Wells 2 and 8; Hampshire Well 9; Hinckley Well 3; Libertyville Wells 11 and 12; Montgomery Wells 3, 4, 8, 10, 13, 14 and 15; Pingree Grove Wells 1 and 2; Yorkville Well 8

IEPA WATER POLLUTION CONTROL (WPC) & PUBLIC WATER SUPPLY (PWS) LOAN PROGRAM PROJECTS

CLIENT: MUNICIPALITIES: BATAVIA (BA), ELBURN (EL), HAMPSHIRE (HA), HINCKLEY (HI), MAPLE PARK (MP), MONTGOMERY (MO), ST. CHARLES (SR), SUGAR GROVE (SG) AND YORKVILLE (YO), ILLINOIS

REFERENCE: BA – GARY HOLM, P.E., DIRECTOR OF PUBLIC WORKS, (630) 454-2300

EL – JOHN NEVENHOVEN, VILLAGE ADMINISTRATOR, (630) 387-8751

HA – JEFF MAGNUSSEN, VILLAGE PRESIDENT, (847) 683-2181 HI – NANCY NELSON, VILLAGE PRESIDENT, (815) 286-3836 MP – KATHY CURTIS, VILLAGE PRESIDENT, (815) 209-7666 MO – JEFF ZOEPHEL, VILLAGE ADMINISTRATOR, (331) 212-9002

SR - TIM WILSON, ENVIRONMENTAL SERVICES MANAGER, (630) 377-4918

SG – TONY SPECIALE, DIRECTOR OF PUBLIC WORKS, (630) 466-7508 YO – ERIC DHUSE, DIRECTOR OF PUBLIC WORKS, (630) 553-4370

Total Loans: \$50,300,000

Year Completed: BA (2021); EL (2014); HA (2002); HI (2010 & 2013); MP (2002); MO (2001, 2011 & 2013); SR (2010 & 2014); SG (2002 & 2003); YO (2005)



LEAD SERVICE LINE REPLACEMENT



LEAD SERVICE LINE REPLACEMENT - MARVIRAY MANOR

CLIENT: VILLAGE OF MONTGOMERY

REFERENCE: MARK WOLF, DIRECTOR OF PUBLIC WORKS,

(331) 212-9041

PROJECT COST: \$1,011,000 DATE (YEAR): 2017-2020

Project Manager: Julie Morrison, P.E.

Scope of work:

Design and construction engineering services

- Installation of 106 new copper and HDPE water services from the main to the meter located inside the residence
- Extensive coordination with residents to schedule and inspect 114 homes
 - Type of service
 - Meter location
 - Basement or slab foundation
 - Overall inventory of existing conditions (flooring, walls, exterior landscaping, etc.)
- Asbestos testing completed with abatement currently in the planning stages
- Public outreach for affected residents
 - Public open house
 - Informational flyers
 - Temporary Construction Easement Waivers
- Kane County Division of Transportation permitting
- IEPA Project Plan preparation and approval \$1,000,0000 Low-Interest-Loan Fund secured with 100% principal forgiveness

APWA-FVB
Project of the Year
Award
Award
Award
Award



2021 LEAD SERVICE LINE REPLACEMENT PROGRAM

CLIENT: CITY OF ELGIN

REFERENCE: ERIC WEISS, WATER DIRECTOR, (847) 931-6159

PROJECT COST: \$4,000,000

DATE (YEAR): 2020-2023 (ON-GOING) Project Manager: Julie Morrison, P.E.

- Design engineering services
- Replacement of 400 lead water services with copper from the b-box to the meter located inside the residence
- · Public outreach for affected residents
 - o Public open house
 - Informational flyers
 - Temporary Construction Easement Waivers
- IEPA Project Plan preparation and approval
 \$4,000,0000 Low-Interest-Loan Fund secured with 100% principal forgiveness
- Construction engineering services to begin in Spring 2022



LEAD SERVICE LINE REPLACEMENT



LEAD SERVICE LINE REPLACEMENT

CLIENT: CITY OF BATAVIA

REFERENCE: JEREMY BARKEI, SUPERINTENDENT – WATER/SEWER UTILITIES, (630)

454-2450

PROJECT COST: \$4,000,000

DATE (YEAR): 2020-2023 (ON-GOING) Project Manager: Steve Dennison, P.E.

Scope of work:

• IEPA Project Plan preparation and approval

Design engineering services

- Replacement of approximately 300 lead water services with copper mix of private-side, public-side, and full-length replacements; includes some galvanized service replacements that are/were downstream of lead
- Inventorying program with residents (80%+ successful response rate) and survey coordination with City staff
- SRF Loan Application preparation approval pending for 100% principal forgiveness on \$4,000,00 in costs, including construction and engineering
- Construction engineering services anticipated to begin in Spring 2022



ENGINEERING SERVICE MODEL:

WATER SUPPLY / DISTRIBUTION



ngineering Enterprises, Inc. (EEI) provides outstanding services in Water Supply / Distribution Engineering to meet our client's needs. The service delivery model described below for Water Main and Lead Service Line Replacement projects are examples of the detailed delivery model used by EEI on all our client-sponsored projects.

Coordination with Stakeholders – EEI assists in communicating with residents, businesses, schools, etc. that may be affected by construction early in the project. Permitting Requirements – EEI coordinates all permit submittals.

Minimizing Inconvenience to Residents – EEI includes provisions in contract documents that help minimize disruptions:

 Requirements for advanced notification to residents regarding construction activities and restrictions

- Maintenance of vehicle and pedestrian traffic
- Construction phasing
- Dust control/street sweeping schedule and/or triggers
- Establishment of working hours for weekdays weekends, holidays, and special events

Preserving Mature Trees -

EEI pursues design solutions that preserve the natural aesthetics of the project site.

Viable Methods of Installation – EEI assesses all possible methods for water main installation.

Data Collection and Sharing and GIS -

EEI's Professional Land Surveyors use the latest Trimble GPS and Robotic Total Station device to capture location data.

Private Utility Coordination – EEI coordinates with utility companies to identify conflicts and begin utility relocation, if necessary, to avoid project delays.

Pavement Design – EEI typically requests several pavement cores to evaluate the

existing thickness of the asphalt and aggregate base.



Relations/Communications -

EEI's Resident Engineer and Project Manager communicate directly with customers to address their concerns. We understand the importance of effective communication during a project.

Construction Meetings – EEI coordinates and leads a pre-construction meeting to establish clear lines of communication and City's expectations. EEI also leads weekly status meetings with the contractor and other stakeholders to discuss issues.



ENGINEERING SERVICE MODEL:

WATER SUPPLY / DISTRIBUTION

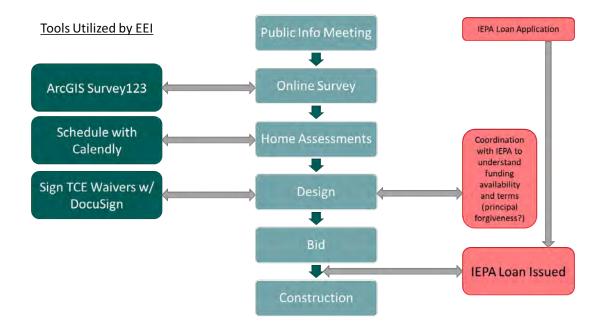


Construction Quantities – EEI's Resident Engineer maintains tight control of the construction budget by maintaining running total of construction quantities. If needed, EEI coordinates with the City to develop corrective actions to resolve the problem.

Construction Management – EEI provides an experienced full-time Resident Engineer to manage construction inspection and documentation. The Resident Engineer ensures that the project is built according to the plans and provides IDOT-level of documentation, including pre-construction videos, daily diary entries, digital photographs, and field books.

Project Completion – EEI provides the necessary close out documentation to the City for final acceptance, including as-built record drawings in both hard copy and electronic file formats. Project records and documentation will be provided to the City as requested in organized job boxes.

GENERALIZED LSLR PROCESS





REFERENCES



ngineering Enterprises, Inc. (EEI) offers the following references for whom we have or currently are providing similar services.

Client Village of Montgomery

Reference: Mark Wolf, *Director of Public Works;* (331) 212-9041 **Address:** 200 North River Street, Montgomery, IL 60538

Client United City of Yorkville

Reference: Eric Dhuse, Public Works Director, (630) 553-4370

Address: 610 Tower Lane, Yorkville, IL 60560

Client City of Elgin

Reference: Eric Weiss, P.E. Water Director, (847) 931-6159

Address: 150 Dexter Court, Elgin, IL 60123

Client City of Batavia

Reference: Jeremy Barkei, Superintendent – Water/Sewer Utilities; (630) 454-2450

Address: 200 North Raddant Road, Batavia, IL 60510

Client Village of North Aurora

Reference: John Laskowski, Public Works Director, (630) 897-8228

Address: 25 East State Street, North Aurora, IL 60542



REQUEST FOR QUALIFICATIONS

Prequalification for Engineering Services



Prepared for:

City of DeKalb Zachary Gill, PE City Engineer 1216 Market Street DeKalb, IL 60115



FEHR GRAHAM

ENGINEERING & ENVIRONMENTAL

Jason Stoll, PE Principal/Branch Manager 515 Lincoln Highway Rochelle, IL 61068 815.562.9087 815.562.4233 (fax) jstoll@fehrgraham.com













Firm Introduction



History

Fehr Graham was founded in September 1973 by professional engineers Allen Fehr and Joseph Graham. The firm was established by the merger of these two individuals' practices established in 1965 and 1962, respectively. Today, we proudly serve our valued clients from 11 office locations: Aurora, Champaign, Freeport, Rockford, Rochelle and Springfield, Illinois; Cedar Rapids, Manchester and West Union, Iowa; and Monroe and Sheboygan, Wisconsin.

Professional Staff

Our staff of nearly 200 is comprised of a wide range of experts, including professional engineers, landscape architects, professional geologists, environmental scientists, safety professionals, engineers-in-training, professional land surveyors, community planners and development specialists, engineering and environmental technicians, field inspectors, grant writers, and support technicians and assistants. Our staff has hands-on experience and applicable registrations and licenses in their areas of discipline.

Organization

Fehr Graham is a Limited Liability Company. It is managed and owned by:

- » Mick Gronewold, PE
- » Adam Holder, PE
- » Joel Zirkle, PG
- » Noah Carmichael, PE
- » Matthew Johnson, PE, SE
- » Nate Kass, PE, PLS
- » Jason Stoll, PE
- » Seth Gronewold, PE
- » Todd Shankland, CPA
- » Ryan Wicks, PE

Office Locations

ILLINOIS

Aurora

230 Woodlawn Avenue Aurora, IL 60506

Champaign

1610 Broadmoor Drive Champaign, IL 61821

Freeport

101 West Stephenson Street Freeport, IL 61032

Rochelle

515 Lincoln Highway Rochelle, IL 61068

Rockford

200 Prairie Street, Suite 208 Rockford, IL 61107

Springfield

2060 West Iles Avenue, Suite A 128 South Vine Street Springfield, IL 62704

IOWA

Cedar Rapids

200 5th Avenue SE, Suite 100 Cedar Rapids, IA 52401

Manchester

221 East Main Street, Suite 301 Manchester, IA 52057

West Union

West Union, IA 52175

WISCONSIN

Monroe

1107 16th Avenue Monroe, WI 53566

Sheboygan

909 North 8th Street, Suite 101 Sheboygan, WI 53081



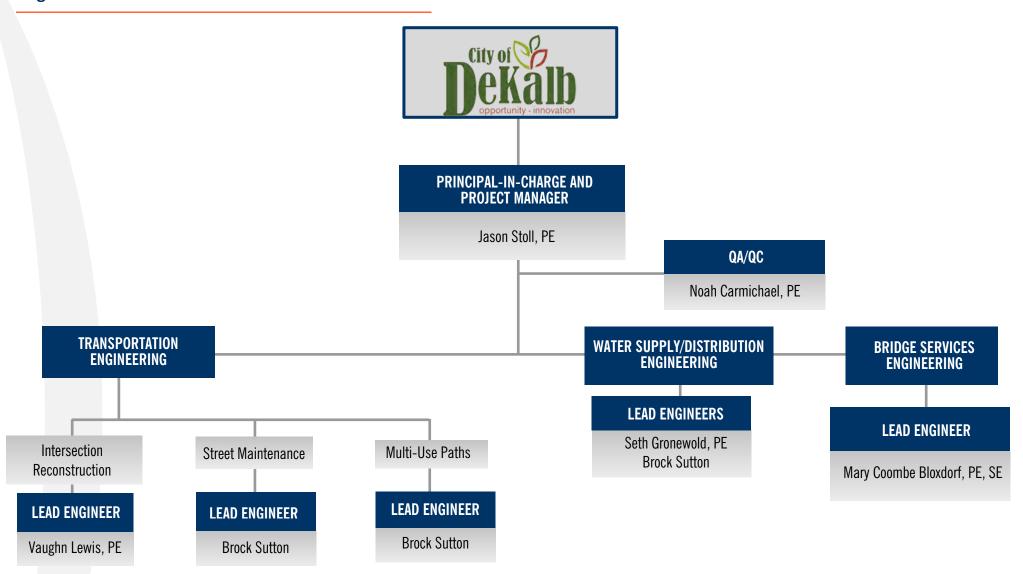
Legal Action in the Last Five Years

1	Case Name	Village of Onarga, Illinois	
	Case Number 2018L3		
	Date Field 2018 Court Iroquois County		
Basis		The complaint is the Village of Onarga against Fehr Graham, Atlas Excavating, Environmental One Corporation and The Hanover Insurance Company for "an action for Breach of Contract, Negligence, Breach of Warranty, and Breach of Performance Bond arising from the defective design, defective products, and defective construction services used in the Sanitary Sewer System in and for Onarga."	
	Status/Outcome	Dismissed with prejudice in December 2020.	

1	Case Name	Loberg Excavating
	Case Number	2019L40
	Date Field	2/10/2021
	Court Stephenson County	
	Basis	On 11/27/2019, Devansoy, Inc. filed a complaint against Loberg Excavating, Inc., which included counts for breach of contract, fraudulent inducement, breach of express warranty and breach of implied warranty related to construction of a waste storage lagoon expansion project. Devansoy alleges that the liner, drainage system and ventilation system supplied and installed for the project were defective, failed and caused certain damages. Fehr Graham was engaged by Devansoy to provide engineering services for the project. On February 10, 2021, Loberg filed a third-party contribution claim against Fehr Graham and Yunker Plastics, the supplier of the liner and ventilation system for the waste lagoon expansion.
	Status/Outcome	Dismissed with prejudice in December 2020.



Organizational Chart





Jason T. Stoll, PE

Principal/Branch Manager



EDUCATION

B.S. in Civil Engineering
Southern Illinois University-Carbondale, 2003
Completed 24 Credit Hours of Land Surveying
Classes Northern Illinois University, 2017

PROFESSIONAL LICENSES

Professional Engineer Illinois #062-063804, 2011 Wisconsin #41775-6, 2011 Indiana #12100667

PROFESSIONAL ASSOCIATIONS

Illinois Society of Professional Engineers
National Society of Professional Engineers
American Public Works Association

Jason Stoll serves as the primary engineering contact for several municipalities in northern Illinois. He regularly attends public meetings and provides consulting services to elected officials and staff. He also is knowledgeable on state loan and grant programs used to fund capital infrastructure improvements.

MUNICIPAL ENGINEERING RESPONSIBILITIES

Multiple Clients | Illinois

Jason consults on a wide range of infrastructure topics, including cost estimate preparations for streets, water and sewer projects to assist with annual budget planning. He understands the Illinois Department of Transportation (IDOT) Motor Fuel Tax (MFT) program and provides year-end documentation to IDOT for MFT-related expenses. Jason also represents the community and reviews private developments that affect the community's infrastructure. He regularly attends public meetings to update officials on infrastructure improvement projects and responds to concerns and issues raised by community members.

FUNDING/PLANNING SOLUTIONS

Multiple Clients | Illinois

Jason informs clients about funding opportunities for capital improvement projects. Jason is well-versed in Illinois state programs with community loans for infrastructure improvements. He helps prepare Department of Commerce and Economic Opportunity grant applications to help pay for sanitary sewer collection main upgrades and Illinois Environmental Protection Agency State Revolving Fund program loan applications for water and sewer system improvements. He works with the Illinois Department of Natural Resources and IDOT to fund community path and trail extensions. Jason also establishes special service areas and tax increment financing districts.

ANNUAL STREETS GENERAL MAINTENANCE (GM) PROJECTS Multiple Clients | Illinois

Jason serves as Project Manager for annual general maintenance streets projects for large and small communities. Since 2018, Jason has helped theCity of DeKalb with its annual streets maintenance program. With \$1 million+ annual project budgets, Jason has overseen efforts to repair and rehabilitate surface pavements and has led design and construction for Americans with Disabilities Act-accessible ramp repairs. Jason has expert knowledge and experience varying construction methods for streets improvements, including standard mill and overlay and hot and cold in-place recyclying. Jason reguarly makes pre-engineering assessements of street conditions and develops cost estimates and methodology for improvements. He works closely with design teams to develop plans and specificaitons and works with engineers and contractors during construction.

BYRON CITY ENGINEER

City of Byron, Illinois

DEKALB CITY ANNUAL STREETS MAINTENANCE PROGRAM (2018-TODAY)

City of DeKalb, Illinois

KIRKLAND VILLAGE ENGINEER

Village of Kirkland, Illinois



Brock Sutton

Engineer



EDUCATION B.S. in Civil EngineeringBradley University, 2019

PROFESSIONAL LICENSES Enrolled Professional Engineer Intern

Illinois #061-040493, 2019

CERTIFICATIONS

Illinois Department of Transportation

Documentation of Contract Quantities, 19-16069

Since joining Fehr Graham in 2019, Brock Sutton has gained experience and completed design and construction engineering services for a number of municipal clients. He works on Phase I, II and III transportation engineering-related projects that range in size and complexity. He serves as a Resident Engineer on many local Phase III construction engineering road rehabilitation projects, funded with local, state or federal money.

Brock is well-versed in the Standard Specifications for Road and Bridge Construction and is certified by the Illinois Department of Transportation (IDOT) in the Documentation of Contract Quantities.

DIXON RESURFACING PROJECT — FEDERAL ROUTES SEC 19-00180-00-RS (FAU 5478, 5497, & 5488) SEC 18-00179-00-RS (FAU 5494)

City of Dixon, Illinois

Brock provided Phase I/II engineering services and served as Resident Engineer for a multistreet resurfacing improvement project. Project work included Hot Mix Asphalt resurfacing, strategic curb and sidewalk replacements, sidewalk intersection ramp reconstruction to comply with Americans with Disabilities Act (ADA) standards, aggregate base repair and utility relocations. Brock worked through PE I/II processes with IDOT District 2 to complete final plans, specifications and estimates that conformed to Local Agency Functional Overlay (LAFO) standards. Under Brock's supervision as the Resident Engineer, work was completed on time and within the \$1.5 million construction budget. Using the IDOT CMMS system, Brock completed daily field reports and was responsible documenting contract quantities and materials certification.

ST. MARY'S ROAD IMPROVEMENTS - SEC 19-00313-00-RS

City of Champaign, Illinois

As part of the PE II effort, Brock assisted the design team in storm sewer and drainage design and prepared the summary of quantities, schedule of quantities and cost estimates for the entire project.

PTB 162/028 - ADA RAMP IMPROVEMENTS

Illinois Department of Transportation, District 6

Regarding the PE II effort with the 3R resurfacing project on IL Route 125 (FAP 67) in Sangamon County, Brock developed engineering designs for ADA-compliant ramp replacements through the community of Pleasant Plains.

2019/2020/2021 VAR. STREETS IMPROVEMENTS

SEC 19-00000-00-GM; SEC 20-00000-00-GM; and SEC 21-00000-00-GM City of DeKalb, Illinois

On a multi-year contract, Brock developed engineering plans, specifications and construction documents for the City of DeKalb's annual street maintenance projects. The annual multi-million-dollar programs included resurfacing multiple streets and reconstructing ADA-compliant ramps.

SOUTH MAIN STREET RECONSTRUCTION - SEC 12-00112-00-FP

City of Rochelle, Illinois

ANNUAL MOTOR FUEL TAX STREETS PROGRAMS (2020/2021)

Village of Paw Paw; Village of Ashton; City of Byron; Town of Cortland



Seth W. Gronewold, PE

Principal



EDUCATION B.S. in Civil EngineeringBradley University, 2015

PROFESSIONAL LICENSES

Professional Engineer

Illinois #062-071468, 2019 lowa #25539, 2019 Wisconsin #47315-6, 2019 Texas #135738, 2019

CERTIFICATION

NBIS Program Manager

Illinois #01064, 2019 Iowa, 2020 Wisconsin, 2021

PROFESSIONAL ASSOCIATION

Illinois Section of American Water Works Association Seth Gronewold serves as a Project Manager for a variety of Fehr Graham's governmental clients. He is experienced in drinking water distribution systems, treatment, road, sanitary sewer, stormwater and culvert designs, and construction management. Seth manages field operations, design considerations and projects. He is proficient in hydraulics, grading plans, site and structural designs, and highway and utility engineering. He participates in large- and small-scale improvements, fulfilling project oversight.

WELL NO. 45 WATER TREATMENT CONSTRUCTION SERVICES

City of Rockford Water Department, Illinois

Seth served as Project Manager for the Phase III construction observation contract. He helped with contract management, product information review, troubleshooting during construction, and communication with the client and contractor. An addition to the Well House provided room for a horizontal pressure filter with Hydrous Manganese Oxide chemical injection to reduce radium content.

PARK AVENUE AND CHURCH STREET WATER MAIN REPLACEMENT

City of Rockford Water Department, Illinois

Seth served as Lead Design Engineer on a water main replacement project on Park Avenue and Church Street. This project required permitting from the Illinois Environmental Protection Agency (IEPA) and Illinois Department of Transportation (IDOT). Because of the need to impact flow on an IDOT route, a Traffic Management Plan was also completed and approved by IDOT.

IEPA PROJECT PLAN

City of Rockford Water Department, Illinois

SOPER STREET WATER MAIN

Village of Winnebago, Illinois

LEAD SERVICE LINE REPLACEMENT PROGRAM DESIGN AND CONSTRUCTION SERVICES

City of Rockford Water Department, Illinois

WENTWORTH TOWER PAINTING AND UPGRADES DESIGN AND CONSTRUCTION SERVICES

City of Rockford Water Department, Illinois

WATER MAIN REPLACEMENT DESIGN, BIDDING AND CONSTRUCTION OBSERVATION

Village of Forreston, Illinois

SOUTH AND STATE STREETS WATER MAIN REPLACEMENT

Village of Durand, Illinois

MONTAGUE STREET WATER MAIN REPLACEMENT

City of Rockford Water Department, Illinois

EDGEBROOK WATER MAIN REPLACEMENT

City of Rockford Water Department, Illinois

OLIVE STREET WATER MAIN REPLACEMENT

City of Rockford Water Department, Illinois



Vaughn R. Lewis, PE, PTOE

Project Engineer



EDUCATION

B.S. in Transportation, Structural Engineering University of Illinois at Urbana-Champaign, 2004

B.S. in Biology

Northern Illinois University, 1998

PROFESSIONAL LICENSES

Professional Engineer

Illinois #062-61904, 2009 Wisconsin #40489-6, 2009 Iowa #23978, 2017

CERTIFICATIONS

Professional Traffic Operations Engineer, 2010

U.S. Department of Transportation, Federal Highway Administration, Roundabout Design

PROFESSIONAL ASSOCIATIONS

Institute of Transportation Engineers

American Public Works Association

Vaughn Lewis' diverse transportation engineering background includes advancing Phase I/II designs for various state and local agencies. His experience involves traffic modeling and geometric design studies for traditional and roundabout intersections, traffic signal analysis, roadway and pavement designs and stormwater management/drainage design. In addition to detailed technical engineering, Vaughn is also responsible for client coordination, project management and quality control efforts.

CHRISTINA DRIVE IMPROVEMENTS — SEC 17-00049-00-CH

Village of East Dundee, Illinois

Vaughn was responsible for the PE I/II associated with the intersection improvements at IL Route 72 (Higgins Road) and Christina Drive in Kane County. PE I services consisted of preparing an Intersection Design Study (IDS), Traffic Management Plan (TMP), Traffic Impact Study (TIS) and Drainage Report and completing a full environmental review. Phase II engineering services included preparing the roadway and drainage design drawings, specifications, proposal booklet and contract documents.

SOUTH MAIN STREET RECONSTRUCTION — SEC 12-00112-00-FP City of Rochelle, Illinois

Vaughn was responsible for the PE I/II associated with the signalization of the Steward Road intersection with Main Street. This project was completed with Illinois Department of Transportation (IDOT) Economic Development Program (EDP) dollars and design approval from IDOT.

INTERSTATE BOULEVARD IMPROVEMENTS — SEC 05-00059-00-FP City of Loves Park. Illinois

Vaughn served as Design Lead during the completion of the PE I/II effort for the roadway and intersection improvments of Interstate Boulevard and Orth Road. His responsibility included preparing an IDS and traffic impact analysis for the roundabout intersection. Vaugn also led the PE II detailed design engineering, including roadway and HMA pavement design, roundabout design and stormwater management design. The project was funded through the IDOT Economic Development Program and designed in accordance with IDOT standards and procedures.

HARRISON AVENUE RECONSTRUCTION — SEC 01-00509-00-RP City of Rockford. Illinois

Vaughn was part of the Harrison Avenue design team for the improvements to 1.5 miles of roadway. As part of the PE II design effort, Vaughn was responsible for pavement design, roadway widening and traffic signal modifications. The project included IDOT funding and was advanced in accordance with IDOT local roads standards.

GALENA AVENUE TRAFFIC MANAGEMENT PLAN

City of Dixon, Illinois

SOUTH COURTYARD RENOVATIONS TRAFFIC STUDY

State Farm Mutual Automobile Insurance Company | Bloomington, Illinois

SIGNAL DESIGN FOR CARLE AT THE FIELDS

Carle Foundation | Champaign, Illinois

SIGNAL DESIGN FOR IOWA 13 IMPROVEMENTS

City of Manchester, Iowa



Mary H. Coombe Bloxdorf, PE, SE

Senior Project Manager



EDUCATION

B.S. in Civil Engineering University of Kansas, 1981

PROFESSIONAL LICENSES

Professional Engineer

Illinois #062-043208, 1986 Missouri #2014009650, 2014

Structural Engineer

Illinois #081-004859, 1990

CERTIFICATION

NBIS Program Manager, Element Level, #00215

PROFESSIONAL ASSOCIATIONS

Illinois Society of Professional Engineer Illinois Award 2018

Structural Engineers Association of Illinois Board Member 2013/2015

Illinois Society of Professional Engineers Board Member, Secretary Treasurer, 2007-2010

Illinois Society of Professional Engineers

National Society of Professional Engineers

American Consulting Engineers Council of Illinois

Mary Coombe Bloxdorf represents private developers and government and institutional clients on-site development, subdivision development, municipal roadways, facility management and structural design projects.

Mary has practical field, design and project management experience. She is responsible for client coordination, scheduling, cost control, and quality assurance and control. She completes engineering design, analysis and planning, evaluates steel and concrete traffic structures, reviews plans, completes hydraulic studies, analyzes structures, designs roads and prepares National Bridge Inspection Standards (NBIS) bridge inspections. Mary regularly works on Professional Transportation Bulletins (PTBs) with the Illinois Department of Transportation (IDOT).

PTB 176/016 WORK ORDER 5, BRADLEY AVENUE OVER I-57, DESIGN AND PLANS Champaign County, Illinois

Mary was the Lead Structural Engineer for the two-span steel composite plate girder structure supported by integral abutments and multicolumn pier. She managed the structure Phase II design and prepared contract plans. Mary also coordinated with Illinois Department of Transportation (IDOT) personnel to address details and correspondence to ensure a quality product with minimal construction issues.

PTB 171/010 WORK ORDER 9, I-74 OVER FRENCH CREEK IDOT District 4

Mary was the Lead Structural Engineer for single-span precast, prestressed I-beam structures, which is supported on integral abutments.

PTB 151/034, WORK ORDER 8, IL 97 (FAP RTE. 626), SECTION 42-(B, B-1) STRUCTURE NUMBER (SN) 048-0097 OVER LITTLE HAW CREEK, CONTRACT 68754 Oates Associates | Springfield, Illinois

SN 16-00613-00-FP WINNEBAGO COUNTY, LYFORD ROAD AND MERCY WAY DESIGN AND PLANS FOR TWO DOUBLE BOX CULVERTS

City of Rockford, Illinois

PTB 172/025, JOB #D-30-012-14 WORK ORDER FOR BRIDGE RATINGS AND PERMITS ASSISTANCE, STRUCTURE LOAD RATING SUMMARIES FOR VARIOUS STRUCTURES IDOT Bureau of Bridges and Structures

PTB 141/004, JOB #D-92-111-06, FAI 39(I39), FAP 301(US 20), SECTION (201-3) K AND 4-1, 5 R, TSL STUDIES FOR THREE STEEL BEAM RAMP STRUCTURES
IDOT District 2



Noah J. Carmichael, PE

Principal



EDUCATION

B.S. in General EngineeringUniversity of Illinois at Urbana-Champaign, 1997

PROFESSIONAL LICENSES

Professional EngineerIllinois #062-061190, 2008
Missouri #2018013634, 2018

PROFESSIONAL ASSOCIATIONS

National Society of Professional Engineers

Illinois Society of Professional Engineers -Rock River Chapter

Illinois Road and Transportation Builders Association

American Council of Engineering Companies

VOLUNTEERISM

Rochelle Rotary Club

Rochelle Area Community Foundation Board and Past Chairman

Rochelle Hospital Association Board and Past Chairman

Rochelle Rescue Mission Fundraising Committee

Noah Carmichael assists municipalities with various public infrastructure improvements. He specializes in transportation, potable water utility and general municipal engineering. A majority of his technical experience includes designing local roads and drainage systems for local and state agencies. His experience includes securing federal, state and local permits through the Federal Emergency Management Agency, Illinois Department of Transportation (IDOT), Illinois Department of Natural Resources and Illinois Environmental Protection Agency. Noah's diverse background also includes construction observation, construction staking and field engineering, which provides a solid foundation for his role with the firm.

As Principal and Project Lead, Noah's strength is his ability to work closely with municipal and government partners on public infrastructure planning, including identifying funding options to support community capital investment goals. By taking a holistic approach to projects – including conception, designing, funding, and ongoing operations and maintenance – Noah has helped position Fehr Graham as a leader in municipal and infrastructure engineering.

MAIN STREET RECONSTRUCTION

City of Rochelle, Illinois

Noah, Project Manager and Lead Design Engineer, advanced the design, permitting and land acquisition for the reconstruction of South Main Street, an industrial corridor in the City. The project included the urbanization of the roadway with the complete removal of the rural Hot Mix Asphalt (HMA) cross section. The resulting design included concrete curb and gutter, storm sewer and HMA pavement. A signalized intersection was designed at Steward Road and included dedicated turn lanes, refuge islands and pedestrian phasing.

ST. MARY'S ROAD RECONSTRUCTION

City of Champaign, Illinois

As Lead Design Engineer, Noah advanced the design and permitting for the reconstruction of St. Mary's Road through the south end of the University of Illinois campus. The project included removal and replacement of HMA and concrete pavements, sidewalk and Americans with Disabilities Act improvements, and signalization modifications. Because of the university setting and the focus on pedestrian mobility and safety, the cross-section of the roadway was modified, reducing lanes while providing a greater level of service to cyclists and pedestrians. The design and approval process were advanced in accordance with IDOT local roads procedures while incorporating City of Champaign and University of Illinois design elements into the project.

DEPOT AVENUE RECONSTRUCTION

City of Dixon, Illinois

LOVES ROAD INTERSECTION RECONSTRUCTION

Town of Cortland, Illinois

ANNUAL STREETS PROGRAM (2018-2020)

City of DeKalb, Illinois

MULFORD ROAD RECONSTRUCTION

City of Rochelle, Illinois





Various street improvements DEKALB, ILLINOIS



CLIENT CONTACT

Zac Gill City Engineer 815.748.2000

PERIOD OF SERVICES

February 2018 to Present

CONTRACT VALUE \$447,400

CONSTRUCTION COST

\$4,075,000

PROJECT TEAM

PRINCIPAL

Noah Carmichael, PE

PRINCIPAL

Jason Stoll, PE

DESIGN ENGINEER

Brandon Boggs

RESIDENT ENGINEER

Royce Monk

AT A GLANCE

- » Developed cost-effective design, allowing City to maximize scope of work.
- » Completed topographic surveys.
- » Supplied construction observation services.
- » Completed IDOT MFT documentation.
- » Developed pay applications to separate improvements by funding source.
- » Evaluated construction bids.
- » Completed construction engineering.

In 2018, DeKalb, Illinois, officials hired Fehr Graham to prepare engineering plans and specifications and provide construction engineering services for a Citywide street improvement project over several years. Fehr Graham provided Phase I, II and III services for various streets resurfacing. We inspected the pavement and made recommendations for improvements. We thoroughly reviewed curb ramps adjacent to the targeted streets, and we designed replacement curb ramps for those that didn't comply with Americans with Disability Act standards.

The City identified aged streets that were deteriorating. We worked with a local geotechnical engineering consultant to complete a subsurface investigation on each street to identify the composition of the pavement. Using this information, we developed each street's design. These plans also identified strategic curbs, driveway approaches and sidewalk replacements. We focused on effectively and proactively communicating. We also held numerous coordination meetings with City officials as plans developed. Fehr Graham updated and shared cost estimates with the City regularly as the final scope was developed to ensure improvements were in line with the budget. Our team prepared contract documents and solicited construction bids on the City's behalf. Fehr Graham helped evaluate bids, which came in below the Engineer's Estimate and allowed the City to add improvements.

Our Project Manager communicated daily with the Resident Engineer and gave the City regular updates and made sure reports and measurement of contract quantities met Illinois Department of Transportation (IDOT) standards throughout construction.

Fehr Graham was responsible for payment of applications to the contractor. Because Motor Fuel Tax (MFT) funds were used, we provided full documentation and correspondence with IDOT District 3 on behalf of the City.

A social media campaign was developed to update the public, which was received well because several residents called the Mayor and other elected officials to commend us for our work.





Various Street Projects 2020

DIXON, ILLINOIS



CLIENT CONTACT

Matt Heckman Public Works Director 815.288.5763

PERIOD OF SERVICES

September 2018 to December 2020

CONTRACT VALUE

\$271,500

CONSTRUCTION COST

\$2,000,000

FUNDING

STU

PROJECT TEAM

PRINCIPAL

Jason Stoll, PE

RESIDENT ENGINEER

Brock Sutton

AT A GLANCE

- Completed PE I and II.
- » Provided construction engineering.
- » Performed Phase III construction services.
- » Worked closely with IDOT, providing required updates.

The City of Dixon, Illinois, was ready to overhaul three routes within corporate limits and modernize its intersections and traffic signals during the process. Fehr Graham was hired to prepare plans and specifications for various streets.

Our team provided Preliminary Engineering I and II. Resurfacing work was finished on three routes within corporate limits. Pavement resurfacing, new thermoplastic pavement markings, Americans with Disabilities Act-compliant sidewalk ramp replacements, strategic curb and gutter replacements, Hot Mix Asphalt Class D patches and restoration efforts were finished. One project scope included traffic signal modifications at signalized intersections, detector loops removal and cameras with new controllers.

The City used a Surface Transportation Program-Urban (STU) funds that required engineering design and plan approval from the Illinois Department of Transportation (IDOT). Working closely with the City and IDOT, Fehr Graham completed plans and specifications that met federal, state and local design requirements. In total, more than 2 miles of streets were resurfaced with STU funds.

We worked closely with IDOT to secure approvals through Local Agency Functional Overlay program. We completed BLR form 46300 and all requirements for approval. Once PE I and II were approved, Plans, Specifications and Estimate documents were finalized for bidding and construction.

Fehr Graham also performed Phase III construction engineering services with a full-time Resident Engineer (RE) on site to provide construction management, pay estimate preparation and coordinate with the City and IDOT. Because this project involved several streets, additional resident technicians were assigned to ensure full observation services were finished daily. Our RE worked closely with IDOT's RE to provide daily updates, reports and contract quantities measurements.

All work was completed on time and by the end of the 2020 construction season and will provide safer roads and intersections for drivers and pedestrians.





City tackles large water main replacement project

DEKALB, ILLINOIS



CLIENT CONTACT

Bryan Faivre Utilities, Transportation & Engineering Director 815.748.2050

PERIOD OF SERVICES

April 2021 to Present

CONTRACT VALUE

\$169,000

CONSTRUCTION VALUE

\$2.5 million

PROJECT TEAM

PRINCIPAL/PROJECT MANAGER

Jason Stoll, PE

ENGINEER

Brock Sutton

RESIDENT ENGINEER

Royce Monk

ENGINEER

Luke Kelly

AT A GLANCE

- » Design engineering.
- » IEPA Permitting.
- » Phase III construction engineering services.

DeKalb, Illinois, hired Fehr Graham to prepare engineering plans for three water main replacement projects in the City's residential district. Water main constructed post World War II were aged, undersized and needed to be replaced. The City identified specific water main to replace to coincide with planned roadway improvements the following year.

Fehr Graham has a long history with the City of DeKalb. Our team has served as the City's preferred consultant for engineering services on the annual various streets general maintenance program since 2018. Our knowledge of the plans for the 2022 street improvements within this corridor allowed for effective communication and planning efforts between the City Engineer and the City Water Department.

Water main replacement work was completed along 13th and 14th streets and on Joanne Lane. Fehr Graham designed and successfully permitted more than 1.5 miles of water main replacement along these routes. Work included new water services for more than 100 homes with new water shut-off boxes at each residence. New fire hydrants were designed to replace aging and failing devices along all routes.

As part of coordination efforts to minimize project costs, our team engineered the water main design and secured all permits. Fehr Graham developed multiple horizontal alignment options for the new water main to ensure minimal utility conflicts, easy access for maintenance and the most cost-effective scope for the City of DeKalb. These alignments were presented to the City, reviewed in detail along with cost estimates for each alternative and identification of long-term impacts.

Construction began in 2021. Fehr Graham is completing Phase III construction engineering services, including daily onsite observation, construction staking, contractor pay requests and final closeout documents and punch list items.











Edgebrook water main replacement - Phase I and II

ROCKFORD, ILLINOIS



CLIENT CONTACT

Jamie Rott Water Superintendent 779.348.7645

PERIOD OF SERVICES

July 2019 to Present

CONTRACT VALUE

\$109,182

CONSTRUCTION COST

\$2.5 million

PROJECT TEAM

PRINCIPAL

Mick Gronewold, PE

PROJECT MANAGER

Seth Gronewold, SE

STAFF DESIGNER

Jeff Jacobson

AT A GLANCE

- » Topographic survey.
- » Engineering design.
- » IEPA water main construction permitting.
- » NPDES permitting.
- » Residential coordination.
- » Easement acquisition.
- » Technical specifications.

Water main constructed in the 1960s is in the literal backyards of homeowners in the Edgebrook neighborhood within City of Rockford, Illinois. Residents have unknowingly built fences, improved landscaping and installed sheds and even swimming pools over water main and service lines, causing the City maintenance issues for years.

The City hired Fehr Graham to complete Phase I and II of a four-phase plan to replace water main on Edgebrook Drive and surrounding roads. Our team helped inform more than 140 residents and business owners affected by the project that will span more than 1.5 miles. We coordinated with the Rockford Township Highway Department on behalf of the Rockford Water Department because part of the right of way is in its jurisdiction.

Our team scheduled neighborhood meetings to explain the project, answer questions and ask for cooperation. We obtained signed construction easements from every homeowner and scheduled workers to move water meters from the rear of basements or crawl spaces in private properties to the front where the water main will be installed. This included preconstruction walkthroughs and postconstruction inspections. We also coordinated with a local school to help alter bus routes for parent pick-up and drop-off times.

Fehr Graham provided engineering design for the replacement and relocation of water main, including the boring of water main beneath an extremely busy roadway. Additional design included water service relocation from back to front yards along Edgebrook Drive, Pinecrest Road and Alpine Road, which was incorporated into the Phase I and II plan set.

Updated water infrastructure in this neighborhood will provide a more reliable water system, improved quality and flow, and it will avoid intrusive maintenance and give the Water Department more access when necessary.





Interstate Boulevard Development

LOVES PARK, ILLINOIS

Loves Park's economic development initiatives attracted Komax MedTech, a national manufacturer of machine systems for the medical device industry, to the City's east side. With the help of local funding sources and an Illinois Department of Transportation (IDOT) Economic Development Program Grant Fehr Graham prepared, the City could pay for a road extension to the future facility as an incentive to relocate.

An Intersection Design Study evaluated potential traffic conditions for a roundabout and the proposed road extension. We addressed right-of-way issues constrained by a watercourse crossing, private development and future public utility extension needs. Our team assisted with plans for the roundabout.

Engineering plans needed approval of the IDOT Bridge Office for a preliminary bridge design and Hydraulic Report. Structural loads and geotechnical testing showed we consider other bridge design options. After analyzing the options, we suggested the precast, prestressed concrete deck beam bridge as the best option for the project because of its structural and budgetary advantages.

Construction began in July 2015 and was completed in October 2015.



CLIENT CONTACT

Steve Thompson Director of Community Development and Public Works 815.654.5033

PERIOD OF SERVICES

May 2015 to December 2015

CONTRACT VALUE \$293,616

PROJECT TEAM

PRINCIPAL

Mick Gronewold, PE

PROJECT ENGINEERJesse Duff, PE

LAND SURVEYOR

Dan Kasten, PLS

- » Completed civil and structural design plans.
- » Prepared and facilitated \$1 million from IDOT Economic Development Program.
- » Coordinated with state and local agencies.
- » Completed intersection design study.
- » Prepared stormwater pollution retention plan.
- » Observed and staked construction.
- » Coordinated with testing agencies.
- » Prepared right-of-way plats.





Mercy Way and Lyford Road Corridor Paves Way for New Hospital ROCKFORD, ILLINOIS



CLIENT CONTACT

Todd Cagnoni City Administrator 779.348.7327

PERIOD OF SERVICES

August 2016 to January 2019

CONTRACT VALUE

\$852,500

CONSTRUCTION COST

\$505 million

SIZE

263 acres

PROJECT TEAM

PRINCIPAL

Mick Gronewold, PE

PROJECT MANAGER

Seth Gronewold, PE

LAND SURVEYOR

Dan Kasten, PLS

PROJECT ENGINEER

Vaughn Lewis, PE, PTOE

LANDSCAPE ARCHITECT

Dylan Schroeder, PLA

ASSOCIATE ENGINEERING TECHNICIAN

George Weber

In 2015, Mercyhealth launched the biggest project - \$505 million to be exact - the region has seen in decades. The City of Rockford chose Fehr Graham to oversee the construction of Mercy Way and Lyford Road near the hospital.

Our team oversaw the design and construction of Mercy Way and Lyford Road from Riverside Boulevard to Spring Brook Road. Fehr Graham observed construction on upgraded traffic signals, a roundabout, water and sewer, multi-use path, storm sewer, two structures, wetlands and endangered species, streetscape and landscape, irrigation and lighting.

Conveniently located off Interstate 90, the Javon Bea Hospital-Riverside campus created jobs and sparked growth in Rockford and Loves Park.

Our team's proposal met the deadline and the design fee was nearly \$100,000 under budget.

Fehr Graham also partnered with the Cities of Rockford and Loves Park, Mercyhealth, Winnebago County and Illinois Department of Transportation on the project. Construction was completed in January 2019.



- » Prepared roundabout and right-of-way plats.
- » Prepared construction layout and as-built survey.
- » Observed construction for road, water mains, storm and sanitary sewers, irrigation, lighting, multiuse paths and landscaping.
- Completed Intersection Design Studies and traffic analysis reports.
- » Obtained joint permitting.
- » Prepared structural, streetscape and landscaping designs.
- » Planned site utilities, paving and stormwater management.
- » Completed erosion control inspections.
- » Designed Americans with Disabilities Act-compliant sidewalks.







DeKalb Shared-Use Path extensions at Fairview Drive and Dresser Road

DEKALB, ILLINOIS



CLIENT CONTACT

Zachary Gill, City Engineer 815.748.2000 Zachary.gill@cityofdekalb.com

PERIOD OF SERVICES

March 2021 to Present

CONTRACT VALUE

\$156,950

CONSTRUCTION COST

Dresser Road: \$200,000 Fairview Segment A: \$160,000

Fairview Segment B: \$350,000 (estimate)

PROJECT TEAM

PRINCIPAL

Jason Stoll, PE

ENGINEER

Brock Sutton

SENIOR ENGINEERING TECHNICIAN

Royce Monk

AT A GLANCE

- Phase I and II design engineering.
- Phase III construction engineering.
- Construction staking/layout.
- Project Development Report.
- **Environmental Survey Request.**
- Land acquisition documents.
- Right-of-way acquisition documents.
- Americans with Disabilities Act-accessible design.

City of DeKalb officials hoped to extend and update its shared-use paths along Fairview Drive and Dresser Road and hired Fehr Graham to help make it happen.

Fehr Graham provided engineering services for the Hot Mix Asphalt path extension along Dresser Road, which was constructed in 2021. The connector path linked North Annie Glidden Road and the sidewalk at West Dresser Road near DeKalb High School. The 0.34-mile project creates a safe and Americans with Disabilities Act-accessible route for students and other pedestrians along Dresser Road.

The Fairview Road Shared-Use Path, designed in two phases, extended the shared-use path from 7th Street to Macom Drive as part of the first phase, known as Segment A. In 2022, the path extension will be continued as part of Segment B from Macom Drive east to the commercial driveway at 3M Distribution Center.

Because the second phase of this project uses federal funds, plans for Segment B required Illinois Department of Transportation (IDOT) review and approval. We created and submitted a Project Development Report after completing environmental studies and assessments for an Environmental Survey Request.

IDOT is in the process of approving path extension designs. We also identified the need for additional right-of-way and are preparing legal descriptions and other documents for land acquisition to move the project forward. We handled the bidding process and provided Phase III construction engineering on Segment A and will provide those services for Segment B later this year.

The shared-use path on Dresser Road connects nearby neighborhoods with DeKalb High school, allowing and encouraging safe travel for students to walk or bike to school. It also helps keep pedestrians off the road and on a safer route.





Dixon bike path DIXON, ILLINOIS

The City of Dixon knew it was important to make its downtown more navigable for residents and tourists, many of whom visit the boyhood home of President Ronald Reagan. The City hired Fehr Graham in 2016 to design 1.5 miles of multiuse bike path extensions along the downtown riverwalk.

The riverfront path runs along heavily trafficked Illinois Route 2, a state route connecting Rockford to Dixon. It will connect people to employment opportunities, retail destinations, schools and other trail systems in the City and surrounding region. The path will be developed in two segments to connect to 1 mile of riverfront trail and Dixon's Heritage Crossing, a two-block long riverfront plaza and public gathering space.

Fehr Graham remediated the site from contaminants, mitigated floodplain and floodway risk and designed around historic railroad bridges. Improving connectivity to downtown amenities will help facilitate economic development. In anticipation of future growth, Fehr Graham prepared a plan showing potential redevelopment of 14 acres of downtown riverfront as open space and mixed-use development. The path integrates a boardwalk as a cost-effective way to accommodate nearly 40 feet of grade change and minimize impact to the former railroad embankment and transition to the riverbank.

The City was awarded an Illinois Transportation Enhancement Program grant, which supports projects throughout the state that improve transportation. Construction is slated to begin in 2022.



CLIENT CONTACT

Danny Langloss City Manager 815.288.1485

PERIOD OF SERVICES

March 2017 to Present

CONTRACT VALUE

\$154,243

CONSTRUCTION COST

\$154,243

FUNDING

ITEP

PROJECT TEAM

PRINCIPAL

Jason Stoll, PE

BRANCH MANAGER

Ross Grimes, PG

- » Planned for future development.
- » Prepared preliminary and final engineering.
- » Surveyed the topography.
- Studied environmental impacts and remediated contaminated soil.
- » Designed preliminary plans.
- » Analyzed drainage systems.





Irene Road Over Interstate 90

BOONE COUNTY, ILLINOIS

When lanes were added to Interstate 90, it was important to determine what additional improvements were needed. The Irene Road Bridge over Interstate 90 in Boone County could not accommodate more interstate traffic lanes. As part of the Tollway's expansion plan, we redesigned the Irene Road Bridge. It is now a two-span, steel plate girder superstructure supported by a rigid frame reinforced concrete pier and integral abutments.

Fehr Graham also provided the engineering to reconstruct the approach roadway and interstate access ramps adjacent to the bridge. We developed plans, specifications and estimates to accommodate a demanding project schedule established by the Illinois Tollway.



CLIENT CONTACT

Mustafa Hassan Project Manager 630.241.6800

PERIOD OF SERVICES

March 2012 to February 2014

CONTRACT VALUE \$1,400,000

CONSTRUCTION VALUE

\$77,500,000

SIZE

Length: 236 feet Width: 55 feet

PROJECT TEAM

PRINCIPAL

Mick Gronewold, PE

PROJECT MANAGER

Tim Souther, PE

SENIOR ENGINEERING TECHNICIAN

Brian Nott

PROJECT MANAGER

Chad Osterbur, PE, PLS

SURVEY CREW CHEIF

Joe Shelly

- » Completed topographic survey.
- » Designed bridge.
- » Prepared plan, specification and estimate development.
- » Completed biologic analysis.
- Reviewed shop drawing.





Environmental investigation completed before bridge replacement projectROCKFORD, ILLINOIS



CLIENT CONTACT

Steve Prange Regional Office Manager 417.869.6009

PERIOD OF SERVICES

August 2011 to April 2014

CONTRACT VALUE

\$71,710

CONSTRUCTION COST

\$40,000,000

SIZE

Length: 503 feet Width: 73.2 feet

PROJECT TEAM

PRINCIPAL
Joel Zirkle, PG, CGP

ENGINEERING TECNICIAN

Bill Covell

The Morgan Street Bridge in Rockford, Illinois, carries more than 6,000 cars over the Rock River daily. Over the years, the bridge became structurally unsafe. Crawford, Murphy & Tilley (CMT) hired Fehr Graham to perform hazardous waste consulting services for the bridge demolition and replacement.

Fehr Graham completed a Preliminary Environmental Site Investigation for the bridge. Our team collected samples from 27 soil borings to test for contaminants like volatile and semi-volatile organic compounds, inorganics, polychlorinated biphenyls and pesticides. Tests showed low-level impacts of inorganic metals and polynuclear aromatic compounds, which can cause carcinogenic reactions in the body. We then provided the technical details needed to manage the impacted soil during construction.

Our team worked with CMT to prepare the special provisions for Section 669 on the specifications for the project. This included defining the lateral extent of the impacted areas by station, off-set and depth. Pay items were developed for the bid documents. Fehr Graham also provided Phase III engineering services related to observing the removal and management of the impacted soils during construction.

The new bridge has created a safe connection from the west to east side of the Rock River and adds aesthetic value to the growing neighborhoods nearby.

- Reviewed documents.
- » Conducted site investigation.
- » Prepared site investigation results and monthly progress reports.
- » Evaluated remediation options and costs.
- » Estimated special provisions, pay items and quantities.
- » Attended project kick-off, city official and internal meetings.
- » Completed field checks and plan-in-hand review.
- » Prepared quality assurance plan.
- » Coordinated utilities, personnel planning and scheduling.





ur commitment to the Project Management principles we embrace at Fehr Graham helps ensure successful and satisfying projects for our clients and our team members. Our approach, like everything we do at Fehr Graham, is developed to focus on providing the best possible customer service for our clients. Our program is centered on communication, with tested and proven processes in place to embrace collaboration with our clients.

Planning

When projects require accelerated schedules and the advancement of work to adhere to deadlines, planning is necessary to make sure team members are available to begin work immediately and advance project deliverables efficiently. Considering this, we will develop a unique project schedule to ensure engineering plans and specifications can be completed before deadlines. We will provide the project schedule to the City of DeKalb before we start work. Schedule updates will be incorporated for any changes in scope or other direction from DeKalb.

Staffing

With a team that includes nearly 200 professionals, Fehr Graham has the resources to dedicate experienced and technically superior engineers and technicians to each project. Our team includes transportation engineers, structural engineers with bridge experience, and stormwater and water distribution engineers. To maintain consistency with our clients, the City can expect project management efforts to come from members of our team in our Rochelle or Rockford offices. However, the type and complexity of the project is identified early, and the right team of engineers/technicians will be selected for that work. These engineers and technicians may also be local, but services may be provided from one of our other 10 Midwest offices. It's entirely about dedicating the right team to the specific project to gain the best results.

Communication and Coordination

When there are problems on a project, more times than not ineffective or poor communication is usually to blame. We understand this at Fehr Graham, and we work tirelessly to ensure we proactively communicate with our clients. We actively listen so your vision is realized through the engineering plans and specifications. We will provide you with regular updates on the progress of engineering plans and specifications. We will use video conferencing capabilities to review progress plan sets at 50%, 90% and final bid sets prior to bidding. In between conferences, we will call and email you so you are aware of the progress. When you call, we will do our best to answer immediately. When we can't, your call will be returned the same day.

When construction begins, the Project Manager will continue to serve as the primary point of communication with you. The Project Manager, working closely with the Resident Engineer, will provide at minimum weekly written updates. The weekly reports will include an update on what was completed that week and what is expected to be completed in the coming week. At the City's request, and like we do for many clients, we are happy to provide tailored updates for social media and for the City's website to update the community on construction.





Quality Assurance and Quality Control (QA/QC) Program

For every project, an experienced Professional Engineer is assigned to perform QA/QC reviews of engineering plans and specifications prior to bidding. This Professional Engineer will have experience in design and construction engineering. He or she will not be actively involved with the design engineering and will not attend coordination meetings with you. We find the best QA/QC reviews come when the person has not been involved in the project directly because he or she can offer unique perspectives of potential issues. Design professionals start with a wide view of the project, but as they work on details, their focus continues to get more narrow. The QA/QC professional comes in with that wide view of the project. We see it all the time. "How did I not see that?" is a common response from our design team when reviewing the project with the QA/QC professional. Our commitment to QA/QC will ensure project change orders are limited, and the City of DeKalb will receive good and competitive bids for this project.

Project Change Orders and Invoicing

Nobody likes change orders, and at Fehr Graham we do everything we can to ensure the project scope is properly defined with our client prior to execution of the contract so change orders are not needed. When there are changes in the project scope, you will not be surprised with an invoice that includes additional costs beyond what was approved. We will discuss the change in scope with you ahead of time and only with the City's approval will we bill for additional services.

Honoring the terms of the executed contract is important to us and, like so many of the project management principles we hold dear, we will communicate if issues arise with the project scope.

WE ARE YOUR PARTNER

through **every step** of the process. We work **closely** with you to reach

WIN-WIN SOLUTIONS.

Invoices will be sent monthly for work completed the previous month. Project invoices are carefully reviewed by the Project Manager to ensure all work is properly coded and accurate. Detailed description of work for all team members can be provided at your request. Invoices can be delivered by mail or email.





References





Kyle Saunders Director of Public Works 425 East State Street Rockford, Illinois 61104 779.348.7300 kyle.saunders@rockfordil.gov



City of Dixon, Illinois

Matt Heckman
Public Works Director
Assistant City Manager
121 West 2nd Street
Dixon, Illinois 61021
815.288.5763
matt.heckman@discoverdixon.org



City of Freeport

Rob Boyer III
Director of Public Works
314 W. Stephenson Street
Freeport, IL 61032
815.297.1166
pwdirector@cityoffreeport.org





Municipal Engineering Services
January 21, 2022









SUBMITTED BY:

Hampton, Lenzini and Renwick, Inc. (HLR) 380 Shepard Drive Elgin, Illinois 60123 Ph. (847) 697-6700 Fax (847) 697-6753

PREPARED FOR:



Mr. Zachary Gill, P.E. City Engineer City of DeKalb 1216 Market Street DeKalb, Illinois 60115



Hampton, Lenzini and Renwick, Inc.

Civil Engineers • Structural Engineers • Land Surveyors • Environmental Specialists www.hlrengineering.com

January 21, 2022

Ms. Zachary Gill, P.E., City Engineer City of DeKalb 1216 Market Street DeKalb. Illinois 60115

RE: Statement of Qualifications for Municipal Engineering Services

Dear Mr. Gill:

At Hampton, Lenzini and Renwick, Inc. (HLR), we share the City's core values of enhancing public safety, investing in proper maintenance and stewardship of City infrastructure, improving the movement of commerce and economic activity, and promoting a sense of well-being for the community while exhibiting fiscal responsibility. HLR keeps these core priorities at the forefront of our projects and interactions with our public agency clients, including the City of DeKalb.

At HLR, we embrace a culture of working hard, having fun, and giving back. We are proud of our philanthropic contributions and successful projects that help each of our clients reach their goals. Our "working hard" philosophy means that we will be an advocate for you and your community. Throughout each project, we will focus on results that embrace the following:

- "Complete Streets" philosophy
- Constructible designs
- Promoting green infrastructure (where possible)
- Individualized, cost-effective solutions
- Collaboration with federal, local, and state agencies
- Promoting inclusiveness throughout the community

HLR's qualifications and experience will result in a successful partnership that the City and residents can count on. We invite you to consider the following factors, which we believe will differentiate us:

Effective Coordination: As an advocate for the City, we understand the value of establishing a positive relationship early on between municipal staff, project stakeholders, contractors, regulatory agencies, and even other consultants. We will implement a partnering process to streamline coordination and allow all necessary parties to be involved – mitigating potential project issues.

Quality Without Compromise: Our employees understand that success depends on providing quality work to meet our clients' goals, which is why we take responsibility for our recommendations and always keep our clients' best interests in mind. We also care more about getting it done right, and the relationships that we build, than the bottom line.

Comprehensive Expertise: We are a full-service firm and can offer all the requested services in-house including, but not limited to: land survey, grant assistance, MFT and other funding project administration, transportation and infrastructure design, traffic operations and analysis, construction observation, development review and inspection, stormwater consulting, and land acquisition/negotiations.

Thank you for the opportunity to submit our municipal engineering qualifications. Our team looks forward to continuing a great relationship with the City, finding winning outcomes for all projects, and contributing to the continued success of the community. If you should have any questions or comments regarding our submittal, please feel free to contact me at (847) 697-6700 or rnewkirk@hlreng.com.

Yours truly,

HAMPTON, LENZINI AND RENWICK, INC.

Randal G. Newkirk, PE

Design Engineering Manager

Fax 847.697.6753









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4) Engineering Service Model(s)	,
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Municipal Engineering Services
City of DeKalb

ATTN: ZACHARY GILL

CITY ENGINEER
City of DeKalb
1216 Market Street
DeKalb, IL 60115

FIRM INFORMATION

Hampton, Lenzini and Renwick, Inc. (HLR) 380 Shepard Drive Elgin, IL 60123 www.hlrengineering.com

AUTHORIZED CONTACT

Randy Newkirk, PE Design Engineering Manager rnewkirk@hlreng.com (847) 697-6700



OFFICE LOCATIONS

We have five office locations throughout Illinois – Elgin (2 locations), Crystal Lake, Springfield, and Mt. Carmel – making us big enough to handle the largest projects, yet small enough to never lose sight of the personal relationships we make. Staff from our northern Illinois offices will be assigned to projects. Our proximity will allow us to quickly respond to meeting and site visit requests by the City.



For over 50 years, HLR has been working with communities to design vibrant places for people to live, work, and play. Our team is full of smart, driven people with an impressive range of experience, achievements, and backgrounds.

When it comes to engineering, we look at things differently than other firms because we know that every project is unique, and every client deserves their own solution. If selected as a qualified firm, our team will work with City staff to understand the needs and goals of the upcoming projects, ultimately allowing us to figure out the best way to bring them to life without a cookie-cutter approach.

FIRM INFORMATION

Since 1965, Hampton, Lenzini and Renwick, Inc. (HLR) has been providing professional consulting engineering services for public-sector clients in Illinois. In 1993, the firm opened an office in Springfield, enabling us to provide engineering services to clients in central and southern Illinois. In the fall of 2015, we acquired Lamac Engineering, Inc., based out of Mt. Carmel, Illinois. Lamac has a long and successful history of their own, providing engineering services since 1938. By joining forces, we can offer our clients superior customer service and a broad range of engineering expertise. The firm is led by ReJena Lyon, PE, PLS, as our President/CEO, a four-person Board of Directors, and seven additional officers of the company. Because our employees are owners, we have an added sense of responsibility to ensure that our clients' needs are met, and they are satisfied with the results.

CORPORATE CULTURE

At HLR we embrace a culture guided by the following: **Work Hard, Have Fun, Give Back**®. HLR is 100% owned by the people who work in our offices and local communities every day. Everyone is committed to working hard and providing our clients with the best service, in part due to the sense of responsibility that comes with ownership. HLR encourages individual development and provides opportunity for growth and plenty of fun along the way – which is why we have some of the best and happiest employees and why we were recently selected as "2021 Employer of Choice" by PSMJ Resources, Inc., the world's leading authority, publisher and consultant on the effective management of architecture, engineering, and construction firms.

FULL-SERVICE ENGINEERING EXPERIENCE YOU CAN TRUST

HLR offers all professional engineering services outlined on the following page and has a wealth of experience in design engineering and construction engineering for annual street maintenance projects, water supply/distribution (maintenance and expansion), intersection reconstructions (signalized and roundabout), multi/shared-use paths, and bridge services (design and inspection). At its core, HLR is an engineering firm with a specific goal to provide our municipal clients with all of their consulting needs in-house. Since its inception, HLR has provided design and construction engineering for annual street improvements, water distribution and wastewater collection improvements, storm sewer upgrades and flood mitigation, traffic studies, signal optimization, municipal asset inventories, and most recently we have grown to add various environmental services, land acquisition services, flow monitoring and modeling, building inspection, and recently acquired a high-performance *RIEGL* VZ-400i scanner for cutting-edge 3D model of our designs.





Municipal Engineering Services
City of DeKalb

PROFESSIONAL ENGINEERING SERVICES PROVIDED IN-HOUSE

We offer a wide range of services to meet our clients' needs on a variety of projects. Our staff has extensive knowledge of local, state, and federal agencies' standards, regulations, and requirements. This allows us to complete a project from concept to construction close-out on time and within budget, while meeting City goals.

Preliminary Engineering

Feasibility Studies
Public Involvement
Intersection Design Studies
Federal-Aid Documentation/Reports
Grant Applications & Assistance

Design Engineering

Roadway/Stormwater Improvements
Lighting Evaluation & Design
Development Plan Review
ADA-Compliant Design and Planning
Pavement Evaluation/Maintenance

Construction Engineering

Construction Observation
Public Relations/Coordination
Erosion and Sediment Control
Construction Layout/Verification
Documentation/CMMS

Structural Engineering

Bridge and Retaining Wall Design
Evaluation and Planning
Structure Design
Building Structure Forensics
NBI Bridge Inspections

Traffic Engineering

Traffic Signal/Interconnect Design
Optimization/Re-Optimization
Signal Coordination and Timing
Temporary Signal Timings
Traffic/Speed/Safety Studies

Land Surveying & Acquisition

Topographic/Route/Boundary Surveys Right-of-Way Surveys and Plats ALTA/NSPS Land Title Surveys Drone Surveys, Scanning, and LiDAR Appraisals and Negotiations

GIS Services

Asset Management
Utility Mapping
System Modeling
Database Design
Training

Environmental Services

Native Area Management
NPDES Documentation
Wetland Delineations/Permitting
Green Infrastructure Design/Build
CCDD, Air, and Noise Analysis

Water/Wastewater

Ground/Surface Water Source Design
Treatment Plant/Collection Systems
Hydraulic Distribution Modeling
Telemetry & Control System Design
Pump and Lift Stations

LITIGATIONS SINCE JANUARY 1, 2010

Case Name: Frigo v. City of Elmhurst, et. al

Basis: Plaintiff was injured in a fall in a construction zone.

Outcome: Settled

Case Name: Ilahi, Abdullah (Ilahi, Shahid, Admin) v. Sebert v. Hampton, Lenzini and Renwick

Basis: Plaintiff's estate filed a wrongful death complaint against Sebert Landscaping company. The decedent drove his motorcycle into the side of a Sebert trailer being pulled through the intersection of Park and Thorndale Avenues. Sebert's driver was cited for disobeying a traffic signal. Hampton, Lenzini and Renwick set temporary timing for construction at the intersection.

Outcome: Settled

Case Name: Hampton, Lenzini and Renwick, Inc. v. John Acree, Tracy Swanson, and Keys Hill Engineering, LLC.

Basis: Plaintiff sued a former employee for violation of restrictive covenants.

Outcome: Settled





PROJECT TEAM

Staff is assigned to a project based on their prior experience and technical expertise in the scope of work anticipated. Once assigned, they will be involved in the project from beginning to end. By using the same personnel throughout the process, we can maintain continuity with the City, maximize productivity, and provide the highest quality engineering services.

Our team is noted in the chart to the right and we have included resumes for key staff on the following pages.



PRINCIPAL-IN-CHARGE RANDY NEWKIRK, PE

Years of Experience: 24





Randy Newkirk is a Project Manager with over 20 years of experience in transportation and stormwater-related projects. He manages and prepares documents for roadway projects, including roadway geometrics, cross sections, soil erosion and sediment controls, landscaping, sewer, water, quantities, cost estimates, and special provisions. He also manages and prepares drainage studies and investigations including permitting and ordinance interpretation, highway drainage system design, storm sewer and culvert analysis and design, watershed analysis, and retention/detention facility concept design.

Randy has working knowledge of the local municipal and county ordinances for transportation and stormwater projects in northeast Illinois. He also has extensive experience with regulatory agencies such as IDNR-OWR, USACE, U.S. Fish and Wildlife Service, Soil and Water Conservation Districts, and IDOT.

PROJECT MANAGERS



AMY MCSWANE, PE, PTOE - Phase I and Traffic Engineering

NICK PIEKARSKI, PE, CFM, DECI – Phase II Transportation Design Engineering

RYAN LIVINGSTON, PE - Municipal and Pavement Maintenance Engineering

IAN NILAUSEN, PE, SE - Structural Inspection and Design

NICK FAGAN, PE – Construction Engineering

JENI LYON, PE, PLS - Survey

ERICA SPOLAR, CWS, DECI - Environmental

SENIOR STAFF

JEFF MEINDL, PE - Roadway / Traffic Signal

BILL NELSON, PE - Water / Wastewater

CHRIS OLCOTT, PE, CFM, CPESC - Stormwater and Plan Review Specialist

AMY MCKENNA, PE, CFM - Stormwater and Plan Review Specialist

ANDRE JUNGERMANN, PE - Preliminary Engineering / Geometrics

ERIK MELCHERS, PE - Pavement Maintenance / Municipal Engineering

SCOTT SHOUP, PE, SE – Structural Engineering and Inspection

ERIC HAGLUND, PLS - Land and Route Survey

PAT HICKEY, PWS, CPESC, CA - Environmental / Permitting

KAREN KASE PWS, CPESC, CA – Environmental / Green Infrastructure & Soil Contamination

RYBA. PE - Construction

JEFF GARTH, PE, DECI - Construction

STAFF ENGINEERS

NICK HALAN, PE, PTOE - Traffic / Phase I

CALLIE CASTRO, PE, PTOE - Traffic / Phase I

KANNON NELMS – Transportation

DREW KISSAMIS, EIT – Transportation

ANISH BHATT, EIT – Transportation

COLLEEN BARRY – Stormwater

LARRY HARVEY, CST III - Survey

GARRET BRADT – Survey

MARIA AGUIRRE, EIT - Construction

LENARD LYNN, CPII, DECI - Construction

CARLOS RODRIGUEZ – Construction







PROFESSIONAL REGISTRATIONS

Professional Engineer, Illinois, #062.056847

Professional Engineer, Iowa, #23870

Professional Engineer, Wisconsin, #36065-006

Professional Engineer, Indiana, PE11800855

YEARS OF EXPERIENCE 24 / 23 at HLR



EDUCATION

Bachelor of Science, Civil Engineering, Northern Arizona University

PROFESSIONAL CERTIFICATIONS

IDOT Documentation of Contract Quantities, 2021, #21-18159

RANDY NEWKIRK, PE DESIGN ENGINEERING MANAGER

KEY STAFF

Randy has over 20 years of experience in transportation and stormwater-related projects. He manages and prepares documents for roadway projects, including: roadway geometrics, cross sections, soil erosion and sediment controls, landscaping, sewer, water, quantities, cost estimates, and special provisions. He also manages and prepares drainage studies and investigations including permitting and ordinance interpretation, highway drainage system design, storm sewer and culvert analysis and design, watershed analysis, and retention/detention facility concept design.

Randy has working knowledge of the local municipal and county ordinances for transportation and stormwater projects in northeast Illinois. He also has extensive experience with regulatory agencies such as IDNR-OWR, USACE, U.S. Fish and Wildlife Service, Soil and Water Conservation Districts, and IDOT.

REPRESENTATIVE EXPERIENCE

LUCINDA AVENUE AND NORTH FIRST STREET BRIDGES REPLACEMENT, City of DeKalb

— Project Manager for the Phase II plans and bid documents to replace two bridges in the City of DeKalb. Coordination was required with City Staff, Northern Illinois University, Illinois Department of Natural Resources, U.S. Army Corps of Engineers, and Illinois Department of Transportation. The project is federally funded using the Illinois Special Bridge Program.

DEKALB WATER MAIN, City of DeKalb — *Project Manager* for the water main replacement on South First Street in DeKalb. The project included preparing plans, specifications, and estimates for water main replacement and pavement patching. The project was divided into two separate phases; water services and fire hydrants were replaced with the water main improvements. Phase I consisted of roughly 2,100-feet of 8-inch water main replacement and 2,000-feet of pavement patching. Phase II involved roughly 900-feet of 8-inch water main replacement, 900-feet of 12-inch water main replacement and 1,500-feet of pavement patching.

KISHWAUKEE RIVER MULTI-USE PATH, City of DeKalb — *Project Manager* for the construction of a new bike path that connects Northern Illinois University to the Prairie Path. The proposed multi-use path crosses below both the Union Pacific Railroad and IL Route 38 bridges. The project included both HMA and concrete path, overhead railroad protection structure, drainage infrastructure, underpass lighting, and scour protection measures. Right-of-way/Easement appraisal and negotiations were necessary for the project. Agency approval and permitting for this project included IDOT, Northern Illinois University, DeKalb Park District, Union Pacific Railroad, Illinois Department of Natural Resources — Office of Water Resources, and the US Army Corps of Engineers.

ANNIE GLIDDEN ROAD WIDENING AND REPLACEMENT, City of DeKalb — *Drainage Engineer* responsible for the design, Hydraulic Report, and permit for the project's only major culvert crossing. The project consisted of widening and reconstruction of approximately 6,000 feet of the highly traveled Annie Glidden Road. Drainage engineering included delineation of the tributary drainage area, determination of flows for a Zone A floodplain, hydraulic analysis using HEC-RAS, and preparation of the Hydraulic Report. Permitting and coordination included USACE Regional Permit for work within the Waters of the U.S. and IDNR-OWR for the culvert replacement over the unnamed tributary to the Kishwaukee River.

SOUTH MCLEAN BOULEVARD FROM SPRING STREET TO STEARNS ROAD, Village of South

Elgin — *Principal-in-Charge* for the Phase II land development of the roadway reconstruction and widening projects. The project will make the existing deteriorated 2-lane roadway to a 5-lane urban section as part of jurisdictional transfer from IDOT to the Village of South Elgin. Project included topographic survey, land survey, preparation of plats and legals, roadway plans and bid documents in accordance with IDOT standards. The roadway improvements include a new traffic signal at North Landcaster, new trunk storage storm sewer, pedestrian facilities, and a noise wall. Project included coordination with a proposed residential development, USACE, and IDOT.





AMY MCSWANE, PE, PTOE PHASE I AND TRAFFIC ENGINEERING MANAGER

KEY STAFF

Amy is our Phase I and Traffic Engineering Manager with 21 years of experience in the preparation of Environmental Assessments, Environmental Class of Action Determination documents, and Section 4(f) environmental documents for federally funded projects. She also has extensive public involvement experience. Amy has prepared public hearing presentations and conducted regulatory agency coordination. She is involved in the preparation of highway location/design reports, intersection design studies, traffic projects, traffic capacity analysis, traffic systems analysis and modeling, accident analysis and safety improvement studies, and cost estimates. Prior to joining HLR, Amy worked for IDOT for six years as a Federal Aid Location Engineer (Phase I Project Manager).

REPRESENTATIVE EXPERIENCE

LUCINDA AVENUE OVER KISHWAUKEE RIVER, City of DeKalb — *Phase I Project Manager* for this federally funded bridge improvement. The purpose of the project is to improve the noted deficiencies in the bridge geometrics, hydraulics, and structural condition and improve the overall safety of the section. The scope of work includes topographic and stream survey, wetland delineations, PESA, tree survey, hydraulic and drainage design, preliminary structural design and BCR, roadway design, a Project Development Report, and a public meeting.

NORTH FIRST STREET OVER KISHWAUKEE RIVER, City of DeKalb — Phase I Project Manager for this federally funded bridge improvement. The purpose of the project is to improve the noted deficiencies in the bridge hydraulics, replace a deteriorated structure, improve overall safety of the section, and provide a long-term economical project for the City. The scope of work includes topographic and stream survey, wetland delineations, PESA, tree survey, hydraulic and drainage design, preliminary structural design and BCR, roadway design, a Project Development Report, and a public meeting. Evaluation of moving the DeKalb Nature Trail's crossing of the roadway to under the structure is included.

KISHWAUKEE RIVER MULTI-USE PATH, City of DeKalb — *Project Manager* for the preliminary engineering of a new bike path that connects Northern Illinois University to the Prairie Path. The proposed multi-use path crosses below both the Union Pacific Railroad and IL Route 38 bridges. The project included both HMA and concrete path, overhead railroad protection structure, drainage infrastructure, underpass lighting, and scour protection measures. Right-of-way/Easement appraisal and negotiations were necessary for the project. Agency approval and permitting for this project included IDOT, Northern Illinois University, DeKalb Park District, Union Pacific Railroad, Illinois Department of Natural Resources – Office of Water Resources, and the U.S. Army Corps of Engineers.

ACCESS TO TRANSIT SHARED-USE PATH, Village of Franklin Park — *Project Manager* for this CMAQ-funded shared-use project. The project involves providing a shared-use path through the Village to connect several industrial areas, transit facilities, and the downtown. Portions of the project are on-street and portions are accommodated with an off-street multi-use path. The scope of work includes, but is not limited to: land surveying, geotechnical, environmental, and preliminary engineering services for bicycle improvements; ADA-compliance; and completing gapped sidewalk sections. Once completed, it will provide safer and more efficient transit for bicyclists and pedestrians and encourage the use of public transportation.

SOUTH STREET/MADISON STREET/LAKE AVENUE ROUNDABOUT, City of Woodstock — **Project Manager** for the federally funded Phase I/II roundabout design project. The existing intersection is a five-leg all-way-stop controlled intersection with geometry that creates traffic backups and causes vehicles arriving at the same time to have uncertainty as to who has the right-of-way to proceed. A modern single-lane roundabout is proposed that will decrease vehicle delay and eliminate right-of-way uncertainty at the intersection. Decorative features including stamped and colored pavements and sidewalks, sidewalk furniture, and decorative street lighting are proposed to enhance the roundabout's aesthetic features and to serve as a gateway to Woodstock's Historic Public Square. The project includes topographic survey, field inspections, geometric design, drainage design, significant utility relocations, roadway lighting, landscaping, right-of-way plats, appraisals and negotiation services, and preparation of Phase II plans, specifications, and estimates. An open house public meeting was held to solicit public input on the proposed roundabout.





NICK PIEKARSKI, PE, CFM, DECI

KEY STAFF

SENIOR DESIGNER

Nick is a Professional Engineer with over a decade of experience providing field engineering on construction projects and assisting with the preparation of roadway plans, specifications, and estimates. He also assists with the preparation of drainage studies, Hydraulic Reports, and storm sewer design. Nick combines his design and construction knowledge to identify and remedy potential issues while providing a design that eliminates potential issues during construction.

REPRESENTATIVE EXPERIENCE

IL ROUTE 31 AND MOOSEHEART ROAD INTERSECTION IMPROVEMENTS, Kane County Division of Transportation. Assisted with revisions to the Location Drainage Study for the intersection improvements. The project consisted of the design of Phase I improvements including the addition of separate turn lanes and installation of new traffic signals. The project also involved pavement widening/reconstruction and installation of curb and gutter with storm sewers. The Location Drainage Study evaluated the stormwater flow and outfalls from the project that are tributary to the Fox River. The drainage design met both IDOT requirements and Kane County Storm Water Management Ordinances.

LATHAM STREET PHASE II, City of Sandwich — *Project Manager and Lead Design Engineer* for the reconstruction of approximately on mile of Latham Street between Center Street and north of Sandhurst Drive. The project improvements included utilizing full-depth reclamation for cost savings to the City. The project also consisted of the design of multiple City-owned utilities including upsizing approximately 2500 feet of water main from 4" to 10" ductile iron pipe, approximately 2500 feet of new main line storm sewer, and sanitary spot repairs. The project was federally funded using Surface Transportation Program (STP) funds which required compliance with IDOT Bureau of Local Roads standards. Additional tasks were included but not limited to review of plans, contract booklet, estimates of probable costs, etc., and coordination with IDOT officials and private utility companies.

MILL STREET AT COMMONS STREET TRAFFIC SIGNALS, City of Naperville. Aided HLR's Traffic team in the design of ADA compliant sidewalks as part of the traffic signal design plans at Mill Street and Commons Street in Naperville, IL. The intersection required the addition of traffic signals as vehicular and pedestrian traffic volumes increased with the construction of the Nike Sports Complex. Sidewalks at the intersection and leading into the site for pedestrian use were designed to meet ADA/PROWAG requirements.

POPLAR AVENUE RESURFACING AND SIDEWALK IMPROVEMENTS, City of Elmhurst — **Design Engineer** in designing ADA/PROWAG compliant crosswalks and sidewalk ramps at 34 corners within the project limits. All sidewalk ramps were retrofitted to existing sidewalks within the limited existing right-of-way requiring the use of side curbs. The project consisted of design services for resurfacing Poplar Avenue in Elmhurst, IL from Vallette Street to Park Avenue.

DUNSTAN-SUNSET WATER MAIN IMPROVEMENTS, City of Elmhurst — *Design Engineer* for updates to the Dunstan Road and Sunset Road water main for the City of Geneva. The project included preparing plans and specifications for upsizing and relocating the neighborhood's water main. The existing water main and service lines were located in the rear yards of residences along Dunstan Road and Sunset Road. The existing line was to be abandoned and relocated under the pavement within the existing City right-of-way. Special coordination was completed with the City and residences to determine houses that could be re-plumbed to provide a water service at the front of the building and which residences required the continued use of the rear service connection.

BUSSE WOODS BIKE PATH EXTENSIONS, Elk Grove Village — *Design Engineer* for the connection of the existing forest preserve bike path to Arlington Heights Road at three locations. The project included preparing plans, specifications and estimates for construction of the bike path and ADA-compliant ramps along with pedestrian traffic signal improvements at each location. Approximately 1025 feet of bike path construction and improvements to three intersections were designed for the project.





RYAN LIVINGSTON, PE MUNICIPAL ENGINEERING MANAGER

KEY STAFF

Ryan has over 15 years of experience in design and construction engineering and is currently our Municipal Engineering Manager and a Vice President of the firm. His experience includes Preliminary, Phase II, and Phase III engineering, and environmental inspections for public agencies. Ryan's responsibilities include administration, oversight, and coordination of municipal engineering projects, such as: annual maintenance programs, grant improvement programs, drainage improvements, water/wastewater improvements, and bridge and culvert inspections. He has experience performing many of the typical tasks required of a municipal engineer.

Ryan previously served as the City of Woodstock's City Engineer and Assistant Director of Public Works. In this capacity, he managed the division superintendents, reviewed private development plans, administered capital improvement projects, prepared budgets for current and future needs, and developed programs to improve the lives of Woodstock residents.

REPRESENTATIVE EXPERIENCE

BODE ROAD AND SPRINGINSGUTH ROAD STP IMPROVEMENTS, Village of Schaumburg — *Principal-in-Charge* for the Phase I and Phase II design engineering services for the Bode and Springinsguth STP Improvements. The two corridors are two separate STP projects requiring coordination with Northwest Municipal Conference, IDOT, and Chicago Area Metropolitan Agency for Planning. The proposed improvements include 3D scanning, topographic survey of utilities, manhole/utility inspection, bike path and pavement evaluation, guardrail evaluation, traffic signal warrant analysis, coordination with subconsultants for geotechnical services and sewer inspection and evaluation and preparation of engineering plans and bid documents in accordance with IDOT Bureau of Local Roads requirements for federal aid projects. Project includes HMA surface removal, HMA leveling binder, HMA binder and HMA surface courses, HMA patching, bike path improvements, ADA upgrades to sub-standard facilities, and spot repairs to storm and sanitary sewer. The project design is currently underway and scheduled for construction in 2022. Potential additional services dependent on findings include traffic signal design and maintenance of traffic.

NORTHEAST AREA NEIGHBORHOOD STREET IMPROVEMENTS, City of Elgin — Principal-in-Charge and Project Manager for the design and construction of the 2021 Streets Improvement Program in the Northeast Area Neighborhood. Plans, Specifications, and Estimates were prepared including bid alternates for street resurfacing which included HMA surface removal and replacement, HMA full depth replacement, total reconstruction, and bid alternates for cold-in-place recycling. After construction award due to COVID-19 related delays, scheduling issues arose with two streets within the plan's adjacent schools. To avoid disruption, HLR worked closely with the Contractor and the City to extend limits of streets that were unaffected and remove the affected streets to still maximize allowable improvements under the currently allocated budget. Other appurtenant improvements included curb and gutter removal and replacement, sidewalk removal and replacement, sidewalk ramp replacement to adhere to ADA standards, and storm sewer and sanitary sewer spot repair. Construction services included Resident Engineering, stakeholder coordination, daily communication to the City's 311 portal, IDOT documentation and closeout. Even with the changes the construction cost was under budget and the engineering cost within budget.

ANNUAL STREETS PROGRAM, City of Woodstock — *Principal-in-Charge and Project Manager* for the design and construction of 2012-2018 and 2021 Annual MFT and non-MFT Maintenance Program. The current program in 2021 includes \$15 million worth of designed improvements consisting of full street reconstruction and various replacement of City-owned utilities: water main, storm sewer and sanitary sewer. The 2020 project was the first year of a five-year plan to invest approximately \$50 million into the City streets and underground infrastructure. The annual program involves the planning, design, construction supervision, and coordination of the City's 25-year plan to resurface and reconstruct their street system. The preliminary engineering included evaluating existing streets and prioritizing based on annual budgets, anticipated street life, and current condition. Improvements included reconstruction, underground utilities, resurfacing, patching, cold-in-place recycling, updating substandard facilities to current ADA requirements, crack sealing, and pavement marking.





IAN P. NILAUSEN, PE, SE SENIOR STRUCTURAL ENGINEER

KEY STAFF

Ian has ten years of experience performing Phase I, II, and III engineering services for bridge design, inspection of bridges, structural design, and construction inspection for public sector clients. Ian is also an NBIS-qualified Team Leader for bridge inspections in the State of Illinois.

REPRESENTATIVE EXPERIENCE

TR 244 OVER COON CREEK, DeKalb County Highway Department. Performed expedited Phase I and II engineering for the replacement of a recently closed structure utilizing a single-span (1@64'-0") precast prestressed concrete deck beam bridge on spill-thru abutments and approach roadway work.

NBIS BRIDGE INSPECTIONS, Kane County Division of Transportation — As *Team Leader*, Ian provides field inspection, structural condition evaluation, legal and overload permit ratings, posting recommendations, and scour inspections. The final inspection reports include a detailed narrative of all structural and geometric deficiencies, photos, and recommended repair or rehabilitative improvements with cost estimate. HLR has developed a GIS-compatible data file of all bridge inspection data and load ratings. HLR has completed NBIS safety inspection for approximately 150 bridges as part of this contract.

STEARNS SCHOOL ROAD OVER MILL CREEK, Lake County Division of Transportation. Performed emergency inspection of existing 13'-11" corrugated structural plate pipe arch (CSPPA) culvert after collapse of adjacent CSPPA culvert barrel. Emergency coordination and permitting for the temporary replacement of collapsed CPPA culvert barrel utilizing two 72" diameter corrugated metal pipe (CMP) culverts. Phase I and II engineering for the permanent reconstructed crossing utilizing single-span (1@61'-0") steel wide flange bridge with concrete deck on spill-thru abutments and approach roadway work.

NBIS BRIDGE INSPECTIONS, City of Belvidere. This project consists of the NBIS and underwater inspections, reports, structural evaluations, and recommendations for all structures within the City since 2000. Ian served as NBI Team Leader for seven structures.

NBIS BRIDGE INSPECTIONS, Lake County Division of Transportation. Ian served as *Team Leader* for the In-Depth inspection and reporting for 2 structures in the Lake County Highway system. He also completed the structural evaluation and repair recommendations for all structures on this project.

NBIS BRIDGE INSPECTIONS, Village of Big Rock. This project consisted of the NBIS and Special inspections, structural load ratings, rehabilitations, and maintenance recommendations for three Village-owned structures. Ian served as Team Leader.

NBIS BRIDGE INSPECTIONS, Village of Vernon Hills. This project included the In-Depth inspection of two bridges and one culvert for Vernon Hills. The inspections required hands-on access. Ian was Team Leader for the inspections. He performed the inspections and produced the inspection reports.

NBIS BRIDGE INSPECTIONS, Village of Bartlett. This project consisted of the NBIS and Special inspections, and maintenance recommendations for three Village-owned structures. Ian served as Team Leader.

NBIS BRIDGE INSPECTIONS, PTB 184, Illinois Department of Transportation. This project included the In-Depth and Element Level inspections of seven bridges for IDOT. The inspections required hands-on access. Ian was Team Leader for the inspections. He performed the inspections and produced the inspection reports.

PEDESTRIAN BRIDGE INSPECTIONS, Village of Lincolnshire. This project included the In-Depth inspection of four pedestrian bridges for Lincolnshire. The inspections required hands-on access. Ian was Team Leader for the inspections. He performed the inspections and produced the inspection reports.

BULL VALLEY ROAD OVER TRIBUTARY TO FOX RIVERS, McHenry County Division of Transportation. Prepared Phase I Type, Size & Location drawing for the replacement of an existing culvert utilizing a stage constructed single-span cast-in-place reinforced concrete slab bridge on spill-thru abutments.





PROFESSIONAL REGISTRATIONS
Professional Engineer, Illinois, #062.069187

YEARS OF EXPERIENCE

9 / 2 at HLR

EDUCATION

Bachelor of Science, Civil Engineering, Valparaiso University

PROFESSIONAL CERTIFICATIONS

30-Hour Construction Industry Outreach, OSHA, February 2020

Module III: Inspection of Erosion and Sediment Control Best Management Practices (BMPS), 2021

Soils Field Testing & Inspection. STTP S-33, 2015

Module I: Fundamentals of Storm Water Pollution and Erosion and Sediment Control, 2015

Illinois Department of Transportation (IDOT)
Document of Contract Quantities, #1813434

ICORS, 2014

NICK FAGAN, PE RESIDENT ENGINEER

KEY STAFF

Nick is a Professional Engineer with over nine years of experience providing field engineering on infrastructure construction projects and is our Tollway Project Manager. Responsibilities have included inspection and resident engineering services on both small-scale to high-profile improvements projects on local roadways and storm sewers. His experience includes ADA compliance for sidewalks, erosion and sediment control inspection, quantity reporting, documentation, and contractor and stakeholder coordination.

REPRESENTATIVE EXPERIENCE

2021 ELGIN NORTHEAST AREA RESURFACING PROJECT (NEAR), City of Elgin — *Resident Engineer* for an approximately \$1M street resurfacing and ADA compliance update on four (4) streets in the City of Elgin. Included ADA sidewalk and ramp installation, curb patching, over 1.5 miles of milling and repaving existing bituminous surface, extensive pavement patching, reconstruction of utility structures in the roadway, structure adjustment, contractor and stakeholder coordination, QA material testing coordination, quantity measurements, and all final documentation on this MFT-funded project.

7TH **AVENUE RESURFACING, City of St. Charles** — **Resident Engineer** for resurfacing a 1.3 mile section of South 7th Avenue from IL Route 64 to Division Street. Included ADA sidewalk and ramp installation, Curb patching, milling, and repaving the existing bituminous surface, limited pavement patching, water valve and valve vault replacement, fire hydrant replacement, structure adjustment, traffic signal loop detector replacement, contractor coordination, QA material testing coordination, quantity measurements and all documentation for this IDOT Local Roads project.

OAK PARK SRTS TRAFFIC SIGNAL UPGRADE, Village of Oak Park / Illinois Department of Transportation — Resident Engineer for the removal of existing pedestrian, and some traffic signal heads, and replacement with new countdown timer heads with new controllers and battery backup systems. Responsibilities included: contractor and stakeholder coordination, pay estimate generation, and generating Contract Change Orders.

UTILITY RELOCATIONS ON THE I-490 CORRIDOR, Illinois State Toll Highway Authority — *Project Manager* for eight (8) consultants performing oversight on 18 Work Orders associated with the removal or relocation of utility infrastructure currently in conflict with the future I-490 corridor. Duties include staffing and scheduling consultants, coordinating with multiple railroads, CDA, FAA, and Tollway, providing inspection review, and coordination with the residents and businesses along the corridor.

I-490 ELGIN O'HARE WESTERN ACCESS TOLLWAY BRIDGE CONSTRUCTION & I-90 COLLECTOR-DISTRIBUTOR OVER HIGGINS CREEK, Illinois State Toll Highway Authority — Field Inspector responsible for the I-90 portion include erosion control, noise abatement wall (NAW) installation and documentation. Responsibilities for the I-490 portion include erosion control, construction of bridge deck, parapet walls, approach slab and parapets, and subsurface structural components (approach slab bents), and electrical/lighting installation.

DUPAGE COUNTY COMPLEX PARKING LOT ASSESSMENT, DuPage County Public Works and Facilities Management Department — *Field Inspector and Resident Engineer* for the removal and repaving of five (5) parking lots in the DuPage County Complex. Improvements included existing pavement removal, determination of subgrade quality, minor storm drainage installation, contractor coordination, quantity documentation, cost estimate generation, QA manager, and ADA sidewalk and ramp installation.

ELGIN O'HARE WESTERN ACCESS ON-CALL AND AS-NEEDED CONSTRUCTION MANAGEMENT UPON REQUEST, Illinois State Toll Highway Authority — *Project Manager* for ISTHA contract I-17-4682, which provides the Illinois Tollway and their Corridor Construction Manager with Construction Management services along the I-390 and I-490 corridors. Tasks include proposal generation, subconsultant coordination, P4G mentoring of DBE firms, diversity inclusion and tracking for assigned tasks, invoice review, budget / fund allocation management, as well as Resident Engineer and Field Inspector responsibilities listed below on other ISTHA Projects.





REJENA (JENI) LYON, PE, PLS

KEY STAFF

Jeni Lyon is the President/CEO at the firm with 30 years of professional engineering and land surveying experience managing the surveying and acquisition needs of infrastructure projects. She has prepared boundary surveys, control surveys, right-of-way surveys, land acquisition services, and various route surveys in support of engineering services. Prior to joining HLR in 1999, Jeni prepared and reviewed right-of-way and land acquisition documents for the Illinois Department of Transportation. In her current role, she provides leadership and management that is aligned with our overall strategic vision and culture of the firm.

REPRESENTATIVE EXPERIENCE

LAND ACQUISITION AND SURVEYING SERVICES UPON REQUEST - SYSTEMWIDE I-14-4646, Illinois State Toll Highway Authority — Principal-in-Charge responsible for overseeing land acquisition activities as assigned such as appraisals, review appraisals, specialty reports, negotiations, relocation, GIS activities, survey, and preparation of plats and legal descriptions. Management includes directing internal staff as well as nine subconsultants. Also responsible for invoicing and preparing and auditing the Quality Control plan.

KIRK ROAD OVER THE UNION PACIFIC RAILROAD (UPRR), Kane County Division of Transportation. Responsible for preparing the Plat of Highways and legal descriptions for 12 parcels between Cherry Lane and IL Route 38. Acquisition includes proposed right-of-way, permanent and temporary easements necessary for a new bridge over the UPRR. Plats and legals were completed as a subconsultant to Strand Associates, Inc.

IL ROUTE 38 (EAST STATE STREET) IL ROUTE 25 TO KIRK ROAD, IDOT PTB 199-001.
Responsible for preparing the Plat of Highways and legal descriptions for 26 parcels between

IL Route 25 and Harrison Street. Acquisition includes proposed right-of-way and temporary easements. Millennia Professional Services acted as a subconsultant to prepare the plats between Harrison Street and Kirk Road.

COOMBS ROAD OVER THE D, M & E RAILROAD, Elgin Township Road District. Responsible for preparing the Plat of Highways and legal descriptions for 6 parcels between Highland Avenue and Brindlewood Lane in Kane County. Acquisition includes right-of-way, permanent easements and temporary easements necessary for constructing a new bridge over the Dakota, Minnesota and Eastern Railroad.

ON-CALL SURVEY SERVICES, 2008-2011 AND 2014-PRESENT, Kane County Division of Transportation. Project Manager directing the survey operations for various land surveying services on a work-order basis. Projects included the boundary survey of Seavey Road gravel pit, monitoring the Lake Campton spillway at Burlington Road during construction of Burlington Road and Corron Road, various right-of-way staking projects, preparation of a Plat of Highways for a parcel on Orchard Road, locating utilities on Orchard Road at Rochester, and providing elevations and coordinates for parking lot extension and bike path relocation on the Stearns Road project. Services also included the Plat of Highways and legal descriptions for Fabyan Parkway at IL 31 for the exchange of land between the County of Kane and the Kane County Forest Preserve District. Pre- and post-construction cross sections were performed at Huntley Road and Galligan Road, volumes were calculated, and as-built reports prepared. Reviewed the Plat of Highways and legal descriptions for Dauberman Road from Granart Road to U.S. 30 and performed various survey activities related to Longmeadow Parkway.

LONGMEADOW PARKWAY, Kane County Division of Transportation. Responsible for preparing the Plats of Highways and legal descriptions for the new Longmeadow Parkway at IL Route 31 and IL Route 62. The project also included the pickup survey for the entire Longmeadow corridor which involved coordinating with the design firms for all four sections of the project. The new corridor, located in Kane County near the McHenry County border, will alleviate chronic traffic congestion on east and west routes within the area.

IL ROUTE 59 AT U.S. ROUTE 20, COOK COUNTY, IDOT PTB 163-016. Prepared the Plat of Highways and legal descriptions for approximately 20 parcels. Acquisition included proposed right-of-way, temporary easements, and access control for the re-designed interchange.





ERICA SPOLAR, CWS, DECI ENVIRONMENTAL SERVICES MANAGER

KEY STAFF

Erica is the Executive Vice President and Environmental Services Manager with over 30 years of experience as an Engineer and Environmental Project Manager. She has conducted noise and air quality analyses and overseen wetland delineations and ecological studies for a variety of transportation, utility, and development projects. Erica has obtained wetland and stormwater permits for several projects at the federal, state, and local level. She has also been involved in several wetland restoration projects and involved in resolving wetland violations issues.

REPRESENTATIVE EXPERIENCE

SWAN ROAD BRIDGE, TranSystems/Kane County Division of Transportation — *Environmental Manager* for the environmental tasks associated with the project including the survey, wetland delineation and report, special Waste screening, and permitting.

STEARNS SCHOOL ROAD BRIDGE PROJECT, Lake County Division of Transportation — *Project Manager* overseeing all environmental tasks including the wetland delineation, report, permitting and CCDD.

STEARNS SCHOOL ROAD EMERGENCY CULVERT REPAIR PROJECT, Lake County Division of Transportation — *Project Manager* overseeing all environmental tasks including the wetland delineation, report, permitting and CCDD.

WALKER PARK CULVERT AND BRIDGE PROJECT, Pleasant Dale Park District — *Project Manager* overseeing all environmental tasks including the grant preparation, wetland delineation, report, permitting and naturalization of the creek channel.

DIX IRVINGTON ROAD PROJECT, Jefferson County — **Project Manager** overseeing all environmental tasks including the wetland delineation and report and PESA report.

FIDDYMENT CREEK, MILNE CREEK, AND FRACTION RUN WATERSHED PLAN, City of Lockport — *Project Manager* overseeing the development of the watershed plan that is part of an IEPA Section 319 grant awarded to the City of Lockport.

ILLINOIS 59 PEDESTRIAN BRIDGE PROJECT, TranSystems/Village of Streamwood — *Project Manager* overseeing all environmental and survey tasks including wetland delineation and report, PESA report, and stream and topographic surveys.

HSIP MONTGOMERY AND PLANK ROAD PHASE I PROJECT, Kimley Horn/KDOT — *Project Manager* overseeing all environmental tasks including the wetland delineation and report, tree survey, and PESA.

VARIOUS REMEDIATION PROJECTS IN ILLINOIS, 2017-2021. Overseeing several remediation projects including Beck Oil Station in Princeton, Illinois, Road Ranger stations in DeKalb and Ottawa, Illinois, Stark's Corner gas station in Hampshire, Illinois, Hanneghan's Amoco in Galesburg, Illinois, and Zeke's Country Store in Warren, Illinois.

DESIGN ENGINEERING SERVICES CONTRACT FOR WATER AND SEWER SYSTEMS, DuPage County Public Works — *Project Manager* for work orders generated under this contract including the DuPage County Complex Parking Lot, Woodridge, Green Valley Fuel Storage project, and SSES 9 East Collection System project.

Project Manager of several ESA and PESA Projects, Reviewed the following PESAs/ESAs:

- ▶ Meacham Parcel Phase 1 ESAs, Village of Schaumburg, 2021
- ▶ Goose Pond and Largemouth Lake Phase 1 ESA, 2021
- Dix Irvington Road PESA, Jefferson County, Illinois, 2021
- ▶ Sugartree Tree Phase 1 ESAs, Wayne County Illinois, 2021
- ► City of Joliet Roadway Program PESA, Joliet, Illinois, 2021
- HSIP Montgomery and Plank Road Phase I Project, Kimley Horn/KDOT, Kane County, Illinois, 2020
- ▶ Various Phase I ESAs, Campbell Energy, Various Counties, Illinois, 2020.



Municipal Engineering Services
City of DeKalb

SCOPE OF SERVICES EXPERIENCE

Annual Street Maintenance, typically \$1-2 million in construction cost

WOODSTOCK ANNUAL STREETS PROGRAM

City of Woodstock

HLR has been providing engineering services to the City of Woodstock for 35+ years. Their 2020 Resurfacing Program consisted of roughly \$9M worth of resurfacing and rehabilitation improvements broken into four separate contracts being constructed concurrently. The 2020 program is the first year of a five year plan to invest approximately \$50M into the City streets and underground infrastructure.

The 2021 program consisted of the design and construction of the \$2M reconstruction and utility improvements and we are currently finishing the design of ~15M of improvements to begin in spring of 2022.

The annual program involves the planning, design, construction supervision, and coordination of the City's 25-year plan to resurface and reconstruct their street system. The preliminary engineering included evaluating existing streets and prioritizing based on annual budgets, anticipated street life, and current condition. Improvements included reconstruction, underground utilities, resurfacing, patching, cold-in-place recycling, updating substandard facilities to current ADA requirements, crack sealing, and pavement marking.



REFERENCE:

Ms. Christina Betz Director of Public Works 815.338.6118 cbetz@woodstock.il.gov

ANNUAL STREETS PROGRAM

City of Elgin

HLR has provided design and construction engineering for the City's annual street resurfacing programs from 2019-present. The 2019 improvements included various road maintenance activities for a total of 3.5 miles of roadway such as pavement resurfacing, sidewalk, curb and gutter, ADA/ PROWAG upgrades, and drainage structure installation and adjustments. The project also involved intersection improvements at South Street and Walnut Street that promoted limited access for safer turning movements in an intersection that had been closed for many years.

The 2020 improvements included various road maintenance activities for a total of 2.4 miles of roadway with similar improvements as in 2019. The project also involved the full reconstruction of Price Drive due to failing subgrade under the road.

The 2021 program was designed and approved using MFT funding. The project includes approximately 1.5 miles of milling and resurfacing of existing streets. Project also includes improvements to existing pedestrian facilities to bring them into compliance with ADA and PROWAG standards.



REFERENCE:

Mr. Mike Pubentz, PE Director of Public Works 847.931.5968 pubentz_m@cityofelgin.org

ANNUAL MFT STREETS PROGRAM

City of Sandwich

Since 2017, HLR has been helping the City of Sandwich affordably maintain their streets with their Motor Fuel Tax (MFT) street improvement program. The City has used a similar approach to address their failing streets as many municipalities have – performing mill and fill operations replacing only the minimal top ~2 inches of asphalt. In recent years they realized that this method was not the most efficient approach to fix underlying pavement failures.

For the first year, we performed an informal evaluation of the roadway conditions with City staff and provided several maintenance strategy alternates for the City's review. We also recommended that the City obtain geotechnical borings to fully analyze the existing HMA and sub-base. Examples of alternates included: HMA resurfacing only where applicable, full-depth reconstruction, and 15-inch depth reclamation with and without additives along with other typical appurtenant construction including patching and base repair where required in the field.

The improvements included roadway resurfacing, reconstruction, full depth reclamation, sidewalk, curb and gutter, ADA/PROWAG upgrades, drainage structure adjustments, and roadside ditch improvements.



REFERENCE:

Mr. Todd Latham Mayor 815.578.1402 tlatham@sandwich.il.us



Municipal Engineering Services
City of DeKalb

SCOPE OF SERVICES EXPERIENCE

Water Supply/Distribution, maintenance, and expansions

HARVARD AND ARLENE WATER MAIN

Village of Palatine

Both the Arlene Avenue and Harvard Drive corridors contain aged and failing water main requiring full replacement.

HLR provided design and construction engineering services for the Harvard Drive and Arlene Avenue Water Main Replacement Projects. The proposed improvements include 3D scanning, topographic survey of utilities, manhole/utility inspection, zinc-coated ductile iron water main, near and far side commercial and residential water services, sanitary sewer spot repairs, and full depth HMA patching.

The Arlene Avenue water main consisted of ~1,380 linear feet (If) of new water main located on a residential street within a mature neighborhood. The new 8" zinc-coated ductile iron water main was located under the existing street pavement to avoid mature trees located within the parkway. The Harvard Avenue water main replacement included ~1,250 lf of new 8" ductile iron water main also located on a mature residential street. Approximately 300 lf of new 6" ductile iron water main was installed on Yale Court, a short cul-de-sac intersecting Harvard Avenue. The Harvard Avenue main was also located under the pavement to avoid parkway trees.



REFERENCE:

Mr. Matt Barry Director of Public Works 847.202.6900 mbarry@palatine.il.us

DUNSTAN-SUNSET WATER MAIN IMPROVEMENTS

City of Geneva

The City of Geneva was looking to provide a better stormwater conveyance system to address continued and persistent flooding within this older neighborhood caused by undersized storm sewers and unserved areas, all while minimizing disturbance to the residents. The project included preparing plans and specifications for up-sizing and relocating the neighborhood's 3,300 feet of water main. The existing water main and service lines were located in the rear yards of residences along Dunstan Road and Sunset Road.

Special coordination was required with the City and residences to determine houses that could be re-plumbed to provide a water service at the front of the building and which residences required the continued use of the rear service connection. HLR was able to construct this project while maintaining electrical, water, and sanitary services throughout the directional drilling process and reducing impacts to landscaping and neighborhood amenities. HLR worked closely with the residents to provide timely information about design timetable, schedule, and construction updates.



"Just want to voice my appreciation for all of your hard work on the project. I knew the residents were going to need extra care and you guys stepped up." - Bob Van Gyseghem



REFERENCE:

Mr. Bob Van Gyseghem Superintendent of Water and Wastewater 630.232.7494 bvangyseghem@geneva.il.us

WATER SUPPLY IMPROVEMENTS

Village of Union

HLR developed plans to replace Well No. 2 within the Village in 2020. The existing well accesses an aquifer that can run dry during dry summer months due to local farming irrigation demand which then causes the only other well within town to run without a backup. This current configuration causes significant stress on the Village's water supply.

The proposed new well would access a deeper, more stable aquifer that would be more reliable for Village water production. Included in the plans is the new drilling and sleeving requirement, pumps, electrical, backups, and connections to the raw water line. HLR obtained the IEPA permit for the new well and is seeking funding assistance for the improvement.



REFERENCE:

Mr. Bob Wagner Village President 815.923.4153 villagemayor2007@sbcglobal.net



Municipal Engineering Services
City of DeKalb

SCOPE OF SERVICES EXPERIENCE

Intersection reconstructions, signalized or roundabout

LAKE-SOUTH-MADISON ROUNDABOUT

City of Woodstock

The existing five-legged intersection is a source of traffic delays and safety concerns for Woodstock. The City desired a roundabout intersection that would improve conditions and be an entryway into the historic downtown square. Phase I included refinement of the roundabout geometrics, environmental coordination, and public coordination. Since federal funding is going to be used for construction, coordination with IDOT and all necessary forms and procedures were followed.

Phase II design services commenced once geometric concurrence was provided by IDOT. This included pavement design, roadway plan and profiles, water relocation, storm sewer relocation, ADA sidewalk layout, pavement marking, signing, lighting, soil erosion and sediment control, and utility coordination. The lighting design, to be used as part of the aesthetic entryway to the historic downtown square, included the selection of multiple LED poles that matched the poles used in the downtown area and meet IDOT requirements of not specifying proprietary materials. Photometric calculations and voltage drop calculations were necessary to provide the lighting, wiring, and controller design.

The project is on the IDOT January letting and is anticipated to begin construction spring of 2022.



REFERENCE:

Ms. Christina Betz Director of Public Works 815.338.6118 cbetz@woodstock.il.gov

U.S. ROUTE 14 AT WILKE ROAD

Village of Arlington Heights

HLR performed preliminary, design, and construction engineering for the intersection of U.S. Route 14 at Wilke Road to improve vehicular and pedestrian safety and relieve congestion.

The improvements included the addition of an eastbound right-turn lane, a dual northbound left-turn lane, and the removal of the northbound right-turn lane. Protected-only left-turning movements on U.S. Route 14 are also included. A multi-use path along Wilke Road will provide access to the Metra facility for pedestrians and bicyclists.

Since the project included an at-grade crossing with the UPRR along Wilke Road, the signals were timed with the advance warning for the approaching trains. All of the proposed improvements were coordinated through IDOT, the ICC, and the UPRR.



REFERENCE:

Ms. Nanci Julius, PE Project Manager 847.368.5000 njulius@vah.com

LONGMEADOW PARKWAY

Kane County Division of Transportation

HLR completed Phase I and II engineering services for Longmeadow Parkway. The proposed corridor will provide a new Fox River crossing and reduce congestion throughout northern Kane County.

Phase II was separated into two sections: A-1, from Huntley Road to just west of Randall Road, and A-2, from Randall Road to just east of Stonegate Road. Section A-1 was locally-let and included reconstruction of Huntley Road for approximately 3,500 feet, Boyer Road for 1,000 feet, and a new rural section of Longmeadow Parkway through an existing farm field for 2,500 feet. Due to tight right-of-way, underground detention was used to store stormwater in accordance with the Kane County Stormwater Ordinance. It also included new traffic signals at the Huntley, Boyer, and Longmeadow intersection.

Section A-2 included 3,000 feet of Randall Road reconstruction and 1,700 feet of urban section Longmeadow Parkway. The Longmeadow Parkway and Randall Road intersection included a traffic signal, dual left-turn lanes, right turn lanes, and additional thru lanes for Randall Road. This urban section of Longmeadow Parkway included concrete pavement. Drainage collection systems, along with both above ground and underground detention, were used to meet the stormwater ordinance.



REFERENCE:

Mr. Carl Schoedel
Director of Transportation
630.584.1170
schoedelcarl@co.kane.il.us





SCOPE OF SERVICES EXPERIENCE

Multi/Shared-Use Paths

KISHWAUKEE BIKE PATH

City of DeKalb

HLR completed a wetland delineation along the Kishwaukee River beginning at the existing path located on Northern Illinois University Campus, north of Illinois Route 38, continuing south across Illinois Route 38 and under the railroad track, continuing west along the south side of the railroad track within park district property.

The City of DeKalb proposed bike path along the Kishwaukee River. HLR investigated two potential wetlands and both were determined to be wetlands. Site 1 includes the Kishwaukee River and associated wetlands and Site 2 is a depressional area located along the south side of the railroad tracks

HLR prepared a wetland delineation report, which included data sheets, figures, and a photo log. Coordination with the Illinois Department of Natural Resources through EcoCAT was initiated, sign-off from the Illinois Historic Preservation Agency was obtained, and a Section 7 Consultation memorandum was completed as required by the U.S. Fish and Wildlife Service.

HLR also completed a Preliminary Environmental Site Assessment (PESA) for the potential design and construction for the new bike path in DeKalb.



REFERENCE:

Mr. Zachary Gill City Engineer 815.748.2385

BUSSE WOODS BIKE PATH CONNECTION

Elk Grove Village

Elk Grove Village wanted to provide new access points to Busse Woods and turned to HLR to design and construct these vital connections. The project was designed to provide better and safer access from the businesses and residents east of Busse Woods to the Forest Preserve District trail system.

HLR prepared the plans and bid documents along with construction inspection for the locally funded project that included ADA compliant pedestrian facilities and traffic signal modifications at Northwest Point Boulevard and Oakton Street.

Significant coordination was required with the Forest Preserve District of Cook County including tree removal mitigation, design of shade tolerant seed mixtures, and signage for the new entry points. Other coordination necessary included the U.S. Army Corps of Engineers for impacts to wetlands, Illinois Department of Transportation for work at the Northwest Point intersection, and Cook County Department of Transportation and Highways for improvements at Oakton Street. All pedestrian facilities were designed and built ADA compliant in accordance with PROWAG.



REFERENCE:

Mr. Ron Raphael, PE Engineering Supervisor 847.357.4234 rraphael@elkgrove.org

127TH STREET SHARED-USE PATH IMPROVEMENTS

Village of Plainfield

HLR worked closely with the Village to develop plans for linking portions of existing shareduse paths into a complete system. We conducted a survey to collect full geometry, right-ofway, elevations, and locations of traffic signal equipment, street lighting, utilities, sidewalks, landscaping, and signage throughout the project limits.

HLR prepared plans and construction documents for the path. Goals of the project included designing an accessible path within existing right-of-way and public easement, while minimizing impacts to utilities and other existing features. Due to the side slope along the road and limited right-of-way in one area of the project, we designed a concrete block retaining wall with safety railing to accommodate the path. This allowed the path to meet accessibility guidelines, while remaining within the available property and reducing impacts to utilities.

Two legs of the path cross the existing signalized intersection of 248th Avenue and 127th Street. The existing traffic signals did not have pedestrian accommodations, so HLR designed plans to add pedestrian signals and push buttons.

The result of the project is a complete system of safe and accessible paths connecting residential, commercial, and school uses in the Village.



REFERENCE:

Mr. Randy Jessen Superintendent of Public Improvements 815.230.2030 rjessen@goplainfield.com





SCOPE OF SERVICES EXPERIENCE

Bridge Services, design and inspection

BRIDGE SAFETY INSPECTIONS AND STRUCTURAL SERVICES

Kane County Division of Transportation

HLR completed inspections on 170 bridges for the Kane County Division of Transportation compliant with the NBIS.

Services included Routine, In-Depth, Underwater inspections, scour critical evaluations, scour plans-of-action, and permit ratings. The final reports and estimates were used by the County to develop the overall maintenance and rehabilitation program. On-call services were used to develop contract plan sets for bridge repair and rehabilitations.

Key project tasks:

- » NBIS Program Management
- » Bridge Inspection and Documentation
- » Rehabilitation Estimates
- » Develop Bridge Management System
- » On-Call Structural Services



REFERENCE:

Mr. Mike Zakosek, PE Chief of Design 630.584.1170 zakosekmike@co.kane.il.us

STEARNS SCHOOL ROAD EMERGENCY REPAIR

Lake County Division of Transportation

In March of 2021, the Lake County DOT closed a section of Stearns School Road after discovering that a culvert was failing. Severe corrosion at the waterline structurally deteriorated the main conveyance culvert and could no longer support the weight of the roadway. The roadway collapsed just days after the road was closed. Stearns School Road is known to be a heavily traveled road, prompting the LCDOT to develop an emergency repair plan and reopen the road and asked HLR to immediately begin design of the repair.

Our team provided structural inspection of existing culverts, wetland delineation and report, land, route, and stream survey within the project area, Mill Creek hydraulic model to determine appropriate emergency measure, CCDD, coordination and permitting with Lake County Stormwater Management Commission, U.S. Army Corps of Engineers (USACE), and Illinois Department of Natural Resources, Office of Water Resources (IDNR-OWR), and Preliminary, Pre-Final, and Final Plans for the emergency improvement.

The work involved in the emergency culvert and roadway repairs, from the first notification of a sink hole forming in the road to the completion of the plans, permits, and construction, totaled 2 months.



REFERENCE:

Mr. Mike Zemaitis, PE Chief of Design 847.377.7400 mzemaitis@lakecountyil.gov

2022 APWA Lake Branch Project of the Year Award 2022 ACEC-IL Engineering Excellence Merit Award

PRICE ROAD BRIDGE OVER BIG ROCK CREEK

Big Rock Township Highway Department

HLR provided Phase I, II, and III for this project. We began the design by developing cost-effective solutions that also minimized the environmental impacts of the needed structural improvements. The structurally deficient bridge was posted with load restrictions and faced potential closure. The project needed solutions that streamlined the approval process to avoid lengthy permitting delays.

Through an analysis of alternatives, HLR determined that replacement with a four-span reinforced concrete slab bridge would be the most cost effective improvement over the life cycle of the structure. Hot-mix asphalt surfaced approaches and traffic barriers were reconstructed to improve safety of the roadway. In-stream piers and stone riprap scour countermeasures were designed with regard to the project permitting process through IDNR, U.S. Army Corps of Engineers (USACE), and the SWCD. The proposed design considerations also included existing right-of-way limits, wetlands mitigation, erosion control best management practices, floodplain compensatory storage and compliance with multiple regulatory agencies.

Coordination with regulatory agencies and permits included, IDOT, USACE, Illinois Department of Natural Resources, Kane-DuPage Soil & Water Conservation District, and Kane County Environmental and Water Resources.



REFERENCE:

Mr. Rick Rausch Highway Commissioner 630-556-4331

WATER SUPPLY AND

DISTRIBUTION

STREET MAINTENANCE

INTERSECTION RECONSTRUCTIONS

MULTI / SHARED USE PATHS

BRIDGE SERVICES



ENGINEERING SERVICE MODEL(S)

Street Maintenance



HLR typically will review streets included in the annual maintenance program using handheld GIS collectors. This helps to identify the lengths of pavement patching, curb, and sidewalk to be removed and replaced for the project. The GIS collectors can also include location, pictures, lengths, areas, and estimates of costs based on estimated unit prices. This helps to expedite the preparation of the maintenance plans.

It should be noted that this is only used for mill and resurface programs. HLR will discuss with the City if we feel that mill and resurface is not the best use of City funds. Roadway base failure would reduce the useful life of a mill and resurfacing program and would be considered a "band-aid" fix. We will discuss other methods to fix the roadway issues including full-depth reclamation and reconstruction. HLR will let the City know if we feel that a cape seal or other more inexpensive methods of roadway maintenance will work and extend the number of miles the City can provide in the maintenance program.

Water Supply and Distribution



HLR prefers to employ scanning technology using GPS control to get ground control. This will allow for quick acquisition of topographic survey for use in the design of public utilities and basic roadway replacement elements, and eliminates costly pickup survey. This provides cost savings for our clients.

We also look at current cost of ductile iron compared to water main-quality plastic pipe. With current steel prices, it is important to see if the cost difference is worth switching material types.

Intersection Reconstructions



Similar to water supply and distribution, HLR prefers to use scan data with one exception of ground control points for better accuracy.

HLR also looks for signal interconnects for any upgrades to signals to help them work together. We have a great relationship with Dan Devine at IDOT District 3 and can help to coordinate signal improvements on state routes as well. We recently coordinated with Dan to get all of the City of Sandwich's traffic signals on US 34 upgraded as part of their maintenance program utilizing federal funding. This allowed the City to only have to pay 10% of the traffic signal upgrades including a new interconnect.

HLR has designed numerous roundabouts and feel they are a great intersection improvement at specific intersection configurations. Any existing roadway with multiple through lanes could be confusing to motorists. The center island is a great opportunity for beautification for the City. Planning for lights, sculptures, and native plants could create a landmark that the City, its residents, and the traveling public can be proud of.

Multi / Shared-Use Paths



There are typically many grants available each year that could help to pay for these improvements. HLR can assist the City in searching for grant funding opportunities and grant preparation.

Bridge Services



HLR provides these services throughout Illinois. One new implementation is the use of the scanner to help with denoting deterioration progress by the crack length and width. On occasion we also use drones to help with difficultto-reach routine inspections.

HLR also has remote control boats for bathymetric survey, which is now required by IDOT for scour in and near bridges and reduces the time and effort that it would take to complete with typical survey equipment.

Municipal Engineering Services City of DeKalb

OUR APPROACH TO CIVIL ENGINEERING

Our approach to civil engineering is to be an extension of your staff, using our knowledge and diverse expertise as a foundation and guide to make your projects a reality.

While each project will have a different scope of work, key components to our philosophy incorporate the following items:

ASSIGN



Assign qualified staff for each project.

HLR has the depth of staff to provide the City with the appropriate team members for each assignment under this Request for Qualifications. Our team will be led by Randy Newkirk, PE, who has experience in nearly every service provided by HLR. Randy will serve as the single point-of-contact for all projects which will help streamline the communication process.

ISTEN



Listen and understand your goals, budgetary parameters, and schedule requirements.

Before initialing any task, our team will listen to specific project concerns in order to develop a thorough understanding of the proposed improvements and associated constraints to ensure a well-designed and viable project. We will compile a scope of work which includes all pertinent information and submit for comments and approval.

COMMUNICATE



Communicate project progress, status, and opportunities to keep you informed.

Effective communication and coordination with all stakeholders on a project is where we shine. Our staff will always make information distribution a priority. We can provide the City with weekly updates and a monthly summary on task order progress with regard to status, milestones, and budget, if desired.

REVIEW

Review design efforts on a regular basis to ensure technical conformance and quality.

Everyone at HLR understands our success depends on quality work and cost-effective solutions that meet our clients' goals. Our Quality Assurance Program allows us to focus on this during every step of a project and includes the following:



- · Scope identification and agreement
- Budget maintenance
- Stakeholder coordination
- Technical requirements
- Accurate cost estimating
- · Special provision preparation
- · Correspondence and documentation

- Public relations/information meetings
- · Value engineering
- Timely issuance of RFI responses and shop drawing reviews
- Field review of contractor work for compliance with plans and specifications
- · Verifying and preparing change orders



Monitor project schedule, scope, and costs to complete project according to timeline.

Randy will prepare the budget based on previous experience and input from the project team. He will also set a schedule based on the final deliverable date and other outside factors.

INNOVATIONS FOR PROJECT EFFICIENCY

At HLR, we use cutting-edge technologies including robotic survey instruments, GPS receivers, and real-time data transfer to deliver information necessary to start and finish projects the right way. Our office is equipped with AutoCAD Civil 3D, MicroStation, GIS workstations, and design software.

HLR has an exemption from the Federal Aviation Administration (FAA) allowing us to operate an unmanned aircraft system (UAS) to conduct precision aerial surveying, construction observation, mining surveying/inspection, aerial photography, and utility monitoring. With our senseFly eBee drone, we can provide our clients with up-to-date, high-resolution aerial photography.









NEW ULTRA HIGH-PERFORMANCE 3D LASER SCANNING

Our highly qualified and experienced staff utilizes the latest technology to develop safe, innovative and cost-effective solutions to meet your project goals.

The introduction of the *RIEGL* VZ-400i by *RIEGL* Laser Measurement Systems allows us to provide cutting-edge 3D laser scanning and waveform processing LiDAR technology for a wide range of applications, while maintaining the highest level of safety. In addition to traditional survey methods, the scanner can be mounted on a vehicle for stop-and-go scanning to reduce the risk of hazardous situations. Scan data can be processed in a variety of platforms, including *RIEGL*'s RiSCAN PRO for Terrestrial Laser Scanning (TLS) projects, TopoDOT® for MicroStation Connect, Revit® and AutoCAD® by Autodesk, Power Line Systems software for electric grid projects, and many other platforms.

APPLICATIONS:

- ► As-Built Surveying
- ▶ Civil Engineering
- ► Building Infrastructure Management (BIM)
- ► 3D Topographical Modeling
- ► Architecture & Facade Measurements
- ► Forensics & Crash Scene Investigation
- ▶ City Modeling
- ▶ Tunnel Surveying
- ► Forestry
- ► Research
- ▶ Monitoring

HIGHLIGHTED FEATURES:

- ► High laser pulse repetition rate of up to 1.2 MHz
- ► High-speed data acquisition up to 500,000 measurements per second
- ► Wide field of view, 100° x 360°
- ► Range up to 800 m, accuracy 5 mm
- ► High accuracy, high precision ranging based on echo digitization, online waveform processing, and multiple-time-around processing
- Innovative processing architecture for data acquisition and simultaneous georeferencing in real time
- ► Automatic on-board registration
- ► Simultaneous image and scan data acquisition
- Optional waveform data output
- Orientation sensor for pose estimation
- ▶ Integrated GNSS receiver and Real-Time Kinematic (RTK) GPS



REFERENCES

Mike Pubentz. PE

Director of Public Works

City of Elgin

150 Dexter Court

Elgin, IL 60120

Phone: 847-931-6159

Email: pubentz_m@cityofelgin.org

Mike Zakosek

Chief of Design

Kane County Division of Transportation

41W011 Burlington Road

St. Charles, IL 60175

Phone: 630-584-1170

Email: zakosekmike@co.kane.il.us

Christina Betz

Director of Public Works

City of Woodstock

326 Washington Street

Woodstock, IL 60098

Phone: 815-338-6118

Email: cbetz@woodstockil.gov

RECENT CLIENT VIDEO TESTIMONIALS

Terry Madden Vice President of Project Management Plote Construction, Inc.

John Kramer Director of Operations Fox Valley Park District



Click to watch video or visit: https://youtu.be/ILbP4I39HMA



Click to watch video or visit: https://youtu.be/EgpeE5S74yE



PREQUALIFICATION FOR ENGINEERING SERVICES

WE ARE PROUD TO PRESENT OUR QUALIFICATIONS TO PROVIDE QUALITY INFRASTRUCTURE SOLUTIONS TO THE CITY OF DEKALB AND ITS RESIDENTS.

PROPOSED BY

KASKASKIA ENGINEERING GROUP, LLC 477 South 3rd Street, Suite 280 Geneva, Illinois 60134 630.332.9157 phone 618.233.5977 fax

PROJECT MANAGER

Eric Lindemann, PE ELindemann@kaskaskiaeng.com

PRINCIPAL

Geri E. Boyer, PE GBoyer@kaskaskiaeng.com

BRANCH OFFICES

477 South 3rd Street Suite 280 Geneva, Illinois 60134

133 South Randolph Street Suite 209 Macomb, Illinois 61455

301 North Neil Street Suite 400 Champaign, Illinois 61820

619 Water Street Suite 2B Peoria, Illinois 61602 2550 University Avenue West Suite 161S St. Paul, Minnesota 55114

323 Main Street Suite E Evansville, Indiana 47708

1 Cottonwood Industrial Park #1 Glen Carbon, Illinois 62034

755 North 3rd Street Ste Genevieve, Missouri 63670

CORPORATE OFFICE

208 East Main Street Suite 100 Belleville, Illinois 62220



FIRM DESCRIPTION

January 21, 2022

Zachary Gill, PE City Engineer, The City of DeKalb 1216 Market Street DeKalb, IL 60115

RE: City of DeKalb, Illinois Request for Qualifications (RFQ) - Prequalification for Engineering Services

On behalf of my team at Kaskaskia Engineering Group, LLC (KEG), I'd like to first express our appreciation for considering our firm for Prequalification Engineering Services for the City of DeKalb, Illinois. We consider it an honor and a privilege to provide quality infrastructure solutions to local communities. Through this work, we can support our fellow community members, enhance local business opportunities, and improve the lives of those we serve. Thank you for the opportunity to serve the City of DeKalb

My team and I have put together this proposal in response to the City of DeKalb's Request for Qualifications (RFQ). We have no doubt we are uniquely qualified and more than experienced for this role. KEG is fully able to commit our time and talents to the City of DeKalb for ongiong engineering services. As our history proves with other local municipalities, our team will be available to the City for consultation on a wide range of engineering and infrastructure needs. We are a local, full-service engineering firm fully capable of handling all scopes of work described in the City's RFQ.

We feel KEG is **uniquely** qualified for this opportunity for the following reasons:

- KEG's extensive knowledge of laws and regulations governing the City's current infrastructure and systems, including funding sources and allocation
- KEG's real-world experience acting as a City Engineer and Engineer of Record for other municipalities
- KEG's lattice structure to distribute work more efficiently, making us a flexible, budget-friendly, and reliable partner with a variety
 of expertise at your disposal
- KEG's vast knowledge of best practices by municipalities through both professional experience and civic involvement

As an on-call professional with the City of DeKalb, KEG will ensure each project and work order is completed on-time and within budget, with efficiency and quality top-of-mind. The KEG Team will be led by Project Manager Eric Lindemann, PE, and supervised myself as the Principal In Charge.

Respectfully,

KASKASKIA ENGINEERING GROUP, LLC

Geri E. Boyer, PE, President

ADDING VALUE WITH SPECIALIZED TRAINING

Diversity in expertise is paramount to the success of local infrastructure. Every day and every project is different. Your engineering partner needs to have the ability to pivot when needed, and to pull in expertise in a wide range of arenas. Being prequalified in certain services is important, but specialized training is just as crucial. KEG has the following in-house certifications at our disposal for our clients. In the past, our clients have benefited greatly from our variety of expertise and specialized training.

- Licensed Professional Engineer
- Licensed Structural Engineer
- NCEES
- Erosion and Sediment Control Planning and Design
- Fundamentals of Storm Water Pollution and Erosion and Sediment Control
- Certified Utility Coordinator
- Road Safety Professional
- Certified Ráilroad Coordinator
- FEMA: NMIS, IS-100.b
- NREP Registered Environmental Manager
- IDOT Documentation of Contract Quantities
- IDOT CMMS Training

- NEPA
- Professional Wetland Scientist
- OSHA 10 and 30 Hour Safety Training
- STTP-S33 Soils Field Testing and Inspection
- OSHA Hazardous Waste Operations and Emergency Response Training
- Context Sensitive Solutions
- Certified Facilitator
- Professional Traffic Operations Engineer
- NBIS Bridge Inspector

FIRM DESCRIPTION

The Story of Us. KEG is a 100% woman-owned and managed engineering and contracting firm that was founded in 2006. What began as a 3-person operation in a small, shared office space in downtown Belleville is now 9 offices in 4 states, 50 employees, and countless successful infrastructure projects throughout the Midwest. From the beginning, we have recruited highly skilled employees from a variety of public and private sector backgrounds. This has allowed us to quickly amass an impressive portfolio of federal, state, county, and private project experience. We have established professional relationships with The Federal Highway Administration, the U.S. Army Corps of Engineers, the Illinois Department of Transportation, the Illinois Department of Natural Resources, Capital Development Board, Illinois American Water Company, MPOs and local units of government, Department of Commerce and Economic Opportunity, and area leaders.

KEG is a certified Disadvantaged Business Enterprise (DBE) through the Illinois Unified Certification Program, licensed as a Women's Business Enterprise (WBE) by the Women's Business Enterprise National Council, and is recognized as a Women-Owned Small Business (WOSB) by the Small Business Administration. While our local presence in nearby Geneva, Illinois will be an asset to the City of DeKalb, KEG regularly works between offices and strategically distributes workload based on the expertise required. Therefore, the City will have the entire KEG team at its disposal for this engagement.

PREQUALIFICATIONS



KEG is prequalified in **20 engineering categories** by the Illinois Department of Transportation (IDOT). Prequalification is based on firm and individual experience. Each category is reviewed by IDOT experts in the specific categories before granting approval.

Highways

- Freeways
- Roads and Streets

Special Studies

- Location Drainage
- Traffic Studies
- Traffic Signals
- Safety Studies
- Feasibility Studies

Location and Design Studies

- Rehabilitation
- Reconstruction/Major Rehabilitation
- New Construction/Major Reconstruction

Environmental Studies and Reports

- Environmental Assessment (EA)
- Environmental Impact Statement (EIS)

Geotechnical Services

- General Geotechnical Services
- Subsurface Explorations
- Structural Geotechnical Reports

Structures

- Highway: Simple
- Highway: Typical

Hydraulic Reports

- Waterways: Typical
- Waterways: Complex

Special Services

Construction Inspection

Subcontractor

Contractor

- Cold Milling, Planing, and Rotomilling
- Earthwork
- Drainage
- Concrete Construction
- Landscaping

Financial Review

IDOT has completed their review of KEG's "Statement of Experience and Financial Condition" (SEFC) which was submitted for the fiscal year ending Dec 31, 2019.

KEG's firm's total annual transportation fee capacity is \$11,200,000. KEG has the financial resources to perform the desired engineering services for the City of DeKalb.

LICENSING

KEG is a professional and structural design firm licensed by the Illinois Department of Financial and Professional Regulation.









PRINCIPAL GERI BOYER, PE



PROJECT MANAGER ERIC LINDEMANN, PE

SUPPORT PERSONNEL

ROADWAY & TRANSPORTATION

ROBERT BOHNAK, PE
BRYAN DONZE, PE, RSP
BRYAN VEALE, PE
VERONICA RICHFIELD, PE, PTOE, RSP
MEREDITH SECREST, EI
HANNAH PAPPROTH, EI
GREG CARRIE
JEFF HEIMER
MATTHEW AMIDON

STORMWATER MANAGEMENT & EROSION

DEBRA ROE, PE ANDREW GARRETT, EI JENNIFER MCCLEARY, EI

STRUCTURAL

JIA WANG, PE, SE ANDREW NORDSETH, PE MOSHE COHEN, PHD, PE, SE MATT CLEVENGER, EI TIM KRUMM, PE (NBIS)

GEOTECHNICAL

MATT MASTERSON, PE CHRISTOPH OPPERMAN, PE JACOB STAUFFER, EI THAISMARA GARCIA, EI

ENVIRONMENTAL CONSULTING

KENT AHRENHOLTZ, PE MOLLY BARLETTA VIRGINIA FLYNN, PWS BROOKE VORBECK JESSICA STERN CHAD KELLY

LAND DEVELOPMENT

MICHAEL VELLOFF, PE DAN BOGASKI DOUG KEENE

CONSTRUCTION INSPECTION

BOB OSBORN JIM WINKLER MATT JACKSON

PROPERTY ACQUISITION & ROW

GERI BOYER, PE AMY TOENJES





Eric Lindemann, PE | Project Manager

Educational Degree

University of Notre Dame, Bachelor of Science - Civil Engineering, 1984

Licenses/Certifications

Professional Engineer: Illinois (062.51170) 1997

Mr. Lindemann joined Kaskaskia Engineering Group, LLC (KEG) in 2021 having 35 years of experience in Civil Engineering, specifically in the design and planning of transportation and infrastructure projects for LPA clients, as well as state, municipal, and commercial development. Throughout his career, he has excelled at managing multi-discipline project teams for timely and cost-effective completions, such as both new and rehabilitated pavements; bridges and retaining walls; interchange and intersection improvements; traffic signals and interconnected signal systems; roadway lighting; roadway drainage and stormwater detention; and guardrail, landscaping, signing, and traffic control and protection plans. Mr. Lindemann's experience includes plan preparation, traffic analyses, horizontal and vertical geometry, cost and budgeting estimates, proposal generation, surveying, civil design, project development reports (PDR), construction document preparation, intersection design studies (IDS) preparation, contract documents, and quality control. In addition, he has managed projects for commercial site, subdivision, and roadway plans, as well as pavement and storm sewer designs. He has led projects with both federal and state funding, as well as assisted in securing and allocating such funding. In addition to his technical expertise, Mr. Lindemann has excellent communication and management skills, which has allowed him to develop valuable relationships both within the industry and among partnering agencies and clients.

Relevant Project Experience

Central Road Phase I Study, Preliminary Engineering Services and Various Phase I Studies, Cook County Department of Transportation and Highways, Hoffman Estates, IL - Project Manager - Phase I Study for approximately 1 mile of Central Road from Barrington Road to Huntington Boulevard in Hoffman Estates, Illinois. The Phase I Study includes the reconstruction of Central Road and the extension of a multi-use path from the newly constructed PACE Park 'n Ride facility to the regional Paul Douglas trail within the Forest Preserve of Cook County. Specific tasks include topographic survey, roadway geotechnical report, traffic counts, traffic capacity analysis, IDS, crash studies, geometric studies, location drainage technical memo, wetland delineation, wetland evaluation studies, USACE coordination, MWRDGC coordination, FPCC coordination, environmental coordination, and coordination with the local municipality of Hoffman Estates.

Lakewood Drive Bridge, Glencoe, IL - Project Manager - Mr. Lindemann served as Project Manager the Phase I engineering study and preparations of Phase II plans, specifications, and estimates of the STP-funded timber bridge replacement for Lakewood Drive, in the Village of Glencoe, Illinois. The project was a recipient of the ACEC Illinois Engineering Excellence Honor Award.

Ashland Avenue over Pershing Road Viaduct Phase II, Chicago, IL - Project Manager - Mr. Lindemann was responsible for the preparation of Phase II engineering for the demolition of the existing Ashland Avenue Viaduct and the construction of an at-grade intersection at Pershing Road in Chicago, Illinois. Plans included watermain replacement, sewer replacement, street lighting, traffic signal installation, landscaping, and roadway improvement plans. Mr. Lindemann prepared plans, specifications, construction documents, and performed quality control on all project deliverables.

Washington Street, Morton Grove & Niles, IL - Project Manager - This MFT-funded project involved the reconstruction of one-mile of Washington Street in Morton Grove and Niles, Illinois. Mr. Lindemann managed the design of subsurface soil stabilization, underground detention facilities, traffic signal modification, vertical alignment, pavement design, storm sewer, maintenance of traffic, cost estimate, and special provisions.

EXPERIENCE HIGHLIGHTS

- Budgeting, planning, and rate studies
- Advance knowledge of local ordinances, and State and Federal regulatory standards
- Intersection design and reconstruction
- Traffic studies and analyses
- Traffic signal design
- Funding and grants
- Street maintenance planning and scheduling
- Review of preliminary and final design drawings and calculations
- Attend and be an active participant in Planning and Zoning Board and City Board meetings
- Construction coordination and bidding
- Water supply distribution
- Utility coordination
 Parking let sidewal
- Parking lot, sidewalk, street, and roadway design
- Multi-use paths construction and expansion





Geri Boyer, PE | Principal In Charge

Educational Degree

- Loyola University New Orleans, Masters in Pastoral Studies, 2003
- Southern Illinois University Edwardsville, Bachelor of Science Civil Engineering, 1990
- University of Missouri Rolla Bachelor of Science Mining Engineering, 1983

Licenses/Certifications

Professional Engineer: Illinois (062.050142) 1994

Geri E. Boyer is Founder and President of KEG. Ms. Boyer's experience includes projects requiring land acquisition, as well as construction-related activities. Ms. Boyer was the Local Roads Field Engineer for IDOT in Madison, Bond, Clinton, and Washington Counties. While working with the Department, she developed an extensive level of experience in the planning, development, and maintenance of short- and long-range transportation programs, land acquisition and negotiations, and the coordination and engineering review of projects from the funding stage to construction completion. Ms. Boyer managed many federally funded local agency projects requiring land acquisition. Her duties have included negotiation of right-of-way and easement acquisitions. Ms. Boyer also oversaw the preparation of plats and scheduling of land appraisals. She is a Certified Facilitator and has completed training on the Context Sensitive Solutions (CSS) process. She has decades of experience working hand-in-hand with local municipalities to improve local infrastructure with budget-friendly and efficient projects.

Relevant Project Experience

Belleville City Engineering Services, Belleville, IL - City Engineer - Ms. Boyer assisted the City of Belleville with their city engineering duties from 2015 until 2021. She was a trusted advisor to the Mayor and was always available to assist with technical issues, maintenance and infrastructure planning, and budgeting. She worked with the city's economic development staff to identify and match projects with applicable grants and prepared grants for their submission. She performed all City Engineering responsibilities, including attending weekly meetings with the Mayor and city staff. She also met with Aldermen and residents to educate them on complex issues. Her duties as City Engineer included assisting city staff to overcome challenges, reviewing and commenting in writing on engineering-related issues, preparing or reviewing correspondence to or from county, state, or federal agencies, and serving as the City's representative for project review, approval, administration, oversight, and close-out. She facilitated the preparation of the yearly MFT maintenance program, closed-out the prior year, and developed an Microsoft Excel-based system for staff to track, pay, and report all maintenance activities. She is an IDOT certified negotiator and acquired the ROW and easements on City roadway and utility projects, as well.

Lebanon Avenue Rehabilitation, Belleville, IL - Principal-in-Charge - KEG provided civil design services for a project improvement along Lebanon Avenue from the intersection of F Street to the intersection with IL 161. KEG's services included Phase I project development and Phase II preliminary engineering. Services included public engagement, roadway patching and resurfacing, intermittent curb and gutter and sidewalk replacement and ADA enhancements. The project was funded with a combination of federal and local funding.

Illinois Route 157/Illinois Route 163 PCC Patching and Bituminous Resurfacing, Cahokia and Alorton, IL - Principal-in-Charge - Ms. Boyer oversaw the design of a Pavement Preservation Project (3P) plans and contract documents for PCC and HMA patching and HMA surface removal and resurfacing along a 3.25 mile section of Illinois Route 157 and Illinois Route 163. The project also included traffic control and protection and pavement marking plans

Market Street and Olympian Drive Traffic Signals, City of Champaign, Illinois - Principal-in-Charge - Oversaw the design of traffic signal plans, specifications, and estimates for the construction of a new traffic signal system at the intersection of Market Street with Olympian Drive in the City of Champaign. Coordination with local utilities was required to provide power to the new traffic signal system and to avoid conflicts with existing utility facilities. Construction documents were prepared in accordance with IDOT specifications.

EXPERIENCE HIGHLIGHTS

- Budgeting, planning, and rate studies
- Federal and State permitting and regulatory standards
- Grant writing, funding, and allocation of such
- Land development
- Review of final design and construction plans
- Overseeing and managing street, storm water, and MFT projects
- Property acquisitions, right-of-way (ROW), and easements
- Utility coordination
- Intersection and roadway design and realignment
- Public involvement and CSS
- Acting as liaison for City Engineer at public meetings, negotiations, and plan development
- Preparation of exhibits and materials for public engagement
- Working with local municipalities to complete projects efficiently and within budget
- Street, sidewalk, and roadway design



Robert Bohnak, PE | Senior Engineer

Educational Degree

 Missouri University of Science and Technology, Bachelor of Science - Geological Engineering, 1994

Licenses/Certifications

Professional Engineer: Illinois (062.057928) 2004

Mr. Bohnak has more than 27 years of consulting engineering experience. He has managed a wide variety of transportation projects from the conception phase through design and construction. These projects include state, municipal, and commercial development. His experience also includes commercial site, subdivision, and roadway plans, as well as pavement and storm sewer designs and the preparation of special provisions, quantities, and bidding documents. Mr. Bohnak's civil engineering experience includes infrastructure assessment and design of roads, municipal water, stormwater, and sanitary sewer systems, drainage (stormwater and floodplain management), FEMA LOMR Elevation Certifications, and Base Flood Elevation Determinations. Mr. Bohnak has worked as a Municipal review engineer representing, the Village of Bourbonnais, the City of Kankakee, Kankakee County, Frankfort Township and Lockport Township. He has provided Project Management and Construction Monitoring for the annual road maintenance project for several municipalities.

Relevant Project Experience

- Road Maintenance Programs Project budgeting, scheduling, task management, construction oversight, review of contractor submittals, payment request reviews and recommendations. Annual project budgets up to \$800,000.
- Route 52, Manhattan, IL Improvements of two lane road with ditches to a two lane road with bidirectional left turn lane, acceleration and deceleration lanes, storm sewer and curb and gutter.

EXPERIENCE HIGHLIGHTS

- Municipal engineering and maintenance
- Sidewalk, street, and roadway design
- Stormwater management and erosion
- QA/QC of preliminary and final plans and designs
- Development of detailed specifications for bidding and coordination
- Local roadway improvements
- Liaison with City officials and partner engineers
- GPS/GIS data gathering and compilation
- Multi-Use Path extension and construction
- Regulatory compliance with state, county, federal agencies

Bryan Donze, PE, RSP | Senior Engineer

Educational Degree

- Kansas State University, Bachelor of Science Civil Engineering, 2007
- Kansas State University, Master of Science Civil Engineering/Transportation and Pavement, 2011

Licenses/Certifications

- Professional Engineer: Illinois (062.070587) 2018
- NCEES

Mr. Donze joined KEG in May 2018 having 10 years of engineering, operations, and management experience. He is a licensed Professional Engineer in Indiana, Illinois, Minnesota and Kentucky; and is also a certified Road Safety Professional. Project experience includes surveying, cost estimating, civil design, drainage design, project development or engineering assessment reports, IDS preparation, plan preparation, right-of-way documents, contract documents, and construction inspection. His experience also includes roadway, intersection improvement, and structure repair plans, including pavement and storm sewer designs and the preparation of special provisions, quantities, and bidding documents.

EXPERIENCE HIGHLIGHTS

- Right of way
- Inspection and documentation of materials and quantities
- Materials testing and inspection
- Surveying
- Drainage analysis and design
- · Storm sewer deisng
- Structure repair and replacement
- Traffic studies
- Phase I documentation
- ADA accessible design

Relevant Project Experience

- Kautz Road Widening and Reconstruction, Kane County, IL- As Project Manager, he led the efforts to perform alignment alternative analysis as part of the Phase I preliminary engineering for the reconstruction and widening of 1.25 miles of Kautz Road in the cities of Geneva and St Charles, Illinois. This project was federally-funded. KEG also participated in the public outreach for the project by organizing a public involvement meeting.
- PTB 193/016 87th Street SMART Overlay, Keeler Ave to Damen Ave, IDOT District 1 Served as the Project Manager for Phase II engineering of the 87th Street improvements. The project involved the preparation of plans, special provisions, and estimates for the resurfacing of nearly 3 miles of 87th Street in Chicago, IL. The plans also included the design of 22 corners to be ADA accessible.



Debra Roe, PE | Senior Water Resources Engineer

Educational Degree

• University of Wisconsin, Bachelor of Science - Civil Engineering, 1989

Licenses/Certifications

• Professional Engineer: Illinois (062.049039) 1994

Ms. Roe joined KEG in April of 2021 having more than 30 years of experience in water resources engineering. She has successfully managed project teams, clients, and employees while building quality infrastructure throughout her extensive career. Her work has included developing scopes, budgets, design plans, and implementation of the following types of projects: wastewater treatment plants, including review of alternative treatments, design, permits, and construction administration; design of sewage lift stations including capacity and head requirements, site plans, force main design, permit, construction administration, and start-up; water main extensions and hydraulic modeling; water booster pump station design and expansion; design or rehabilitation of water treatment facilities; and modeling water distribution systems for expansion, improvements, or creation of an entirely new system. Ms. Roe is extremely knowledgeable on permitting and regulatory standards for water resources planning and design. She is experienced in working with advanced industry software, such as Autocad, Microstation, HEC-HMS, and HEC-RAS.

Relevant Project Experience

- Washington Sewer Capacity Analysis, Tazewell County, IL Analyzed a section of sanitary sewer in Washington, Illinois to
 determine current capacity and available capacity for potential development. Senior Project Manager duties included preparing
 calculations and a summary report for the developer and the City to reach an agreement on how to address capacity concerns
 for future development.
- T-L Rural Water District, Trivoli System Improvements, Peoria County, IL Coordinated and oversaw the design, permitting, construction plans, and construction administration of public water supply improvements, including water main construction, an elevated steel water tower, pump station improvements, remote data acquisition, and communication system.

Matt Masterson, PE | Senior Geotechnical Engineer

Educational Degree

 Missouri University of Science and Technology, Bachelor of Science - Geological Engineering, 1996

Licenses/Certifications

Professional Engineer: Illinois (062.061885) 2009

Mr. Masterson joined KEG in February of 2009 and has over 25 years of experience in a wide variety of geotechnical studies ranging from soils and foundation analysis, design, and construction monitoring to MSE retaining wall and reinforced soil slope design, analysis, and construction. His responsibilities have included project initiation; proposals; project management; geotechnical analysis and design; geotechnical reports; construction monitoring reports; footing and foundation excavation oversight and reporting; deep foundation design; analysis and field inspection; residential foundation distress observation, study, and reporting; slope failure investigation and analysis; civil surveying; drafting; and global stability analysis. Mr. Masterson has performed analyses and writpaten reports with respect to various geologic and subsurface conditions throughout the Midwest. In addition, he has developed design plans on over 875,000 square feet of MSE retaining wall and slope projects.

Relevant Project Experience

- Fourth Street, St. Mary's to Kirby Avenue, Champaign, IL Senior Geotechnical Engineer to prepare design plans for the reconstruction of Fourth Street, from St. Mary's Road to Kirby Avenue. Mr. Masterson coordinated pavement borings along the street alignment, including coring of the existing pavements for pavement design recommendations.
- County Highway 2 Over Spoon River, Fulton County, IL Coordinated as lead geotechnical staff in performing stability analysis
 using Slope/W using an estimated geometry of the slope in its current state of erosion and failure.

EXPERIENCE HIGHLIGHTS

- Stormwater management systems and erosion
- Bridge design and inspection
- Hydraulic and hydrologic analysis
- Drainage design and analysis
- Water supply design
- Stormwater retention basins and ponds
- Culvert replacement and rehabilitation
- Land Development
- Erosion and sediment control
- Expansion of water systems
- Sewer design

EXPERIENCE HIGHLIGHTS

- Subsurface exploration
- Foundation analysis
- Soil classification
- Project management of drill teams and subsequent reporting
- Preparation of geotechnical reports, including structure geotechnical reports (SGR) and roadway geotechnical reports (RGR)
- Stormwater and sewer system design
- Drainage and erosion analysis

Jia Wang, PE, SE | Senior Structural Engineer

Educational Degree

- University of Maine, Orono, ME Master of Science Computer Science, 2002
- University of Maine, Orono, ME Master of Science Civil Engineering, 2000
- North Industry University Beijing China, Bachelor of Science Civil Engineering, 1996

Licenses/Certifications

- Structural Engineer: Illinois (081.006586) 2008
- Professional Engineer: Maine (PE10800) 2005

Mr. Wang joined Kaskaskia Engineering Group, LLC (KEG) in August of 2020 as a Senior Structural Engineer with 18 years of experience in the civil and structural engineering fields. He is a licensed Structural Engineer in Illinois, as well as a licensed Professional Engineer in Maine. His experience encompasses various areas of infrastructure engineering and building engineering, including highway design, roadway alignment, structural design, bridge inspection, industrial and commercial buildings, prestressed/precast parking garages, hydraulics, and power utility structures design.

Relevant Project Experience

Troy O'Fallon Road over Mill Creek, Madison County, IL - Engineer of Record for the preliminary design and plan development, as well as QA/QC review of all structural design documents for IDOT Structure Number 060-3373 in Madison County, Illinois.

PTB 174-02 Winnetka Road over I-94, US 41 Edens, IDOT District 1 - Engineer of Record for the field investigation and the development of the associated Bridge Condition Report (BCR) to evaluate Structure Number 016-0923 carrying Winnetka Road over I-94 in Cook County, Illinois. Mr. Wang provided four potential alternatives to the District with cost estimates and a final recommendation was proposed in the formal BCR and submitted for review.

EXPERIENCE HIGHLIGHTS

- Advanced knowledge of local ordinances, and State and Federal regulatory standards
- Phase I and II structural design, evaluation, and inspection
- Evaluation of bridge capacity
- Comprehensive and detailed bridge inspection for anticipated rehabilitation
- Development of repair plans, steel beams, and diaphragms
- BCR completion
- Development of Preliminary Bridge Design Report with Scour Analysis
- Design and drawing review and QA/QC
- Completion of Structural Load Rating Summary

Moshe Cohen, Phd, PE, SE | Structural Engineer

Educational Degree

- Northwestern University, PhD Civil Engineering, 2012
- University of Missouri St. Louis, Bachelor of Science Civil Engineering, 2007
- University of Missouri St. Louis, Bachelor of Science Computer Science, 2007

Licenses/Certifications

- Professional Engineer: Minnesota (58757) 2021, Missouri (2017018957) 2017
- Structural Engineer: Illinois (081.008104) 2017

Mr. Cohen joined the KEG staff as a Structural Engineer in 2020 with 11 years of combined professional and research experience. He is adept at integrating his computer programming and spreadsheet capabilities to streamline structural and bridge design tasks. His experience involves working on bridge, civil, and structural projects of varied magnitude and complexity. In addition to his work at KEG, he is an adjunct instructor in engineering at University of Missouri - St. Louis and Washington University.

EXPERIENCE HIGHLIGHTS

- Structural and safety analysis of both commercial and residential buildings
- Bridge design specifications and drawings
- Bridge and structure inspection and analysis
- Bridge studies
- BCR preparation
- Plan development
- Structural Load Rating Summary preparation

Relevant Project Experience

- Pleasant School Bridge Road, Jersey County, IL Structural Engineer responsible for performing an inspection of the existing structure carrying Pleasant School Road over a Tributary to Macoupin Creek. The inspection was to determine if the existing closed structure could be repaired adequately to reopen the road with a reduced load carrying capacity. Mr. Cohen was responsible for the bridge study for the PPC 3-sided arch structure.
- PTB 193-33 W01, Jackson County, IL Structural Engineer for the replacement of three structures in Jackson County, Illinois.
 Performed site visits of each structure and drafted BCRs and cost estimates for various maintenance and repair options. KEG was tasked with the preparation of Bridge Condition Reports (BCRs), hydraulic reports, TS&L, a PDR, and structural geotechnical reports (SGRs) for the three structures.



PROJECT TEAM ······

Molly Barletta | Senior Environmental Scientist

Educational Degree

- Fontbonne University, Master of Business Administration, 2009
- Iowa State University, Bachelor of Science Community and Regional Planning, 2000

Licenses/Certifications

NEPA

Ms. Barletta joined KEG in 2013 and has over 20 years of experience in transportation, military, and environmental planning for urban, regional, municipal, and federal agencies; land development; and mixed use projects. She has significant experience in managing, writing, and reviewing National Environmental Policy Act (NEPA) documents; evaluating government planning-related documents and reports; comprehensive knowledge of business development, project budgeting, contracts, design development, and quality control; client presentations and stakeholder mediation with federal government and military clients; and possesses the ability to translate information, develop insights, and work alongside clients at project sites.

EXPERIENCE HIGHLIGHTS

- NEPA
- State, Federal, and local permitting and environmental documentation
- PESA
- Advanced of knowledge of local environmental issues
- Public involvement and CSS
- Preparation of exhibits
- Local knowledge of environmental issues

Relevant Project Experience

- Macomb Safe Routes to School PESA, Macomb, IL Project Manager in support of Safe Routes to School (SRTS) sidewalk
 improvements along Johnson, West, Grant, and McArthur Street in Macomb, Illinois, near Macomb High School. Ms.
 Barletta utilized environmental database results, in coordination with field reconnaissance, to screen 16 sites along the
 project area for potential hazards. Of the 16 sites, five contained Recognized Environmental Conditions (RECs), while 11
 contained de minimis conditions only (potential lead paint, asbestos, or use of herbicides/pesticides).
- **Downtown Peoria PESA, Peoria, IL** Project Manager in support of street improvements in downtown Peoria, Illinois. Utilized environmental database results, in coordination with field reconnaissance, to screen 30 sites along the project area for potential hazards. Of the 30 sites, 20 contained Recognized Environmental Conditions (RECs), while 10 contained de minimis conditions only (potential lead paint, asbestos, or use of herbicides/pesticides).

Virginia Flynn, PWS | Senior Biologist

Educational Degree

- Southern Illinois University Carbondale, Master of Science Plant Biology (Ecology), 1995
- University of Illinois Urbana, Bachelor of Science Horticulture (Landscape Design), 1993

Licenses/Certifications

Professional Wetland Scientist (2880) 2017

Ms. Flynn joined KEG in 2013 and has over 20 years of experience with both government and private organizations in a diverse array of NEPA projects (Environmental Assessments, Environmental Impact Statements, and Categorical Exclusions), transportation projects, DoD projects, and Water Resource Development Act (WRDA) projects with the US Army Corps of Engineers. Her skills and experience include NEPA, wetland delineations, wetland mitigation area monitoring, waterway permitting, habitat evaluation and restoration, vegetation sampling and plant community classification, natural resource management, threatened and endangered (T&E) species surveys, and mined land reclamation/revegetation. She incorporates ArcGIS into her work.

EXPERIENCE HIGHLIGHTS

- NEPA
- Environmental Documentation
- Permitting and Waters Reports
- Environmental Survey Request (ESR)
- PEŚA
- IDNR, IEPA, and Army Corps Permitting
- Incidental Technical Agreement (ITA)
- Stream relocation environmental efforts

Relevant Project Experience

- Chicago Metropolitan Water Reclamation District (MWRD) Flood Control Project on Calumet-Sag Tributary C in Bremen
 Township and Midlothian, Cook County, IL Project Manager/Wetland Specialist responsible for preparation of a permit
 review memo summarizing regulatory requirements for the project and permit agency coordination and meetings. Ms. Flynn
 was also responsible for conducting a Phase I ESA, including soil sampling and Phase 1 Report summarizing the data. She
 also prepared an Ecological Review Report as part of the services.
- Wetland Survey for Our Lady of Snows Shrine Development Project, Belleville, IL Completed a wetland survey and delineation of a 33-acre project site for a new commercial development in the City of Belleville, Illinois, to assess wetland impacts. Ms. Flynn completed a site reconnaissance and data collection visit to delineate any potential wetlands and waters of the U.S. Ms. Flynn prepared an Ecological Review Report as part of the services.



SCOPE OF SERVICES



Maintenance of public roadways, right-of-way, and city-owned property may include the evaluation and repair of roadway striping, signage, pavements, and sidewalks. Our team is capable to assist in these types of day-to-day maintenance issues and help the City with future planning for programs and long-range efforts.



IL ROUTE 162 AND IL ROUTE 157 IMPROVEMENTS, MARYVILLE, IL

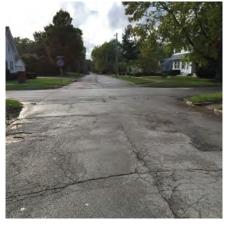
KEG completed a crash analysis for IL Route 157 and IL 162 intersection. The crash analysis revealed that the predominant types of crashes were rear-end and turning, which occurred predominantly on dry pavement during daylight hours mainly on IL 157. This pattern was found at both the north and south intersections and generally indicated a lack of capacity and proper channelization. The addition of auxiliary turn lanes at the intersections, improved pavement markings, and additional signage should decrease the potential for crashes and may serve as a short-term deterrent for some crash types. However, correcting the majority of rear-end and turning crashes would require intersection reconstruction and/or realignment to upgrade the intersection to current AASHTO and Bureau of Design and Environment geometric policies and to reduce congestion. It was recommended that IDOT pursue interim, low-cost improvements to correct the existing signing and striping deficiencies, while providing for a complete future capacity and geometric realignment of the intersections.

KEG also completed a stakeholder involvement plan based on the results of the preliminary stakeholder meetings and conducted three public informational meetings.

CHAMPAIGN INFRASTRUCTURE MAINTENANCE PROJECT, CHAMPAIGN, IL

KEG was selected as a subconsultant to Farnsworth Group, Inc., by the City of Champaign to prepare design plans and contract documents for the 2019 Infrastructure Maintenance Project. The proposed improvements consisted of roadway repairs of approximately 1,250 feet of streets at various locations in Champaign, Illinois.

KEG's scope included preparing plans, specifications, and quantities for resurfacing plans, pavement marking, and ADA ramp design for McKinley Avenue from north of Vine Street to south of Washington Street and Columbia Avenue from McKinley Avenue to Prospect Avenue. KEG was also responsible for ADA sidewalk ramp design at 26 locations along Bradley Avenue. KEG was also responsible for preparing the traffic control plans for the project.





JUANITA PLACE STREET IMPROVEMENTS, BELLEVILLE, IL

KEG provided transportation engineering services to the City of Belleville for the development of engineering documents for the roadway reconstruction and pedestrian facilities on North 79th Street and West Washington Street in the Juanita Place neighborhood in Belleville, Illinois.

KEG's scope included coordination with local residents, City and Uiltity companies to ensure the project was complete to the satisfaction to all parties. KEG engineering services included the preparation of construction plans, contract documents, special provisions, and cost estimates. Improvements included widening and resurfacing, and portions of new asphalt pavement with aggregate base, bounded by new concrete curb and gutters along both sides of the roadway. The project also included new concrete sidewalks along both sides of North 79th Street and West Washington Street and new concrete driveway aprons.



SCOPE OF SERVICES



MFT MAINTENANCE PAVEMENT AND STREETS, EAST ST. LOUIS, IL

KEG assisted the City of East St. Louis, Illinois, as part of the 2015 Motor Fuel Tax (MFT) program, with the assessment and evaluation of various streets throughout the City to determine the most economical approach for pavement repairs. After the street assessment, KEG prepared the construction plans, specifications, cost estimate, and estimate of time in accordance with the Illinois Department of Transportation (IDOT) MFT guidelines. The plans and specifications included pavement patching of 25th Street and State Street, 38th Street and State Street, 38th Street and College Avenue, 39th Street and State Street, 46th Street and Audubon Avenue, and Audubon Avenue.

KEG also assisted the City during the bidding process and provided construction inspection during the construction of the improvements. The construction inspection services included inspection of the full-depth asphalt pavement patches including documentation of quantities for paving materials in accordance with the IDOT standards and construction documentation policies. The improvements were completed in 2015.



US 50 LOCATION DRAINAGE STUDY, O'FALLON, IL
KEG prepared a Location Drainage Study in accordance with the IDOT Drainage
Manual for improvements on US 50 from Scott Troy Road to Quarry Road in O'Fallon, Illinois. The project consists of widening to construct a bi-directional turn lane on US 50 from 0.1 miles east of Scott Troy Road to 1.0 mile east of Scott Troy Road; widening to construct an eastbound left turn lane on US 50 at Quarry Road; and resurfacing from 0.1 miles east of Scott Troy Road to 0.14 miles west of Quarry Road. KEG analyzed the existing and proposed drainage system, including 2.4 miles of roadside ditches, thirty-seven (37) entrance culverts, and three (3) crossroad culverts. Peak runoff was calculated under existing and proposed conditions for the 2-year, 10-year, 25-year, 50-year, 100-year, and 500-year storm events. Recommendations were made for ditch design, culvert design, and treatments to minimize erosion. The Location Prainage Study was approved quickly treatments to minimize erosion. The Location Drainage Study was approved quickly through by IDOT, with only one minor comment.

WEST WINTERS STREET STORMWATER IMPROVEMENTS, SCOTT AIR FORCE BASE, IL
KEG conducted hydrologic and hydraulic analysis and field inspection of storm sewer system associated with approximately 2,100 LF of pavement repair and rehabilitation of West Winters Street on Scott Air Force Base. Analysis focused on eliminating existing street flooding and storm sewer backups. The hydraulic scope involved evaluating the existing storm sewer system for the effects of recent commercial development adjacent to the roadway. This analysis resulted in the need to upgrade sections of the existing storm sewer system to accommodate the additional stormwater runoff generated by new commercial construction within the project limits. Storm sewer improvement plans were included as part of the final roadway project.



WALNUT STREET AND TAYLOR STREET IMPROVEMENTS, CHAMPAIGN, IL

KEG was selected as a subconsultant to Farnsworth Group, Inc., by the City of Champaign to prepare design plans and contract documents for proposed roadway and streetscape improvements at the intersection of Walnut Street and Taylor Street.

KEG's scope included preparing plans, specifications, and quantities including typical sections, removal plans, sidewalk grading plans, traffic control, drainage, erosion control, intersection warping, pavement marking, and ADA ramp design. The project provided sidewalk bump outs allowing for safer pedestrian travel as well as additional sidewalk seating for downtown restaurants.



VATER SUPPLY/DISTRIBUTION, MAINTENANCE, AND EXPANSIONS

KEG's hydraulic and transportation engineers work together to develop solutions for every aspect of a city's water supply system. Furthermore, KEG's hydraulic engineers are involved in hydrologic and hydraulic studies for culverts and flood plain mapping; commercial land development; roadway inlet spacing; and storm sewer design. They rely on the transportation engineers to make sure inlets and storm sewers enhance the performance of a roadway. KEG's civil engineers are certified in Erosion and Sediment Control Planning and Design. They perform this work throughout Illinois, Indiana, Missouri, and Minnesota.

It takes a combination of expertise to solve stormwater issues for a city given the extreme precipitation events of the last several years. In 2020, updated rainfall totals for Illinois were published that consider changes to heavy precipitation that have been experienced throughout Illinois. In the Southwest Illinois Region, the 10-year and 50-year design storms have shown increases of 15% or greater, depending on the frequency of the event. KEG uses the updated rainfall totals to inform design. We review existing and design proposed drainage infrastructure (storm sewers, detention basins, and other appurtenances) in consideration of both compliance with current design standards as well as realistic performance with the heavier rainfalls being experiences in the region.

ILLINOIS AMERICAN WATER WATER MAIN REPLACEMENTS, BELLEVILLE, IL

KEG provided survey, civil design, permitting, and construction inspection services for the replacement of approximately 1,700 LF of 6-inch water main at two locations in Belleville, Illinois. The project involved the installation of new water mains, valves, piping, and hydrants along urban roadways. The project was complicated by the aged infrastructure in the project area, including brick streets and sewers.

Specific tasks included establishing right-of-way (ROW) limits and property boundaries needed to design the water mains; locating existing streets and curbs, utilities, and landscaping; preparation of plans and specifications for construction improvements; and providing final construction documents and specifications. KEG was also responsible for submitting the required permits for the project's completion, including IDNR and IEPA.

As the on-site Construction Inspection Technician, KEG assisted the contractor during the construction process, participated in preconstruction meetings, and reviewed material submittals from the contractor for final approval. KEG was onsite for documentation purposes throughout the project.



KEG provided design services for a water main extension in the Interurban District for Illinois American Water. The extension was designed to provide Illinois American Water the ability to supply the City of Edwardsville an additional 1 million gallons per day, and ultimately 3 million gallons per day, so that Edwardsville could use the additional supply to supplement their current supply to the Village of Glen Carbon. Edwards ville supplies water to the clearwell at the abandoned Glen Carbon treatment facility, and then Glen Carbon pumps out of the clearwell to distribution.

KEG designed the water main to extend from an existing 16-inch ductile iron main along Route 162 to the Glen Carbon clearwell. The design includes installation of approximately 2,000 feet of 16-inch ductile iron main and approximately 800 feet of 12-inch ductile iron main; a meter vault with a control valve; and an ammonia feed station. The ammonia feed is required to avoid mixing the chloramines in the Illinois American Water system with the free chlorine in the Edwardsville system.

KEG also prepared the required IEPA Construction Permit Application for the proposed main extension.









WATER AND SEWER EXPANSION STUDY, O'FALLON, IL

KEG completed a study to develop recommendations for improvement of water and sewer facilities serving the area between I-64 and Scott Air Force Base, from IL 158 to Rieder Road (Study Area). The purpose was to ensure that the City of O'Fallon can provide water and sewer service to potential customers in this currently undeveloped area, including fire protection.

KEG developed a range of water demands and needed fire flow based on the approved assumptions from reviewing zoning/land maps and contacting the economic development department to determine potential customers in the Study Area. Moreover, KEG reviewed the same data obtained for developing water demand projections to build a land use plan and determine potential sewer flows based on the approved assumptions in the Study Area. A list of recommended improvement projects/casing size were prepared, including a planning level cost estimate.



WATER SYSTEM IMPROVEMENTS, PUMP STATION, ALTON, IL

KEG provided design services for a pump station suction line in the Alton District for Illinois American Water, which was one of many improvements being designed in the Principia High Service Zone of the Alton District. The Principia College installed a 16-inch HDPE main from the Illinois American Water storage tank site on the east edge of campus to the college facilities. The college also installed a booster station at the Illinois American Water tank site to provide fire protection, as well as domestic service, at their buildings through this new 16-inch main.

In addition to the booster station suction line design, KEG performed a hydraulic analysis to determine that the Principia College booster and main can be used to serve other customers in the Principia High Service Zone and identified additional improvements to the distribution system that are required in order to serve additional customers from this main. The nearby Village of Grafton agreed to purchase water from Illinois American Water and plans to install parallel main from the entrance of Principia College north and west through Elsah to the meter point near the Joywood Subdivision.

KEG also prepared the required IEPA Construction Permit Application for the proposed main extension.

WATER MAIN DESIGN, BELLEVILLE, IL

KEG completed three water main extension designs near Belleville, Illinois. KEG managed surveying and easement acquisition and provided design, permitting, and construction observation services. Design services included selection of main alignments, development of plan and profile, technical specifications, protection of wetlands, utility coordination, thrust restraint, and stream crossing. Permits included IEPA, IDOT, and 401/404. Construction observation services included daily observation, collection of GPS points on hydrants, valves and bends, and preparation of as-built drawings.

- 3,300 feet of 16-inch ductile iron main along Frank Scott Parkway in Shiloh, IL. Construction completed in 2009.
- 1,200 feet of 12-inch ductile iron main along Smelting Works Road in Belleville, IL. Construction completed in 2009.
- 2,200 feet of 16-inch ductile iron main crossing Illinois Route 15 near Illinois Route 159. Construction completed in 2010.



POWER HOLDINGS REND LAKE INTAKE AND PUMP STRUCTURE, FRANKLIN AND JEFFERSON COUNTIES, IL

KEG prepared preliminary planning report for a Rend Lake intake and pump station. Power Holdings planned to withdraw 10 million gallons per day from Rend Lake to supply cooling water for the proposed Southern Illinois Coal-to-Synthetic Natural Gas Facility. The purpose of the preliminary planning report was to identify potential locations for a water intake in Rend Lake and pump station on the shore of Rend Lake. KEG prepared a layout of the recommended type of intake structure, recommended size and type of pumps, and recommended size and route for the transmission main.

The report described the evaluation of alternatives including cost estimates for the recommended intake, pumps station, and transmission main. We coordinated closely with the Corps of Engineers to provide a description of the regulatory and permitting requirements including an estimated cost and schedule for permitting.





KEG's resources include highly-experienced transportation engineers and CAD designers. Our engineers are skilled in many areas of the field, including conceptual layout, traffic capacity analysis, traffic studies, and intersection design. We understand and design the appropriate intersection improvement ranging from all-way stops, additional turn lanes, and installation or modification of traffic signals, to designing modern roundabouts.

Our team's systematic approach to accomplish the scope of work is for transportation engineers to make a field visit and investigate all feasible alternatives based on engineering effects of the proposed roadway improvement within each existing intersection. Engineering effects include traffic and drainage impacts, land use, existing and future development needs, location of major utilities, and geotechnical recommendations. Existing and future traffic patterns, business development, and pedestrian/bike accommodations all factor into our approach to recommend the best alternative to the City.

Each design will go through a value engineering process in which we work to identify the most beneficial and economical solution. In addition to evaluating alternatives for each intersection design, our engineers will assess the cost of items within each alternative. The designers will develop several conceptual designs, estimate a construction cost for items included in each alternative, and then eliminate particular aspects of each design in order to select a final design most appropriate for the City. The designers will collaborate with the City at various stages in the design process to ensure your needs and expectations of the project are met or exceeded.

Any existing information on traffic, such as ADT, will be requested from various sources and supplemented by traffic counts performed by our technical staff. Also, City/County utility and right of way maps will be requested, including any GIS-based utility information for input to our GIS database for the project design. Utility location maps will be requested from IDOT and other utility providers in the area, as well.

If traffic data is not available, KEG has the capacity to do its own counts. Accurate traffic analysis and modeling is key to ensuring the proposed improvements work well with the overall transportation system. We will incorporate traffic modeling, along with the use of GIS, to represent a geometric analysis of the resulting traffic characteristics on a daily basis and the Highway Capacity Software to analyze existing and design year traffic levels of service. Our engineers incorporate all of this data, public input, and City concerns into developing the appropriate type of intersection improvement for each intersection being studied.

ILLINOIS ROUTE 3 & OLIVE STREET TRAFFIC IMPACT STUDY, CHESTER, IL

KEG prepared a traffic impact study to determine the impacts of the realignment of Olive Street and the expansion of the Chester Center commercial development would have on Illinois Route 3 in Chester, Illinois.

KEG conducted manual intersection turning movement counts at multiple intersections within the study area and incorporated the data in order to model the existing and future traffic volumes along the roadways. Traffic generated by the proposed expansion of the Chester Center development was calculated and added to the traffic model. Due to the realignment of Olive Street and the installation of a traffic signal at the intersection of IL Route 3 and Olive Street, traffic from the Menard Correctional Center was reassigned to the local roadway system in the traffic model. The signalized intersection will provide more direct access to Illinois Route 3 from Menard Correctional Center. These traffic volumes, along with the growth-adjusted background traffic volumes, were used in the traffic signal warrant analysis and the auxiliary turning lane analysis of the intersections of Illinois Route 3 with Olive Street and Illinois Route 3 with Bridge Bypass Road.

The Synchro traffic model was utilized to analyze the operating levels of service of the intersections within the study limits during the AM and PM peak traffic hours of the existing year, construction year, and design year. The study found that a new traffic signal was necessary at the intersection of Illinois Route 3 and Olive Street. It was also determined left-turn lanes be installed at the intersection. The traffic signal analysis at the intersection of IL Route 3 and Bridge Bypass Road determined that the installation of a traffic signal is warranted at this intersection as well as the construction of a westbound left-turn lane. The traffic signals will be coordinated to improve traffic flow along Illinois Route 3. The traffic study findings were presented to the City of Chester and the Illinois Department of Transportation.









MUDDY MONSTER SUBDIVISION & INTERSECTION IMPROVEMENTS, MURPHYSBORO, IL

The proposed Muddy Monster Commercial Subdivision and Development is the redevelopment of a 10-acre site in Murphysboro, Illinios. The site is planned to be a mixed-use commercial development with hotel, fast food, convenience store, and office space. KEG was the prime consultant for the development from initial traffic studies thru site design and construction. The first phase of the project was the Phase I Traffic Studies. A Traffic Impact Study (TIS) was developed for the access to the site via the current North Street and Illinois Route 13/127/149 intersection. The TIS showed the existing intersection was causing crashes due to poor sight distance. The IDOT approved TIS includes new intersection access for the redevelopment to Illinois Route 13/127/149 that meets sight distance criteria. The TIS included auxiliary turn-lane warrant analyses, traffic operational analysis in Synchro Study, existing crash data and diagrams, traffic movement diagrams, proposed design exhibits, and crash modification factors for proposed configurations. KEG also produced an Intersection Design Study (IDS) for IDOT Approval. The IDS included a full intersection layout and design, including turning movements, cross-sections, profiles, details, and right-of-way impacts.

The next phase of the project was design and engineering for the intersection improvement and commercial subdivision. KEG provided the right-of-way engineering that included a new subdivision lot layout, IDOT right-of-way reconfiguration (including a change of access), and City of Murphysboro street right-of-way. KEG produced two sets of construction plans. One for the IDOT intersection improvement permit plans, which included pavement design, intersection details, based off the IDS, drainage design and details, and cross sections. The second was the City of Murphysboro's subdivision road plans, which included pavement design, geometric details, road plan and profile, storm sewer design, and lot grading. Both projects included the development of construction specifications, contract documents, utility coordination and relocation, and construction bidding services.

The final phase of the project is the construction inspection and oversight. KEG and our sub-consultants provided full-time IDOT construction inspection and testing for the IDOT intersection improvement permit. KEG also provided construction oversight for the utility relocations, subdivision improvements, and construction staking services.

FRANK SCOTT PARKWAY IMPROVEMENTS AT NORTH BELT WEST INTERSECTION DESIGN STUDY (IDS) REVIEW, BELLEVILLE, IL KEG reviewed the Intersection Design Study for the intersection of Frank Scott Parkway with North Belt West. The intersection improvement included removing the concrete median on Frank Scott Parkway and eliminating the striped median on Frank Scott Parkway. The medians were to be replaced with a dedicated right turn lane onto North Belt West. This improvement was intended to increase traffic capacity and safety for the intersection. KEG's review of the IDS noted that there was a discrepancy on which agency would be responsible for constructing ADA ramps with detectable warnings. KEG personnel worked with the consultant that prepared the IDS, as well as IDOT, to confirm that IDOT would be responsible for this portion of the improvement.

ILLINOIS 13 AT FREEBURG AVENUE ROUNDABOUT, BELLEVILLE, IL

KEG is providing Phase I and II engineering services to upgrade the intersection of Illinois 13 and Freeburg Avenue located in Belleville, Illinois to a modern roundabout. The current intersection is skewed and is currently experiencing traffic back-ups during the AM and PM peak hours.

Phase I services included performing traffic counts, conducting SIDRA Intersection analysis, Synchro/SimTraffic traffic model, and the preparation of an Intersection Design Study (IDS). The Synchro/SimTraffic traffic model was utilized to model the queuing lengths of the traffic if the railroad signals are activated. The roundabout showed that eastbound traffic through the intersection will not back-up to the at-grade crossing throughout the 20-year design year. The Synchro/SimTraffic traffic model also showed that eastbound traffic, exiting the roundabout, will not back-up through the intersection while the railroad signal is activated. A Project Development Report was also prepared for the project which included the geometric design of the roundabout and access to adjacent properties, limits of proposed work and construction limits, and a review of possible environmental impacts.



Phase II services included the preparation of general and detailed plans, special provisions, and cost estimates in accordance with the guidelines contained in the Illinois Department of Transportation (IDOT) Bureau of Local Roads and Streets Manual, the Bureau of Design and Environment Manual, and the AASHTO Guide for the Development of Bicycle Facilities-1999. The adequacy of the existing drainage facilities was analysis and improvements were incorporated into the intersection improvements.

In order to meet the IDOT's Complete Streets requirements, KEG recommended 7' wide sidewalks at each leg of the intersection to connect into the existing sidewalk for pedestrian movement, and a 3' wide urban shoulder for bicycle movements. These complete street additions coupled into the newly reconstructed McClintock Avenue street project that attaches to the Bi-State Metrolink Bike Trail and also provided alternate bicycle and pedestrian access to nearby Laderman Park. This intersection improvement project was constructed using CMAQ funding.





WEST BELLEVILLE BIKE TRAIL PHASE II, BELLEVILLE, IL

The West Belleville Bike Trail Phase II project was part of a multi-phase project that will, when completed, connect the west end of the City of Belleville with the MetroLink Belleville Bikeway on the East side of Belleville. The Phase II project is approximately two miles in length and located between Wesley Drive (Signal Hill Bike Trail) on the west and will connect to 52nd Street (West Belleville Bike Trail Phase I) on the east. This phase will connect Signal Hill School with Bellevue and Citizens Park.

The Phase II bike trail included the construction of a ten-foot wide asphalt trail with one-foot wide aggregate shoulders. The project improved the quality of life for Belleville residents, surrounding communities, and visitors; increased recreational amenities; reduced traffic congestion; improved air quality; and increased the safety for bicyclists and pedestrians, including many school children, motorists, and trail users.



KEG provided Phase I and II engineering services to construct the new bike trail. Phase I services included right-of-way (ROW), boundary, and topographic surveys; preliminary layout and design of the bike trail, Preliminary Environmental Site Assessment (PESA), public meetings, and the submittal of the project development report (PDR). Phase II services included the preparation of standard and detailed plans, contract documents with special provisions, and cost estimates in accordance with the Illinois Department of Transportation (IDOT) Bureau of Local Roads and Streets Manual – Bicycle and Pedestrian Accommodations. Design included pavement markings, erosion control, and all necessary state permitting. KEG also coordinated with local residents, City and IDOT officials, and utility companies to ensure that the project was completed to the satisfaction of all parties involved.

This project was complicated by the need to cross Norfolk Southern Railroad tracks. After submission of the PDR, the railroad rejected the at-grade crossing design and mandated a bridge be built over the tracks or the trail be realigned to an alternative route. KEG prepared a cost estimate for this alternative and determined the bridge over the railroad tracks would cost the City an additional \$1.2 million. As a result of this decision, KEG worked with the City, FHWA, and IDOT Bureau of Local Road and Streets to re-route the trail, while still providing the needed connectivity to existing trails, schools, and parks. Redesign of the trail is currently underway. The project was funded by the Illinois Transportation Enhancement Program (ITEP) using 80% federal monies with a 20% local match. KEG assisted the City of Belleville with attaining funding for the project.

BIKE TRAIL FEASIBILITY STUDY, STOOKEY TOWNSHIP, IL

Stookey Township retained KEG to investigate and evaluate the feasibility of various connections and associated construction cost estimates to provide pedestrian and/or bicycle accommodations within the Township limits. The primary purpose of this study was to identify feasible conceptual alignments to provide connections between neighbourhoods, schools, and recreation sites in Stookey Township; whereby, connecting to the existing and planned City of Belleville path network (i.e. Signal Hill Bike Trail, West Belleville Bike Trail, and MetroLink Bike Trail).

The existing roadways in Stookey Township within the feasibility study location do not provide any pedestrian and/or bicycle accommodations. Therefore, for this feasibility study, the proposed connections are intended to serve primarily as shared use paths for pedestrians and bicyclists separated from motorized traffic. The proposed shared use path connections were projected to offer options to the community for pedestrian and bicycle travel and encourage environmental stewardship in trail users of all ages.

KEG studied the area to gain a greater appreciation of the potential to implement trail connectivity within Stookey Township and conducted this in four steps. The first step identified and evaluated the existing conditions. The second step involved the development of shared use path connections. The third step evaluated the connections, which included construction cost estimates. The final step was the review of funding possibilities and recommendations. KEG also considered the following criteria during the evaluation process:

Geometry/Traffic – Safety was the primary objective in selecting and designing the shared use paths. The main focus was to eliminate or minimize potential conflicts between shared path users and motorists.

Accessibility/Connectivity – Access to the shared use path was essential. Users should be able to enter the facility at or near residential areas and travel to destinations such as schools, recreational facilities, parks, or existing trails, and all connections must conform to ADA requirements.

Compatibility with Community Goals – The location and design of the shared use paths reflect local, regional, and state goals of existing and future plans along the proposed connections.

Construction Costs – The cost associated with the establishment of a shared use path is important in evaluating the connections.





SHILOH SAFE ROUTES TO SCHOOL, SHILOH, IL

KEG provided construction inspection for the Illinois Safe Routes to School (SRTS) program improvements built by the Village of Shiloh near Whiteside School. The improvements provided ADA compliant sidewalks along Sierra Drive and portions of Lebanon Avenue to provide students a safe walking route from their homes to Whiteside School. SRTS uses a multi-disciplinary approach to improve conditions for students who walk or bike to school. The program has three main goals: to enable and encourage children, including those with disabilities, to walk and bicycle to school; to make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age; and to facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution within two miles of both public and private primary and middle schools.



KEG also served as the Resident Engineer for the construction inspection for the construction of the accessible sidewalks and shared use path. KEG was responsible for all coordination between the contractor and the Village and with IDOT. All testing of materials and documentation of work was done in accordance with IDOT standards. KEG was also responsible for inspecting workmanship and dealing with the day-to-day issues that occurred onsite.

BIKE AND PEDESTRIAN TRAIL STUDY, CANTON, IL

The Canton Park District serves a population of 17,000 and manages nearly 1,400 acres of open space. Major park facilities are located in Wallace Park, which also houses the Canton Park District offices; Big Creek Park; South Park; and Lakeland Park. The need for a greenways and trails network to connect the Park District's major facilities was identified during a comprehensive land use planning process. The Canton School system operates three elementary schools, a middle school, Canton High School, and McCall Development School.

The new trail system provides direct links from Lincoln Elementary and Canton High School to Canton Park District facilities. This system has improved safety for bicyclists and pedestrians, especially school children; decreased local traffic volumes by providing an alternative means of accessing these schools and the park system; enhances the quality of life for local residents; and provides an amenity that may assist in attracting new businesses to Canton. The proposed network also serves as the baseline for establishing additional trail links within the City.

KEG completed environmental studies and prepared an Environmental Class of Action Determination (ECAD) record to document the benefits and potential environmental impacts of the 2-mile system. The system includes improvement of existing trails within Big Creek Park, as well as a new trail along Big Creek. Impacts to natural resources were minimized through minor shifts in trail alignment and modification of the trail cross-section in critical areas.

KICKAPOO RAIL TRAIL, CHAMPAIGN COUNTY, IL

KEG provided environmental services for the Champaign County Forest Preserve District, in support of converting an area of abandoned CSX railroad into a recreational trail in Champaign County, Illinois. The overall project, the Kickapoo Rail Trail (KRT) is a 24.5-mile trail that follows former CSX railroad from East Urbana to Kickapoo State Park in Illinois. Specific to this project was the Phase II-B portion, which includes a 5.1-mile section from Saint Joseph, Illinois, to the Champaign/Vermillion County line.

KEG's scope of work included submitting the Wetland Impact Evaluation (WIE) forms to document all information regarding potential wetland impacts on the project. In support of the completion of the WIE forms, KEG coordinated with the Illinois Department of Transportation's (IDOT) Bureau of Design and Environment (BDE) and the lead engineering consultant on the project, Farnsworth Group, Inc. The WIE was completed for four wetland sites impacted by the project. Wetland impacts totaled approximately 0.017 acre; therefore, mitigation was not suggested, since the amount is considered below the threshold for mitigation. The WIE was successfully approved by IDOT in October 2019.

SIGNAL HILL BIKE TRAIL, BELLEVILLE, IL

KEG provided engineering services for the design of a new bike trail from the intersection of Foley Drive and Wesley Drive to Signal Hill School in Belleville, Illinois. The purpose of the trail was to provide a safe route to school for the students of the Signal Hill School District, as well as provide recreational opportunities for the residents of West Belleville. The project was funded by the Federal Safe Routes to School Program.

The trail utilized the right of way of Foley Drive and an abandoned railroad corridor to construct a 12-foot wide asphalt trail with aggregate shoulders and a pedestrian signalized crossing at Wesley Drive. The project included topographic survey, property owner/right-of-way research, easement document preparation, public meetings, traffic analysis, and preparation of a project development report, plans, specifications, and cost-estimates. The project was included in the City's Master Park Plan and is a part of a multiphased project plan which will connect the East Belleville Bikeway, the MetroLink bike trail, and the Depot Connector bike trail with West Belleville, thereby creating a city-wide bike trail system. The project involved coordination with FHWA, IDOT, School District 181, residents, and the City.





The Structural Engineers at KEG have extensive experience designing both vehicular and pedestrian bridges, and performing structural inspections for buildings, both residential and commercial. Designs have included inspection and rehabilitation, complete removal and replacement of existing structures, and new structures on new alignments and/or profiles. The size of structures have ranged from simple span structures, twenty-feet (20-ft) in length, to multi-span structures up to twenty-seven hundred feet (2,700-ft) in length. KEG's structural, hydraulic, geotechnical, environmental, and transportation engineers work together to deliver Phase I and Phase II engineering services for most structural rehabilitation projects. Over our 15 years in business, KEG has been tasked with more than 200 structural projects. Our Structural Team has more than 90 years of combined experience in structural engineering and consulting.

ANNUAL BRIDGE INSPECTIONS, EAST ST. LOUIS, IL

KEG served as the Program Manager and was responsible for the annual bridge inspections for the City of East St. Louis, Illinois per the National Bridge Inspection Standards (NBIS). The Federal Highway Administration (FHWA) requires local and state agencies to routinely inspect and report the inspection findings of all roadway bridges and culverts over 20 feet in length. In order to inspect and serve as Program Manager per the NBIS requirements, KEG staff have successfully completed the FHWA course, Safety Inspection of In-Service Bridges, and fulfilled the requirements to become certified to perform NBIS bridge inspections for local agencies.

As part of the bridge inspection program for the City of East St. Louis, KEG performed 24-month and 48-month inspections on the City's six bridges, which includes inspections of the deck, superstructure, substructure, channel, waterway, and approach roadway. KEG completes the bridge inspection reports, as well as prepares photo logs for each of the structures and submits the inspection findings to IDOT per the program requirements.







BUCHTA ROAD (HEEREN BRIDGE) OVER INDIAN CREEK, EDWARDSVILLE, IL

KEG was contracted by Madison County, Illinois for the replacement of Buchta Road, Heeren Bridge, over Indian Creek in Edwardsville, Illinois. The existing structure (designated by IDOT as SN 060-3340) consisted of a simple span Precast/Prestressed concrete deck beam bridge supported on timber pile abutments. Due to frequent flooding and deterioration of the substructure, the County asked KEG's structural group to perform a cost/benefit analysis to determine the most cost effective replace structure while keeping the overall lifespan of the structure in mind.

KEG's engineers determined that a 183-ft long 3-span rolled steel, wide flange, structure was the most cost effective. In order to extend the lifespan of the structure the steel beams were galvanized. Additionally, in order to reduce cost, a beam line was removed, reducing the overall number of beams to five (5). This was determined to be feasible as there is a low ADT on the structure. Additionally, any revisions to the structure will be widening of the overall structure in the future, which can be accomplished with staged construction.

The substructure consists of cast-in-place concrete abutments supported on steel H-piles. The piers consist of solid wall pile encased pile bent piers. The structure is located in a Seismic Performance Zone = 3 with SD1 = 0.320g and SDS = 0.722g. This combined with the Soil Site Class = E resulted in substantial seismic loadings requiring multiple iterations of the design to be completed to balance the substructure demands. The ending design consisted of a combination of HP 14x89 and HP 14x117 piling.

In addition to the structural design and detailing, KEG was tasked with generating the necessary special provisions, performing a load rating of the new structure, reviewing the applicable shop drawings, and answering any RFI's from the Contractor during construction.





2ND STREET OVER I-72 BRIDGE REHABILITATION, SPRINGFIELD, IL

As a sub consultant to Poepping, Stone, Bach and Associates(P.S.B.A.), KEG was tasked with performing the structural analysis and plan development for the rehabilitation of Structure No. 084-0104, carrying 2nd Street over I-72 in Springfield, Illinois

The existing structure consists of a four-span steel wide flange bridge. The existing cast-in-place reinforced concrete deck is supported by six (6) non-composite wide flange beams. The out-to-out width of the deck is 34-ft 0-in and the overall bridge length is 220-ft 6-in. The end spans of the structure are 40-ft 5-in and the interior spans are approximately 67-ft 6-in. The State has determined it would like to widen the structure, incorporate new standard barrier curbs and revise the existing expansion abutments to semi-integral abutments.



The new bridge deck will be 34-ft 10-in wide and made composite in the positive moment regions of the spans. In order to accomplish this, a new deck design was completed. The existing steel beams had to be analyzed to ensure making them composite, there was adequate strength to account for the moment redistribution effects. The new shear studs were designed, along with the new Type I elastomeric bearing pads.

In making the abutments semi-integral, the existing backwall and portions of the wing walls had to be removed to allow for the longitudinal movement of the bridge due to expansion/contraction. Additionally, the existing bridge mounted highway sign needed to be replaced. It was determined the new sign could be placed nearly in the same location, and the existing bolt holes in the steel wide flange web could be reused for the new sign brackets. One additional bracket was required, but this minimized the number of field-drilled holes required in the beams. The design was completed per the 2002 AASHTO Standard Specifications and the applicable IDOT Bridge Manual and All Bridge Designer Memos.

FAP 673 (US24/IL 116/IL 29) OVER FARM CREEK, EAST PEORIA, IL

KEG provided structural engineering services for an Abbreviated Bridge Condition Report in East Peoria, Illinois. KEG was responsible for the field investigation necessary to evaluate Structure Number 090-0047 carrying FAP 673 (US24/IL 116/IL 29) over Farm Creek in order to develop the Abbreviated Bridge Condition Report (ABCR). The existing structure was originally built in 1983 and consists of a 3-span structure with a total length of 179-ft 9-in. The superstructure includes a reinforced cast-in-place concrete deck supported by steel wide flange beams.

During NBIS inspection, it was determined that excessive deterioration of the steel beam ends may reduce the load carrying capacity of the structure. During the site investigation, measurements of the deterioration were taken. These measurements were then analyzed to evaluate if repairs are required or if the remaining steel can safely carry the design loads without being posted. The findings of this analysis were formulated into the ABCR and provided to IDOT, District 4 for review.

PTB 147-23 ILLINOIS ROUTE 17 OVER EDWARDS RIVER, MERCER COUNTY, IL

KEG was contracted by Chastain & Associates, LLC to provide Structural Engineering and Erosion Control services for the Illinois Route 17 over the Edwards River project in Mercer County, Illinois. The purpose of the project was to replace the existing 10-span structure carrying Illinois Route 17 over the Edwards River with a new 5-span structure. The new structure consists of 42-inch deep plate girders made composite the full length. Because of the length of structure, both modular expansion joints and preformed joint strip seal joints were required. The substructure consists of open spill through abutments and solid wall encased piers supported by metal shell pile foundations. The new structure carries two lanes of traffic along with two 4-feet wide shoulders across the river.

KEG's role on this project was to do the complete design and detailing of the bridge approach slabs. In addition, KEG's structural engineering department provided the QC/QA review for the design calculations and final plans. This included independent design checks of all superstructure and substructure elements as well as independent quantity calculations. The plan review QC/QA process included verifying the design elements were accurately shown on the contract plans as well as ensuring the constructability of the various stages of construction.

In addition to the structural aspects, KEG's transportation engineering group designed and developed the necessary erosion control measures for this stream crossing. This included armoring around the new bridge piers per the recommendations in the hydraulic analysis to prevent scour at the pier and embankment. There were also areas of bank identified upstream of the bridge that required bank stabilization measures. KEG designed the stabilization measure using stone riprap along the bank to correct the existing bank erosion. KEG provided complete erosion control plans to accommodate both temporary and permanent measures.



ENGINEERING SERVICE MODEL

While every project is different and our approach should to be tailored for each work assignment, our experience with other local municipalities give us a great "leg up" on other firms. The City of DeKalb would be hard-pressed to find an issue or project KEG has not encountered with similar clients. A beneficial feature of partnering with KEG is our flexibility. Our ability to adapt, assign work immediately, and cut out the red tape of larger firms gives our clients open lines of communication and fast, efficient service.

KEG's structure allows employees to cross-train and support multiple service groups. Being able to work across service sectors makes employees more versatile, increasing KEG's strategic flexibility. In times of urgent need, these expanded skills provide KEG the ability to rapidly ramp-up in response to a clients unanticipated schedule or additional needs. Our organization also provides employees with the opportunity to work remotely or on flexible schedules. This structure allows KEG to be nimble and to adapt quickly to the urgent/surge demands of our clients.

Futhermore, KEG has a mandatory Quality Assurance/Quality Control Process to assure a quality product is being delivered to our clients. KEG has developed a method for performing reviews of documents to help assure technical quality in a clear and concise written style reflecting correct grammar and presentation. This is completed through the implementation of our technical and editorial review process, which is documented through a form, attached to each document, and is signed by multiple reviewers as it completes the process. The form helps assure compliance with project and corporate practices at all levels and provides a means of documenting participation in the process of preparing, reviewing, and issuing a document. A copy of the review form is included at the right.

SERVICE MODEL FUNCTION

PROJECT ASSIGNMENT

We will draw from our extensive pool of professionals to assemble the team best suited to successfully deliver each assignment.

SCHEDULE & COST MANAGEMENT

At the outset of each assignment, we will develop a list of deliverables and schedule milestones. Where appropriate, we will accelerate assignments that necessitate early environmental clearance and advancement of future project development activities.



PROJECT BUNDLING

Our team has extensive experience in project bundling, having bundled many projects throughout Illinois. Project bundling can be an effective cost and schedule savings tool when implemented properly. Projects of similar work types, in the same general vicinity, with relatively similar schedules can be efficiently bundled in order to generate the best cost savings for the City and its residents.

QUALITY CONTROL AND ASSURANCE

Hands-on quality management and implementation during the documentation process results in the delivery of better projects. The KEG team follows a detailed QA/QC procedure ensuring every project element has received the appropriate interdisciplinary review.

So, why KEG?



We are committed to producing quality work in order to grow our footprint with the City of DeKalb and surrounding communities.



We have built your contract team with the capacity and experience necessary to bring each project from scope to completion with your satisfaction in mind.



The KEG culture and diversity pledge is one we commit to with every project. We will bring a diverse and well-rounded perspective to the City.



Our streamlined processes and focus on utilizing the most advanced technology and software allows us to be flexible with the changing times and keep on task and within budget for all projects.



We are happy to provide the references below, as they can attest to our quality of work and the high standard of client service we deliver. We are only as good as our last project, and we urge you to contact these professionals to learn more about KEG and how our approach and expertise has assisted their local communities, agencies, and projects.

MUNICIPAL REFERENCES

Chris Sokolowski

Assistant City Engineer for Transportation City of Champaign, Illinois 217.403.4700 chris.sokolowski@champaignil.gov

Jason Poole

Director of Public Works City of Belleville, Illinois 618.233.6816 JPoole@belleville.net

Sean Henry Director of Public Works City of Carbondale, Illinois 618.457.3270 shenry@explorecarbondale.com

Plans were submitted on time despite low probability of the job, making the letting. Consultant was prompt in answering emails. Consultant anticipated and incorporated change to constant slope parapet. Pleased with performance.

-Mark Daugherty, IDOT Reviewer PTB 180-021 Various/Various

All submittals were made on time. The work performed contained no major errors. The consultant was selfmanaged, available and always very responsive to problems and concerns. The consultant has been cooperative in meeting the Department's needs.

-Avoree Gore, IDOT Reviewer PTB 181-013 Various/Various District 5

The City of Belleville has had the opportunity of working with KEG on multiple projects. They have a wide variety of civil and construction engineering projects throughout Belleville. KEG has always been professional and thoughtful in their approach to serving the public interest and approached our projects with the best interst of the City and its residents in mind.

-Mark Eckert, Former Belleville Mayor

Kaskaskia is a partner to WSP USA (WSP) on several projects, supporting our project teams environmental documentation, permitting, and maintenance of traffic. For WSP, Kaskaskia is a preferred partner in that we can rely on them to complete quality work on time.

Being a larger firm, WSP often leads projects with aggressive schedules. When Kaskaskia is on our team, not only can we rest assured that they will meet the accelerated schedule, they serve as an advisor to us on streamlining their scope so that our team can successfully deliver for the owner.

-Kelli McNamara, PE WSP Area Manager

Any prime would certainly benefit from the expertise, high-quality work responsiveness. and Kaskaskia **Engineering Group provides. The firm proved on this project** it is an exceptional partner dedicated to serving the client's needs. I look forward to working with them on future projects. The firm is a truly deserving candidate for the ACÉC Indiana Diversity Award.

-Kenneth R. Olson, PE American Structurepoint, Inc. Project Development Director





Prepared By:

WBK Engineering, LLC. 116 West Main Street, Suite 201 St. Charles, IL 60174 630.443.7755 www.wbkengineering.com

Contact: Greg Chismark, PE gchismark@wbkengineering.com P: 630.338.8527

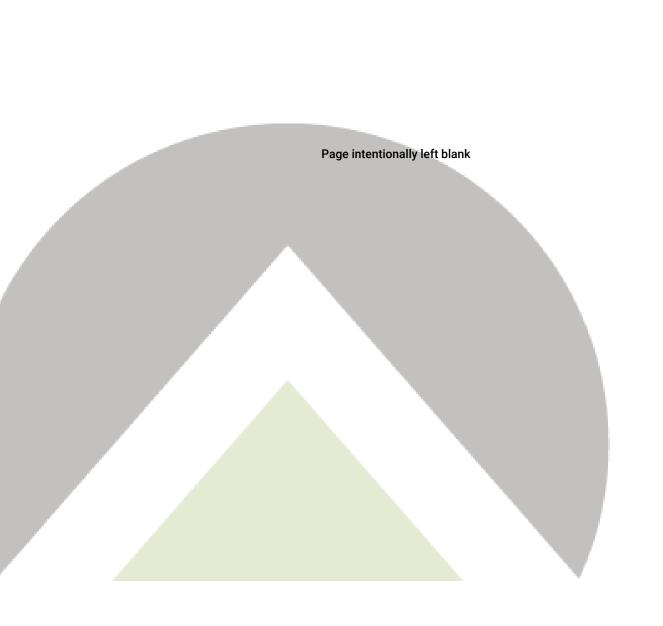
STATEMENT OF QUALIFICATIONS Prequalification for Engineering Services

CITY OF DEKALB



Prepared For: Zachary Gill, PE | City Engineer City of DeKalb 1216 Market Street DeKalb, IL 60115







January 21, 2022

City of DeKalb Public Works Mr. Zachary Gill, P.E. 1216 Market Street DeKalb, IL 60115

Re: Statement of Qualifications - City of DeKalb Prequalification for Engineering Services

Dear Mr. Gill:

WBK Engineering, LLC (WBK) appreciates the opportunity to submit our Statement of Qualifications for various municipal projects within the City. As a full-service engineering consulting firm, WBK has enjoyed working integrally with City staff over the last several years. We believe that WBK's experience and success with the City has mutual benefit, and we look forward to building on that relationship.

The depth and technical capability of our staff renders us competent and qualified to perform all the services and project related tasks identified in the RFQ. Accordingly, we have identified WBK staff with specific skills and abilities to successfully complete projects on behalf of the City. Our recent work with both DeKalb and other local municipalities is well-aligned with the selected projects and services.

With a client-focused attitude, WBK's model for project delivery is simple and effective. WBK's approach is based on four primary principals: team collaboration, cost effectiveness, communication, and a commitment to excellence for our clients. These principles combined with experience, technical competence and knowledge of DeKalb will allow us to successfully serve the City in the future.

Based on the range of engineering services requested, we have organized WBK staff into several teams based on project type and in order to best serve the needs of the City. I will be the primary contact for WBK with over 37 years of experience, including serving as the acting City Engineer in DeKalb. Working with me are three very competent and accomplished professionals leading the day-to-day effort on individual projects.

To address a specific item in the RFQ, be advised WBK has never been the subject of a complaint with the Illinois Department of Professional Regulation. WBK has been involved in litigation related to personal injury lawsuits. None have resulted in a finding of negligence nor improper professional practices.

WBK offers the City a complete package; a qualified team, a track record of successful project delivery, and immediate availability to meet the requirements of these projects. If you have any questions or require additional information, please contact me at 630.338.8527 or gchismark@wbkengineering.com. Thank you for your favorable consideration.

Sincerely,

Greg Chismark, P.E.

President

FIRM DESCRIPTION



DUNS Number #146696476

CAGE Code 595 13

NAICS Codes

541330 - Engineering Services (Primary)

541310 - Architectural Services

541320 - Landscape Architecture

541340 - Drafting Services

541620 - Environmental Consulting

Office Locations



St. Charles Office 116 W. Main Street Suite 201 St. Charles, Illinois 60174 (630) 443-7755



Battle Creek Office 68 E. Michigan Avenue Battle Creek, Michigan 49017 (269) 224-3182

Municipal Contact



Greg Chismark, PE President



St. Charles Office

116 W. Main Street Suite 201 St. Charles, Illinois 60174



(630) 338-8527



gchismark@wbkengineering.com

Please visit www.wbkengineering.com to find out more.

WBK Engineering LLC has been providing engineering services to public and private sector clients for the past 23 years. Our staff includes an experienced team of experts in Civil Engineering and related fields with current practice in Water Resources, Transportation, Structures, Municipal Services, Environmental Resources, Planning & Development, and Construction. Our clients include public agencies and private sector companies looking for solutions to engineering challenges that integrate client objectives in the built and natural environments.

PRACTICE AREAS

Water Resources

Flood Studies & Design Detention Design Stream Bank Stabilization LOMA/LOMR Submittals Hydraulic Design Permitting Ordinance Consulting

Transportation

Highway Design Intersection Design Studies Traffic Studies Location Design Studies Traffic Management Plans Feasibility & Corridor Studies Foundations & Walls **Utility Coordination**

Structures

Bridge Design Bridge Rehabilitation Bridge Inspection Structural Analysis **Detention Storage Vaults** Construction Drawings

Municipal Services

Zoning Administration & Plan Review Local Code Compliance Comprehensive Plan Management **Existing Conditions Assessment** Drainage Investigation & Improvements NPDES Permitting & Compliance Sewage Conveyance and Water Supply

Planning & Development Preliminary and Final Engineering Residential Neighborhood Design Mixed-Use, Commercial, Industrial Placemaking

Zoning Analysis & Entitlements 3D Renderings and Graphic Design Project Management

Environmental Resources

Stream Surveys Floristic Studies and Tree Inventories Wetland Delineations and Restoration

Joint Permit Applications Mitigation Design

Environmental Maintenance & Monitoring Permitting

Construction

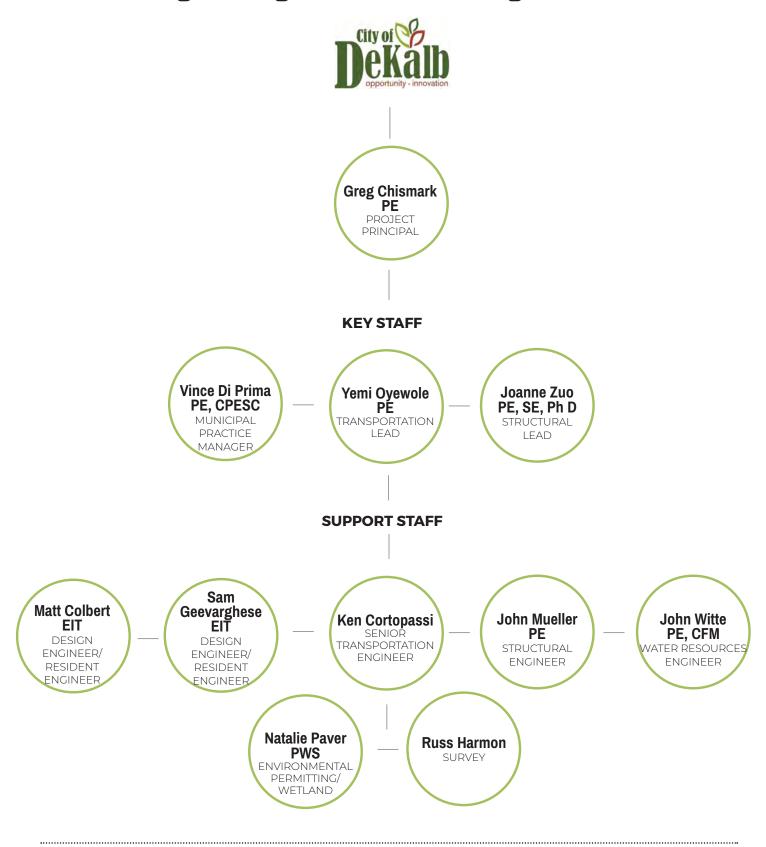
Construction Management Drawings & Specifications Resident Engineering Permit Compliance Quality Assurance / Quality Control Project Budgeting & Estimating Public Outreach & Coordination

MUNICIPAL & COUNTY CLIENTS

City of DeKalb City of Geneva City of Woodstock City of Elgin City of Aurora Village of Lincolnshire Village of West Dundee City of Batavia City of Naperville Village of Westmont City of St. Charles Kane County DOT Village of Willowbrook Village of South Elgin Kendall County DOT Village of Downers Grove Village of North Aurora McHenry County DOT

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Engineering Services Team Organization





About Grea

Greg Chismark has over 37 years of infrastructure and civil engineering project management experience. He is intimately familiar with the City of St. Charles serving as City Engineer for 15 years. Design and project management skills include projects related to streambank stabilization, stormwater management, utilities, transportation, regulation development. and subdivision and site development plan review, and construction management oversight. Greg has a proven ability to communicate with citizens, elected officials, government staff, engineers, architects and construction contractors resolving concerns and finding solutions.

Education

BS, Civil Engineering, University of Illinois

Professional Registrations & Certifications

PE, Illinois 062-044133 PE, Wisconsin 42678-6 PE, Michigan 6201064156 Qualified Engineer Review Specialist, Kane County, IL



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Greg Chismark, PE PROJECT PRINCIPAL

Related Project Experience

Annie Glidden Road at Fairview Drive, Phase I, II & III, City of DeKalb Project Principal on this intersection improvement project to plan and design the intersection of Annie Glidden Road at Fairview Drive, located at the southwest limits of the City of DeKalb. The intersection was widened to accommodate the addition of warranted turn lanes on the north and east approaches. WBK used a 3R design approach to minimize the project footprint and expedited the approval process securing a Federal earmark for the project. Greg's responsibilities included project management, client and agency interface and QA/QC for the project.

2019 Clifford/Jerusha/Wing Park Neighborhood Street Program - City of Elain, IL

Principal for this project which included work in multiple neighborhoods on the west side of the City. The improvements in the Goethe neighborhood and on Crystal Street and McClure Avenue which are located immediately west of Route 31 and north and south of Wing Street covered approximately 2.2 miles and included basic resurfacing with isolated profile corrections to elimination of an inverted crown, skip patch curb and sidewalk repairs, ADA compliance for sidewalk corners and minor underground utility installation. The improvements in the Owasco Neighborhood located between the Route 31 and the Fox River over approximately 1 mile of rural roadway consisted of full depth pavement removal and replacement with a new 12" typical section, undercutting of roads in the floodplain, the addition of storm sewer, curb and gutter and underdrains in isolated areas to improve roadway drainage, tree clearing, roadway ditch regrading, replacement of roadway and driveway culverts and restoration.

North 2nd Avenue & Delnor Avenue Utility Improvements, City of St. Charles, IL

Project Manager. This purpose of this project was to reconstruct two block of North 2nd Avenue and one block of Delnor Avenue on the east side of St. Charles. The proposed improvements consist of the complete removal and replacement of the City's water distribution and sanitary sewer systems via trenchless technologies including directional drilling and pipe bursting throughout the project limits and minor storm sewer improvements. During design we assisted the City in securing construction easements for side yard sanitary sewer replacement. In addition, all three blocks will be fully reconstructed with a uniform rural cross-section including a ribbon curb along both sides of the street to confine the pavement and protect the edge. Minor roadway profiles adjustments and intersection improvements were made to improve the neighborhood drainage and flow of traffic.

Richards and Stevens Reconstruction, City of Geneva, IL

Greg served as the Project Principal on this large-scale utility replacement and roadway rehabilitation project in the City of Geneva. This project was funded by the City and included the reconstruction of five block on Richards Street and two blocks on Stevens Street. The improvements consisted of the complete removal and replacement of the City's water distribution system throughout the project limits, as well as partial replacement of storm sewer and sanitary sewer systems. Richards Street was also reconstructed with new curb and gutter and an improved roadway profile. Preparation of the final engineering plans, specifications, and cost estimates were completed in a condensed timeframe in order to meet the City of Geneva's summer construction schedule.



About Vince

Vince has 15 years of experience in the field of civil engineering with a focus on construction oversight and municipal engineering. His responsibilities include construction observation and documentation, MFT program design and management, assisting with design and permitting of site development and municipal engineering plan reviews. Vince's experience includes hydraulic analysis of storm sewer, hydrologic analysis, and stormwater management permitting for Kane and DuPage Counties. Vince also has over 10 years of experience in construction observation and soil erosion and sediment control inspections for the Village of West Dundee and the City of Elgin respectively.

Education

BS, Agricultural Engineering, University of Illinois

Professional Registrations & Certifications

PE, IL #062-064196 CPESC #4979 **Designated Erosion Control** Inspector, Lake County **IDOT** Documentation of Contract Quantities #18-13433 OSHA 30-Hour 24-602009874



Part of the Mno-Bmadsen Family



Vincent Di Prima, PE, CPESC MUNICIPAL PRACTICE MANAGER

Related Project Experience

Annie Glidden Road at Fairview Drive, City of DeKalb, IL

Full-time Resident Engineer for the Annie Glidden Road and Fairview Drive Intersection improvement project on behalf of the City of DeKalb. Coordination on this project was paramount the City owning the intersection and the Township and Tollway owning 3 of the 4 legs of the intersection. The project consisted of the widening the intersection to accommodate the addition of the warranted turn lanes on the north, south and east approaches. Construction included full depth pavement widening on all 4 legs of the intersection, installation of 48 inch storm sewer along the north side of Fairview Drive, replacement of the traffic signals, grind and overlay of the entire limits, pavement markings and restoration. The full time construction observation and inspection services included utility work coordination, local agency coordination, pay estimates, change orders, project documentation and closeout in accordance with IDOT procedures utilizing ICORS system for documentation.

North 2nd Avenue & Delnor Avenue Utility Improvements, City of St. Charles, IL Lead Design Engineer. The purpose of this project was to reconstruct two block of North 2nd Avenue and one block of Delnor Avenue on the east side of St. Charles. The proposed improvements consist of the complete removal and replacement of the City's water distribution and sanitary sewer systems via trenchless technologies including directional drilling and pipe bursting throughout the project limits and minor storm sewer improvements. During design we assisted the City in securing construction easements for side yard sanitary sewer replacement. In addition, all three blocks will be fully reconstructed with a uniform rural cross section including a ribbon curb along both sides of the street to confine the pavement and protect the edge. Minor roadway profiles adjustments and intersection improvements were made to improve the neighborhood drainage and flow of traffic.

2019 Clifford/Jerusha/Wing Park Neighborhood Street Program - City of Elgin, IL Project Manager. This project included work in multiple neighborhoods on the west side of the City. The improvements in the Goethe neighborhood and on Crystal Street and McClure Avenue which are located immediately west of Route 31 and north and south of Wing Street covered approximately 2.2 miles and included basic resurfacing with isolated profile corrections to elimination of an inverted crown, skip patch curb and sidewalk repairs, ADA compliance for sidewalk corners and minor underground utility installation. The improvements in the Owasco Neighborhood located between the Route 31 and the Fox River over approximately 1 mile of rural roadway consisted of full depth pavement removal and replacement with a new 12 inch typical section, undercutting of roads in the floodplain, the addition of storm sewer, curb and gutter and underdrains in isolated areas to improve roadway drainage, tree clearing, roadway ditch re-grading, replacement of roadway and driveway culverts and restoration.

Richards and Stevens Reconstruction, City of Geneva, IL

Lead Design Engineer. Vince prepared final engineering plans for a large scale utility replacement and roadway rehabilitation project within the City of Geneva. The purpose of this project was to reconstruct five blocks of Richards Street and two blocks of Stevens Street. Proposed improvements consisted of removal and replacement of the City's water distribution system throughout the project limits, as well as partial replacement of storm sewer and sanitary sewer systems. Richards Street was reconstructed with new curb and gutter and an improved roadway profile. Vince worked with the City and the private Burgess Norton industrial facility adjacent to the project to reconfigure the parallel parking along both streets. Final engineering plans, specifications, and cost estimates were developed in a condensed timeframe in order to meet the City's aggressive timeline. Vince also assisted the City in obtaining an IEPA permit for the proposed utility improvements.



About Yemi

Yemi is a licensed Professional Engineer with more than 30 years of experience in civil design and project management with a leadership role, responsible for generating, leading and delivering challenging projects; leveraging his network and focusing on clients' priorities while managing complex projects in multiple sectors, types and sizes. He is a forward thinker consistently demonstrating initiative to adopt new technologies and develop efficient processes. He has a strong knowledge of transportation projects from start to finish to push the business forward through innovative and industry changing ideas.

EducationBS, Civil Engineering, Southern University

Professional Registrations & Certifications

PE, Illinois, #062-058164 PE, Wisconsin #37297-6



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Yemi Oyewole, PE

Related Project Experience

Various/Various Phase I and/or Phase II Projects (P-92-004-18), Illinois Department of Transportation District 2, PTB 189/019

Project Manager for Phase I and/or Phase II engineering services as requested by District Two for various projects throughout Region Two including, but not limited to, the following work tasks:

Work Order #6 – WBK developed a type, size, & location (TSL) drawing for the replacement of an existing box culvert on IL 251 over an un-named tributary in LaSalle County.

Work Order #7 – Developed inlet relocation and maintenance of traffic plans associated with the completed ADA design at the intersection of IL 2 and Squires Avenue in Dixon.

Work Order #13 – Developing Phase II PS&E for the removal and replacement of the existing structure along IL 173 over an unnamed tributary to the Beaver Creek.

Various/Various Phase II Projects (D-91-253-18), Illinois Department of Transportation District 1, PTB 187/06

Project Manager for Phase II engineering services as requested by District One for various projects including, but not limited to, the following work tasks: Work Order #25 – IL 72 over Fox River Bridge Rehabilitation and Deck Overlay: Developed Phase II PS&E for maintenance of traffic plans, completed transportation management plan (TMP) form, attended IDOT Detour Meeting, performed quantity calculations, and assembled all required specifications and special provisions.

Work Order #28 – Phase II PS&E for Traffic Signal Installation plans at the intersection of IL 59 and Champion Drive.

Work Order #32 – Roadside barrier warrant analysis for IL 59 adjacent Grant Community Baseball and Softball fields in Fox Lake, IL.

US Route 41 From IL Route 21 to Delany Road, Cook County

Responsible for Phase II design engineering consisting of development of final plans, specifications and estimates and supervision and coordination of staff engineers for the development of final Drainage Plans, supporting calculations, specifications, special provisions, quantity and cost estimates, and required permits, Storm Water Pollution Prevention Plans (SWPPP), Floodway Permit application, compensatory storage design, development of cross sections and soil erosion control plans and maintenance of traffic plans. Responsibilities included project design support, cost estimating and analysis, utility coordination, and contract administration.

Illinois Tollway: PSB 20-1/6; RR-20-4524, Systemwide Design Upon Request

Project Manager responsible for Phase II engineering services for the preparation of plans, specifications, estimates, and contract requirements for advertisements and bidding of various contract packages for overhead sign structures. WBK reviewed contracting capacity, production rates, and overall construction costs to determine if the contracts should be separated into multiple contract packages. Additional tasks included site details, structural coordination, utility coordination, barrier warrant analysis, and maintenance of traffic.



About Joanne

Joanne is a licensed Structural Engineer in Illinois. Through her 26-year career, Joanne has worked on numerous projects including design of bridges, culverts, retaining walls as well as buildings and various special structures for many agencies including IDOT, Illinois Tollway, DuPage County, Kane County, US Army Corps of Engineers (USACE), the City of Chicago, Geneva, N. Aurora and St. Charles, National Park Services (NPS), Chicago, Joanne is familiar with many design standards, including those of the AASHTO, AREMA, Illinois DOT, Illinois Tollway, Chicago DOT, Chicago Transit Authority, and several state departments of transportation bridge design manuals.

Education

Ph. D/Doctorate, Civil Engineering, Illinois Institute of Technology

BS, MS, Structural Engineering Tongji University, Shanghai, China

Professional Registrations & Certifications

SE, Illinois 081006794 PE, Illinois 062054610 PE, Iowa 0564013



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Jiahong (Joanne) Zuo, PhD, SE, PE

Related Project Experience

Geneva Citywide Culvert/Bridge Inventory Study and Maintenance, Geneva, IL
As the Structural Engineer of Record, Joanne provided technical oversight of this
project. For each of the City's structures, WBK performed a visual inspection and
provided a report with condition assessment, significant findings, recommendations
for repair, rehabilitation, or replacement along with concept level estimates of cost and
prioritized maintenance/repair schedule.

KDOT Structure Services with Three-Culvert Replacement, Kane County, IL

As the Structural Engineer of Record, Joanne provided the primary technical oversight. The project involved the replacement of two (2) culvert structures on Harmony Road (CH 36) and the rehabilitation of the culvert conveying a Tributary of Mill Creek beneath Randall Road (FAP 336).

IL Route 173 over Un-named Tributary to Beaver Creek, PTB 189, IL DOT

As the structural Engineer of Record, Joanne led the design and preparation of contract documents including plan, specifications, and cost estimate. The project involved the removal of the existing single cell concrete box culvert carrying IL Route 173 over an unnamed tributary to Beaver Creek in Boone County and reconstruction a double-cell 10'x5' cast-in-place box culvert with staged construction.

IL 137 Culvert over Bull Creek Culvert, PTB 193, IL DOT

As the structural Engineer of Record, Joanne led the design and preparation of contract documents including plan, specifications, and cost estimate. The project involved the removal of the existing double cell concrete box culvert and reconstruction of triple-cell 12'x12' cast-in-place box culvert carrying IL Route 137 over Bull Creek in Lake County.

Stormwater Facility Structural Inspections and Design Engineering, DuPage County, Department of Stormwater Management

As the structural Engineer of Record, Joanne led the design and preparation of plans and specifications of the Elmhurst Quarry Flood Control Facility which was part of a various-various contract with DuPage County's Department of Stormwater Management.

US Route 45 Culverts Over Tributary to Millburn Creek, IL DOT

As the structural Engineer of Record, Joanne led the design and preparation of structural plans, specifications, and cost estimate. The project included realignment of new U.S. Route 45 (US 45 Bypass). As part of this improvement project, a 42-ft clear span three-sided structure and three precast box culverts were constructed carrying the U.S. Route 45 Bypass over Tributary to Millburn Creek.

I-80 /I-35 over the Des Moines River Bridge Widening, Polk County, Iowa

Lead Structural Engineer/I-80 /I-35 over the Des Moines River Bridge Widening/Polk County, Iowa: The/I-80/I-35 over the Des Moines River Bridge is 712 ft long, comprising seven spans with PPC beams. Major work includes superstructure and substructure widening, replacing expansion joints with link slabs, changing overall bearing fixity and converting stub abutments to semi-integral abutments.

US 52/IL 64 Bridge over Mississippi River, Savanna, IL & Sabula, IA

Lead Structural Engineer. The bridge consisted of 1,908 ft.-long approach spans and 546 ft. long arch span. The east approach spans consisted of 488-foot-long flared framing, four-span steel plate girder superstructure on the Illinois side and the west approach spans consisted of 1,420-foot-long eight-span of steel plate girder superstructure ranging from 125 feet to 240 feet on the lowa side.

DESIGN ENGINEER/RESIDENT ENGINEER



Matt Colbert, EIT

Matt has 5 years of experience in the construction industry having spent the majority of his early career working for national-scale General Contractors, managing projects during the construction phase. His project management experience includes installing wind farms across the United States and even helped manage the largest single-phase wind farm installed to date in North America. Since joining WBK, Matt has assisted and/or served as the resident engineer on the City of St. Charles Checkerboard Parking Lot Reconstruction, the 2019 City of Elgin Roadway Rehabilitation Program, Silver Glen Road Bridge Replacement, Rural Street Bridge Replacement, and for the proposed underground utility improvements for a large scale multi-family private development in West Dundee.



DESIGN ENGINEER/RESIDENT ENGINEER

Sam Geevarghese, EIT

Sam has 5 years of experience in the civil engineering field focusing primarily on design and construction engineering for municipal infrastructure projects. Prior to joining WBK, Sam served as a design engineer and a resident engineer on a multi-phase sanitary sewer and water main replacement in the oldest subdivision in the Village of Crestwood. He also assisted the Village of Crestwood in securing an IEPA State Revolving Fund Loan to help fund this large scale water main replacement.



SENIOR TRANSPORTATION ENGINEER

Ken Cortopassi

Ken brings over 30 years of engineering experience on a variety of infrastructure projects. The extensive experience gained over the years as a transportation and municipal consulting engineer has strengthened Ken's role as a team leader in the design and oversight of both locally and federally funded Phase 1 (Project Development) and Phase 2 (Design) projects. He will be directly responsible for civil related design items including design, plan preparation, utility coordination, estimates and plan specifications.



STRUCTURAL ENGINEER

John Mueller, PE

John will serve as a design and/or resident engineer specializing in structural elements. He will also perform the NBIS Project Manager duties and structure condition reports for bridges, culverts, and retaining walls. John has worked his entire career at WBK and is working with the Transportation Department, supporting structural efforts and other transportation related engineering activities. He has also served as a Resident Engineer providing construction oversight on various public bridge and structural related projects and underground utility improvements for private commercial developments on behalf of the City of DeKalb and the Village of West Dundee.

WATER RESOURCES ENGINEER



John Witte, PE, CFM

John has over 25 years of experience leading drainage and civil design efforts. He has worked on the drainage design for a variety of public infrastructure improvements and is familiar with IDOT design standards along with local stormwater ordinances in Northeast Illinois. John's experience includes oversight of water resources projects including roadway drainage design and stormwater permitting, including IDOT Location Drainage Studies and Hydraulic Reports, and municipal stormwater and development permits.

ENVIRONMENTAL PERMITTING/WETLAND



Natalie Paver, PWS

Natalie has 16 years of experience and is responsible for conducting on-site floristic studies, valuations, and preparing maintenance and monitoring reports; preparing wetland delineation reports, mitigation plans, and other environmental compliance/permitting documents; preparing environmental resource assessments; monitoring of sediment and erosion control on project sites; and construction and native landscape observation and management. Natalie will assist with navigating environmentally sensitive areas and the associated permit process to ensure projects are completed in a responsible manner.

SURVEY



Russ Harmon

Russ has 24 years of experience in survey, construction layout, topographic, engineering design and ALTA/ASCM land title surveys. Under the direction of a Professional Land Surveyor, Russ has performed ALTA/ASCM land title surveys, boundary surveys, construction layout and topographic surveys. He will serve as the lead surveyor on this project and will complete all the field survey work.



City of Elgin MFT Annual Right-of-Way (ROW) Maintenance Program

ELGIN, IL

The City of Elgin has trusted the WBK project team for eleven years (2010-2021) with preparation and oversight of the City's Motor Fuel Tax (MFT) Annual ROW Maintenance Program. The WBK team has been engaged in managing a wide variety of aspects of roadway and ROW maintenance projects throughout the City of Elgin. We have also been responsible for preparing the requisite MFT documentation for the City, including Council Resolutions, General Maintenance Section estimates and reconciliation records on an annual basis since 2008. We have participated collaboratively with City staff in IDOT audits of MFT records and successfully resolved outstanding issues identified.

Program Construction Values

2010	\$1,000,000	2016	\$500,000
2011	\$1,625,000	2017	\$500,000
2012	\$2,860,000	2018	\$550,000
2013	\$2,100,000	2019	\$600,000
2014	\$635,000	2020	\$750,000
2015	\$600,000	2021	\$800,000

Program Elements

- · City-wide Pavement Marking Program
- Traffic Signal Painting Program
- Intermittent Resurfacing Program
- Traffic Signal Maintenance Contract
- Asphalt & Concrete Material Bid
- · Sidewalk Repair Program
- · Historic Street Light Painting Program
- LED Lighting Replacement
- Pavement Rejevenating Program
- Microsurfacing Project
- Retaining Wall Evaluation & Design
- Pavement Condition Rating
- Alley Survey

WBK Engineering, LLC (WBK) provided the following services:

- Preparation of MFT Maintenance Bid Package Documents and estimate of construction cost
- Field reconnaissance and measurements require for the proposed improvements
- · Administering the bid opening and pre-construction meetings
- · Construction observations and documentation services
- Reviewing and approving contractor pay requests and change orders
- Preparation of MFT project annual closeout documentation
- Assistance with IDOT MFT Audit
- Completion of a City-Wide AutoCAD map detailing pavement marking maintenance program

Quick Facts

Time Period: 2010-2021

Clients:

Prior City Staff
Dave Lawry, Dan Ault,
Greg Rokos, Chris Tiedt,
Joe Evers, Jay Beverly

Current City Staff
Dan Rich, Aaron Neal,
Ron Rudd, Mike Pubentz
City of Elgin
1900 Holmes Road
Elgin, IL 60123
847.697.3160

WBK Team:

Greg Chismark, PE Vince Di Prima, PE, CPESC Doug Breunlin (Retired) John Mueller, PE Matt Colbert, EIT Sam Geevarghese, EIT Chad McDaniel, EIT



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2019 Neighborhood Street Improvements Program

ELGIN, IL

Throughout the past 10 years, the City of Elgin has regularly retained WBK Engineering, LLC (WBK) to serve in the capacity of Design and Construction Engineer for its annual Neighborhood Street Improvements Program. In 2019, WBK provided these services for substantial improvements within two neighborhoods on the northwest side of the City. The total construction value of the 2019 program was approximately \$1.9 million.

The neighborhoods chosen for improvements in 2019 were the Wing Park and Owasco Park neighborhoods. The Wing Park neighborhood improvements consisted of a grind and overlay of the neighborhood streets, curb and gutter replacement, minor utility improvements including the installation of new storm sewer, sidewalk replacement and modifications to ensure ADA compliance, pavement markings and site restoration. The Owasco Park neighborhood improvements consisted of a complete removal and reconstruction of neighborhood streets in addition to intermittent installation of new curb and gutter and storm sewer, removal and replacement of existing driveway culverts, earth excavation and ditch grading, erosion control and site restoration.

The WBK project team worked closely with City staff throughout the design process to help develop the scope of neighborhood improvements. During the design, WBK prepared preliminary plans and estimates of cost that were shared with City staff prior to moving to final engineering plans, specifications, and estimates of cost.

The Owasco Park neighborhood, in particular, posed several difficult challenges during design and construction, including:

- Presence of floodplain and high groundwater table during construction
- Lack of clearly defined potential drainage solutions for neighborhood improvements
- Steep neighborhood grades (up to 20%) created erosion challenges during construction
- Maintenance of traffic throughout neighborhood while completing a full reconstruction of the roadway network

WBK also served as the Construction Engineer for this project, making daily reports to City staff advising of the project status. Throughout the duration of construction operations, WBK staff was on site providing oversight of all work performed by the contractor, making all field determinations, documenting all work completed, and reviewing and approving all change orders and pay estimates. WBK also coordinated with other City entities such as the City Clerk's Office, Purchasing Department, Utilities Department and Streets Department as needed during construction.

Quick Facts

Time Period: 2019

Client:

Mike Pubentz, PE Director of Public Works City of Elgin Elgin, IL 847.931.5968

Funding: Local

WBK Team:

Greg Chismark, PE Vince Di Prima, PE, CPESC Matt Colbert, EIT Natalie Paver, PWS Ginna Podge



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North 2nd Avenue & Delnor Avenue Roadway & Utility Improvement

ST. CHARLES, IL

The City of St. Charles desired to reconstruct two blocks of North 2nd Avenue and one block of Delnor Avenue located just north of downtown St. Charles and east of Pottawatomie Golf Course on the east side of the City. North 2nd Avenue and Delnor Avenue both have rural cross-sections with narrow streets and mature trees immediately adjacent to the roadway in a residential neighborhood. As an older part of the City, the public utilities were undersized requiring full replacement of the water distribution and sanitary sewer systems along with minor storm sewer improvements. In addition, the City asked that special attention and care be taken to preserve the mature trees and rural cross-section of the existing neighborhood.

Since the neighborhood has only one access point, narrow streets, and portions of the sanitary sewer system is located in side yards trenchless technologies were implemented to replace the water and sanitary sewer systems. The sanitary sewer system was replaced via pipe bursting and the water system was replaced via horizontal directional drilling. All three blocks were fully reconstructed with an improved roadway profile while minimizing the impacts to the driveways of the homes in the neighborhood. Other components of the project included limited storm sewer improvements, tree removals, mailbox relocations, and coordination with Nicor Gas for the relocation/replacement of the gas main and services throughout the neighborhood.

WBK worked closely with the City throughout the engineering process to ensure an end product that met the City's expectations. Final engineering plans, specifications and estimates were developed in late 2019/early 2020 in order to meet the City's timeline for construction. The project was bid in April 2020 with construction commencing in May 2020. The project was substantially completed in November of 2020 with an overall construction cost of \$1.8 million.

WBK provided the following services:

- Topographic survey including sub-surface utilities
- Tree survey and inventory
- Coordination on geotechnical investigation and CCDD testing
- · Existing utility coordination
- Roadway design (1,600 LF) including roadway profile and cross slope design
- Directional drill & open cut water main design (1,625 LF)
- Sanitary sewer pipe bursting design (2,200 LF)
- Storm sewer design (750 LF)
- Development of final engineering plans, specifications and estimate of probable costs for bidding
- IEPA permitting for water main & sanitary sewer construction

Quick Facts

Time Period: 2018-2020

Client:

Ken Jay, PE
Public Works Manager-Engineering
City of St. Charles
2 E. Main Street
St. Charles, IL 60174
630.377.4418

Funding:

City of St. Charles

WBK Team:

Vince Di Prima, PE, CPESC Greg Chismark, PE Natalie Paver, PWS Matt Colbert, EIT Russ Harmon







Richards and Stevens Street Reconstruction

GENEVA, ILLINOIS

The City of Geneva desired to reconstruct five blocks of Richards Street and two blocks of Stevens Street on the City's west side. Richards Street and Stevens Street both have urban cross-sections and are located in a primarily residential area, although industrial activity is also present. As an older area of the City, many of the public utilities were undersized and/or in poor condition; as such, the removal and replacement of much of the City's utility systems was included within the project scope. The City also desired to bring the area into compliance with ADA PROWAG requirements.

The project improvements consisted of the complete removal and replacement of the City's water distribution system throughout the project limits, as well as a partial replacement of the storm and sanitary sewer systems. Richards Street was entirely reconstructed with new curb and gutter and an improved roadway profile, while the existing curb on Stevens Street was able to remain in place. Other project components included the removal and replacement of approximately 10,000 square feet of sidewalk, the installation of new ADA provisions at intersections, and much coordination with the private Burgess Norton industrial facility adjacent to the project.

WBK worked closely with the City throughout the engineering process to ensure an end product that met the City's expectations. Final engineering plans, specifications and estimates were developed in a condensed timeframe in order to meet the City's aggressive timeline. WBK also procured an IEPA water main construction permit in a timely manner, allowing the project to commence construction without delay. The project was bid in May 2017, and construction commenced in July 2017. The project was substantially completed in December of 2017 with an overall construction cost of approximately \$1.8 million.

WBK provided the following services:

- · Topographic survey including sub-surface utilities
- · Roadway design (2,800 LF) including roadway profile design
- Sidewalk design (10,000 SF) including ADA provisions at intersections
- Water main design (3,100 LF)
- Storm and sanitary sewer design (3,000 LF)
- Development of final engineering plans, specifications and estimates for bidding
- IEPA permitting for water main construction

Quick Facts

Time Period: 2017

Client:

Brian Schiber, PE City Engineer/Assistant Director of Public Works 1800 South Street Geneva, IL 60134 630.232.1501

C. Elton Orozco Civil Engineer 1800 South Street Geneva, IL 60134 630.232.1501

WBK Team:

Greg Chismark, PE Vince Di Prima, PE, CPESC Doug Bruenlin, PE (Retired) Russ Harmon











Annie Glidden Road at Fairview Drive Intersection, Phase I, II & III

DEKALB, IL

WBK Engineering, LLC (WBK) provided expedited Phase I, II and III Engineering services to the City of DeKalb for the intersection improvements at Annie Glidden Road and Fairview Drive in DeKalb, Illinois.

The existing Annie Glidden Road at Fairview Drive intersection was in need of widening and pavement repair. The intersection was previously included in an approved Phase I study along Annie Glidden Road. However, a new PDR was required in order to receive IDOT/FHWA approval. In order to ensure the City could utilize Federal funding in the amount of \$800,000 prior to expiration of a legacy Federal earmark, WBK completed both Phase I and II concurrently.

The following items were included in the Phase I and Phase II scope of services:

- Topographic Site Survey and Existing ROW
- Plats and Legal Descriptions
- Geotechnical Investigation
- · Geometric Design, Intersection Analysis, and Intersection Design Study
- Wetland Delineation and Report
- Environmental Surveys
- · Location Drainage Analysis
- · Project Development Report
- Public Involvement
- · IDOT and Tollway Coordination
- · Phase II Plans, Specifications, and Estimate

Subsequent to a successful bid, WBK was engaged to provide construction management and oversight. The challenges of construction included coordination with an adjacent Tollway project that impacted the I-88 and Annie Glidden interchange, Northern Illinois University student and football events/traffic and adjacent user concerns with access. Utility relocations created schedule challenges; however, all of the underground utility improvements and pavement/ geometric improvements were completed in 2018. The final traffic signal improvements were completed in the spring of 2019. The final cost to construct the intersection improvements was \$1.09 million which was approximately \$25k under the awarded contract value.

WBK Engineering, LLC (WBK) was responsible for the following tasks during construction on this project:

- Full-Time Construction Observation and Documentation
- Utility Relocation Coordination with ComEd, Comcast, and Metro Net
- Weekly day-time and bi-weekly night-time traffic control inspections
- Weekly Soil Erosion & Sediment Control Inspections
- Pay Estimates & Change Orders
- Extension of Time Requests
- Project Documentation in accordance with IDOT Procedures, utilizing ICORS

Quick Facts

Time Period: 2017-2019

Client:

Zac Gill City Engineer City of DeKalb 1216 Market Street DeKalb, IL 60115 815.748.2331

WBK Team:

John Witte, PE, CFM John Mueller, PE Vince DiPrima, PE, CPESC Greg Chismark, PE Natalie Paver, PWS Matt Colbert, EIT Russ Harmon









Peace Road Corridor Study and Intersection Improvements

DEKALB, IL

WBK Engineering, LLC (WBK) provided Phase I & Phase II Engineering services to the City of DeKalb with respect to the highly-traveled Peace Road corridor from IL Route 38 to Gurler Road including the interchange with Interstate I-88. The initial scope of services includes a transportation corridor study, consistent with IDOT Phase 1 Project Development Report. From the study intersection and roadway segment projects were defined and prioritized. Additionally, specific project scopes were developed resulting in Phase II construction documents.

Such was the case for the {Peace Road and Fairview Drive intersection. Located just north of Interstate I-88, Fairview Drive is a major eastwest collector serving DeKalb's industrial park as well as residential areas to the west. The Peace and Fairview intersection is scheduled for construction in 2022 with a letting in March of 2022 with a total construction value of \$3.2 Million.

The following items were included in the Phase I and Phase II scope of services:

- » Topographic Site Survey and Existing ROW
- » Plats and Legal Descriptions
- » Geotechnical Investigation
- » Geometric Design, Intersection Analysis, and Intersection Design Study
- » Wetland Delineation Report & Environmental Surveys
- » Location Drainage Analysis
- » Project Development Report
- » Public Involvement
- » IDOT and Tollway Coordination
- » Phase II Plans, Specifications, and Estimate

Quick Facts

Time Period: 2018-Present

Client:

Zac Gill City Engineer City of DeKalb 1216 Market Street DeKalb, IL 60115 815.748.2331

Team:

Yemi Oyewole, PE Vince DiPrima, PE, CPESC Ken Cortopassi John Witte, PE, CFM Elizabeth Eboli, EIT Rajesh Bhatt, EIT Natalie Paver, PWS Supraja Sundaresan Russ Harmon







Illinois Prairie Path Resurfacing & Widening

FOX VALLEY PARK DISTRICT, IL

WBK Engineering, LLC (WBK) provided Phase I & Phase II engineering services to the Fox Valley Park District for the resurfacing and widening of approximately 2.1 miles of the Illinois Prairie Path from Indian Trail Road to the DuPage County line within the City of Aurora. The project consists of widening the existing aggregate Illinois Prairie Path from eight (8) to ten (10) feet in width, constructing turf shoulders, intersection improvements at three (3) roadway crossings, and providing a new hot-mix asphalt surface.

The extensive presence of wetlands and floodplain throughout the corridor presented significant design challenges; however, the final design ultimately avoided impacts to these sensitive areas, resulting in reduced mitigation costs to the client. After the geotechnical investigation found contaminated soils WBK revised the proposed bike path profile to minimize the amount of haul-off. In addition, to help expedite the project schedule WBK completed both Phase I and Phase II concurrently. The project is funded in part by a federal ITEP grant and has an approximate construction cost of \$1.0 million, with construction anticipated to begin in the Spring of 2022.

The following items were included in the Phase I and Phase II scope of services:

- » Topographic Site Survey
- » Geotechnical Investigation
- » Utility Coordination
- » Public Outreach & Involvement
- » Wetland Delineation and Assessment Report
- » Geometry Alternatives for Farnsworth Avenue Crossing
- » Project Development Report
- » IDOT and City of Aurora Coordination
- » Permitting
- » Phase II Plans, Specifications, and Estimate

Quick Facts

Time Period: 2018-2021

Client:

Jeff Palmquist Fox Valley Park District 101 W. Illinois Ave. Aurora, IL 60506 630.897.0516

Team:

Yemi Oyewole, PE Scott Randall, PE, CFM Vince Di Prima, PE, CPESC Ken Cortopassi John Mueller, PE John Witte, PE, CFM Natalie Paver, PWS Sam Geevarghese, EIT Russ Harmon







Rural Street over Indian Creek, Phases I, II & III

AURORA, IL

WBK was selected by the Aurora Township Highway Department to provide Phases I, II, and III engineering services for the replacement of the Rural Street Bridge. The existing three-span bridge crosses Indian Creek in an urban setting closely surround by residential and commercial properties. The new structure consists of a 3-span, PPC deck beam bridge measuring 83'-6" back-to-back abutments with a 5" concrete wearing surface. The bridge deck out-to-out measures 36'-0" and carries two (2) 12'-0" lanes with 4'-0" shoulders. The substructure consists of concrete spill-thru abutments and concrete encased pile bent piers. Modified reinforced concrete approach slabs were constructed along with guardrail safety improvements and 165' of roadway reconstruction beyond the bridge limits.

WBK performed the following Phase I activities for this project:

- Route & Hydraulic Survey
- Subsurface Investigation
- Utility Coordination
- · Abbreviated Bridge Condition Report
- · Hydrology/Hydraulic Analysis
- · Wetland Delineation and Report
- · Special Waste Assessment and Preliminary Environmental Site Assessment
- Preliminary Bridge Design
- · Project Development Report

Phase II engineering activities included:

- Supplemental Surveys
- Data Collection
- Utility Coordination for subsurface and aerial line conflicts
- · Roadway & Bridge Plans, Specifications and Estimates
- Permitting

Serving as Aurora township's representative during construction, Phase III engineering activities included:

- Utility conflict resolution and relocation coordination
- Full-time construction observation
- Pay estimates and change orders
- Project documentation in accordance with IDOT procedures, utilizing the IDOT ICORS and MISTIC documentation systems
- Record drawings
- NBIS initial inspection, documentation and coordination with IDOT for inclusion in the NBIS registry

Quick Facts

Time Period:

Phase II: 2016-2017 Phase III: 2018-2019 Phase IIII: 2019-2020

Client:

Juan Reyna Township Hwy. Commissioner Aurora Township Hwy. Dept. 220 Butterfield Road North Aurora, IL 60542 630.892.0246

Funding:

STP-Bridge

WBK Phases I II & III Team:

Joanne Zuo, PE, SE, PHD John Mueller, PE John Witte, PE, CFM Scott Randall, PE, CFM Natalie Paver, PWS Vince DiPrima, PE, CPESC Matt Colbert, EIT Craig Tacey, EIT Russ Harmon











Citywide Culvert/Bridge Inventory Study and Maintenance Plan

CITY OF GENEVA, IL

WBK Engineering, LLC (WBK) served the City of Geneva by providing engineering services for a Citywide Structure Inventory Study and Maintenance Plan project. This type of comprehensive approach helps Public Works/City Engineer prioritize projects and serves as a budgeting tool for the City. The goal of an inspection program is that condition awareness and programmed maintenance extends the useful life of infrastructure and is the most cost-effective approach in the long run.

As part of the scope of service, WBK:

- Determined the initial structure inventory and inspection list utilizing the City's known GIS map of culverts and bridges as well as the City's storm sewer GIS atlas map.
- Identified structures that have not been previously recorded and established a complete and up to date a citywide structure inventory based on the knowledge of the City's drainage system and infrastructure.
- Performed bridge inspections per the National Bridge Inspection Standard (NBIS) for the City's known and extended culvert/bridge inventory.
- Prepared thorough documentation of the current existing conditions and significant findings.
- Provided recommendations for repair, rehabilitation, or replacement along with concept level estimates of cost and prioritized maintenance/ repair schedule based on the condition assessment.

WBK developed a comprehensive priority matrix of rehabilitation and maintenance plan for short and long-term durations to assist the City with structure prioritizations and future funding necessities. Establishing an inspection program with scheduled routine inspections detects structural and functional deficiencies, minimizes the probability of structural failure, and ensures the public safety.

Ouick Facts

Time Period: 2020-2021

Client:

Brian Schiber, PE City of Geneva 22 S. First St. Geneva, IL 60134 630-232-7494

Funding:

Local

Cost:

Fee: \$37,000 Construction: Estimated \$713,000 (\$536,000 over next 1 year and \$177,000 over next 4 years)

WBK Team:

Joanne Zuo, PE, SE, PhD John Mueller, PE Craig Tacey, EIT





ENGINEERING SERVICE MODELS

WBK has experience with a variety of non-traditional engineering service models. These include:

- Design Build & Construction Management Variations
- Dedicating an employee or on-call team
- Multi-Year Task Order
- Multi-discipline project collaboration

For the project types identified we believe the conventional design bid build is the most appropriate model for the City because they likely involve a straightforward project scope. However, if a project arises where an alternative is preferred based on schedule or scope we can accommodate the City's need.

Design Build - WBK has experience with alternative project delivery methods such as design build with a Guaranteed Maximum Price as well as Construction Management variations. Our most recent and current project is working with the Village of North Aurora on an expansion of their Public Works garage / facility.

Staff Supplement - Another engineering service model to support municipal staff includes dedicating an employee to an agency or providing on-call services through a team approach. WBK experience and examples of providing dedicated staff includes supporting the City of DeKalb when in transition between City Engineers. We also provide on-call services related to development review and oversight for several municipalities. We find this approach often leads to other ways we can supplement municipal staff with a specific skill or manpower when necessary.

Multi-Year Task Order - WBK had several contracts with IDOT and the Tollway that are task order based. However, at the municipal level this approach can also be utilized. We have a five-year contract with the City of Elgin that identifies project types, estimated budget values but also provides flexibility for the City. This approach allows projects to start and be accomplished quickly, saves time on contract processing for both parties and helps build collaboration between personnel.

Multi-Discipline Collaboration – WBK is part of a professional service group that includes architects and mechanical and electrical engineers called the Bodwé Group. As a result of common ownership, we have collaborated with 7Generations A & E as well as Steelhead Engineering and Blue Star Integrative Studios to serve a wide-range of clients across the country. If a project warranted the need for services beyond civil engineering we have willing and ready partners for you to consider making coordination seamless and a one stop shop for you.

REFERENCES

Chris Adesso
Assistant Director of Public Works
City of St. Charles
2 E. Main Street
St. Charles, IL 60174
(630) 377-4405
cadesso@stcharlesil.gov

Aaron Neal
Public Works Superintendent
City of Elgin
1900 Holmes Road
Elgin, IL 60123
(847) 931-6099
neal_a@cityofelgin.org

Rich Babica
Director of Public Works
City of Geneva, IL
1800 South Street
Geneva, Illinois, 60134
(630) 232-1501
rbabica@geneva.il.us



wendler engineering services, inc. civil • structural • surveying

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DeKalb. Illinois 60115

(815) 756-7756 Fax (815) 756-7750

Statement of Qualifications Municipal Engineering Services City of DeKalb

January 21, 2022

Prepared for:

City of DeKalb Zachary Gill, P.E. 1216 Market Street DeKalb, IL 60115

Prepared by:

Wendler Engineering Services, Inc.
201 East Lincoln Hwy
Suite A
DeKalb, IL 60115

Prepared:

On: January 21, 2022 By: David A. Weber, P.E.

WENDLER ENGINEERING SERVICES, Inc. dweber@wendlergs.com

WENDLER ENGINEERING SERVICES, INC.

Civil and Structural Engineering & Land Surveying

Statement of Qualifications City of DeKalb January 21, 2022

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About Us

Wendler Engineering Services, Inc. (Wendler) is a professional consulting engineering firm providing a diverse range of civil engineering, land planning, land surveying and structural engineering services. Founded in 1968, Wendler began operations in Dixon, Illinois in order to serve the civil engineering and land surveying needs in Northern Illinois. Our services are provided to clients large and small, private and public, for-profit and non-profit.

Wendler's services are organized into three distinct yet complementary practice areas: civil engineering and land planning; land surveying; and structural engineering. With senior level involvement in every project, we are committed to consistently delivering the most accurate and cost-effective solutions to our client's engineering and surveying needs.

For over 50 years, the Wendler name has been synonymous with quality, integrity and professionalism. Dedicated to progress, customer satisfaction and to our industry, our experienced design professionals and support staff work hard to provide you with the best practices available through emerging technologies and sustainable innovative solutions.

Prequalifications

Wendler is prequalified with the Illinois Department of Transportation in the following categories:

- Hydraulic Reports—Waterways; Typical
- Special Services—Surveying
- Location Design Studies—Reconstruction/Major Rehabilitation
- Location Design Studies—Rehabilitation
- Highways—Roads and Streets
- Structures—Highway, Simple
- Structures—Highway; Typical
- Special Services—Sanitary
- Schematic Design

The Illinois Department of Transportation has determined our firm's capacity for design services is \$6.4 million in professional design fees. We are currently contracted at less than 20% of our maximum capacity.

In addition, Wendler holds the following credentials:

- Certified Small Business with the SBA
- Prequalified to perform professional services for the State of Illinois CDB and for Illinois American Water Company
- NBIS Bridge Inspection Certified Staff

Professional Discipline

Wendler Engineering Services, Inc. is licensed as an Illinois Professional Design Firm, Number 184-000848. To the best of our knowledge, our firm, ownership, management, or employees have not been involved in litigation or had complaints filed for improper practices with the Illinois Department of Transportation or any other state or federal regulatory authority.

Contact Us

Corporate Office

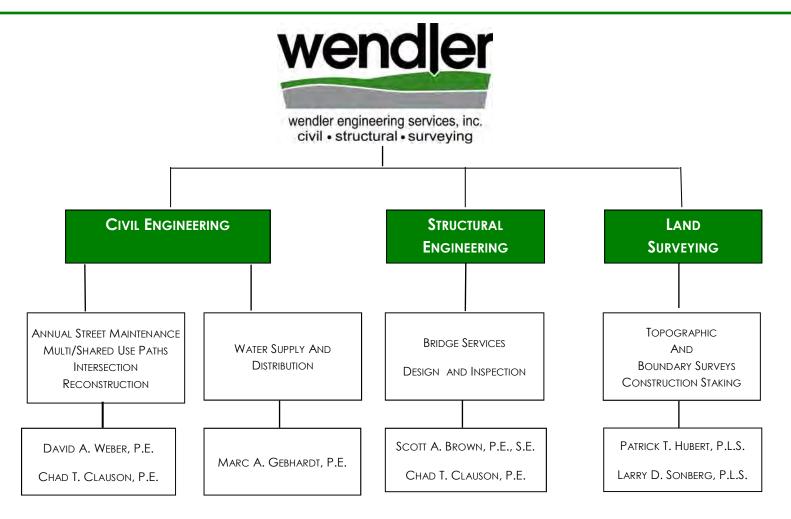
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ORGANIZATION CHART AND RESPONSIBILITIES



Project Team Contact Information

David A. Weber, P.E.—President, Director Civil Engineering, dweber@wendlergs.com, 815-288-2261

Scott A. Brown, P.E., S.E.—Secretary, Director of Structural Engineering, sbrown@wendlergs.com, 815-288-2261

Patrick T. Hubert, P.L.S.—Vice-President, Director of Land Surveying, phubert@wendlergs.com, 815-288-2261

Marc A. Gebhardt, P.E.—Treasurer, Senior Project Manager, mgebhardt@wendlergs.com, 815-288-2261

Chad T. Clauson, P.E.—Project Engineer, cclauson@wendlergs.com, 815-288-2261 or 815-756-7756

Larry D. Sonberg, P.L.S.—Senior Survey Manager, Isonberg@wendlergs.com, 815-288-2261

DAVID A. WEBER, P.E.

Education B.S., Civil Engineering

University of Wisconsin-Platteville, 1984



Position

President / Director of Civil Engineering Division

Registration &

Licensed Professional Engineer—Illinois

Licenses

Member of the Illinois Society of Professional Engineers

Member of the National Society of Professional Engineers

Member of Ride Illinois, an advocate for all Illinois bicyclists

- Offers more than 35 years experience representing a broad range of engineering projects.
- Promoted to Director of Civil Engineering Division in 1996.
- Served as former Assistant County Engineer for Whiteside County.
 Responsibilities included planning, coordinating, allocating and supervising the design, maintenance and repair of the county's road and bridge system.
- Project experience includes the evaluation and design of roads, streets, bike paths, storm sewers, sanitary sewers, and watermains.
- Extensive experience in the design of streets and highways, recreation trails and open spaces, site plans, storm water management plans, athletic fields/ courts, and parking lots of various sizes.
- Received the 2002 Professional Engineering Management Award presented by the Illinois Society of Professional Engineers for his leadership in advancement of technical goals, encouragement and inspiration of technical and professional achievements, and a continuing concern for professional ethics.



MARC A. GEBHARDT, P.E.

Education B.S., Civil Engineering

Bradley University, 1994



Position

Senior Project Manager / Civil Engineering Division

Registration &

Licensed Professional Engineer—Illinois

Licenses

Member of the Illinois Society of Professional Engineers

- Offers over 25 years of civil engineering experience.
- Joined Wendler Engineering Services in 2001.
- Extensive experience with planning, designing, and securing IEPA permits for watermain and sanitary sewer main extensions or replacements.
- Responsibilities have included the design of commercial and residential subdivisions, water mains, sanitary sewers, stormwater management, parking lots, size development, bid documents, permitting and project management.
- Diverse experience in the design of residential, commercial, and industrial land development projects. Also in rural and urban roads, storm water management, public infrastructure maintenance and rehabilitation, parking lots, storm sewers, sanitary sewers, and watermains.
- Collaborated with clients and stake holders to develop budgets, coordinate schedules, and project implementation.



SCOTT A. BROWN, P.E., S.E.

Education B.S., Civil Engineering, 1995

University of Illinois, Urbana-Champaign



Position Director / Structural Engineering Division

Registration & Licensed Professional Engineer—Illinois, Florida

Licenses
Licensed Structural Engineer—Illinois

Member of the Illinois Society of Professional Engineers

NBIS Certified Bridge Inspector

- Diverse range of structural and civil engineering experience.
- Joined Wendler Engineering Services in 1995.
- Structural engineering experience includes performing the design and plan preparation for the construction of bridges, culverts, retaining walls, building foundations, structural inspections, and structural analysis.
- Local Agency Program Manager for Woodford County and Northern Illinois University bridges.
- Additional responsibilities include performing hydraulic analysis for bridges, culverts, hydraulic reports, roadway design, site development and construction inspection.
- Diverse experience in the design of residential, commercial, and industrial subdivisions.



CHAD T. CLAUSON, P.E.

Education B.S., Engineering, Civil Concentration, LeTourneau

University, 2015



Position

Project Engineer

Registration &

Licensed Professional Engineer—Illinois, Florida

Licenses

Member of the Illinois Society of Professional Engineers

- Over 6 years of experience of a variety of civil engineering disciplines.
- Municipal Engineering project experience includes the design of various street resurfacing projects along with site design reviews.
- Civil Engineering project experience includes the evaluation and design of roads, streets, multi-use paths, storm sewers, sanitary sewers, and watermains.
- Transportation Engineering Project experience includes performing traffic impact studies, intersection design studies, and plan preparation for signalized intersections and roundabouts.
- Structural Engineering Project experience includes design and plan
 preparation for the construction of highway structures, retaining walls, building
 foundations, structural building inspections, highway structures, pedestrian
 bridges, and steel building design.
- Construction inspection experience on local and federally funded projects.
- Additional responsibilities include hydraulic analysis for bridges, culverts, location drainage studies, storm water detention design, and site development design for industrial and commercial properties.



PATRICK T. HUBERT, P.L.S.

Education Associates Surveying Technology, 1990

Bachelor of Science Structural Design / Construction

Engineering, 1992

Penn State University, State College Pennsylvania

Position

Director / Land Surveying Division

Registration &

Licensed Professional Land Surveyor—Illinois

Licenses

Licensed Professional Land Surveyor—Colorado

Licensed Professional Land Surveyor—Pennsylvania

Member of the Illinois Professional Land Surveyors Association

Member of the National Society of Professional Surveyors

Member of the American Public Works Association

Member of the American Society of Civil Engineers

- Extensive land surveying and land planning experience.
- Diverse survey experience includes residential, commercial, and municipal.
- Over 30 years of land surveying experience.



LARRY D. SONBERG, P.L.S.

Education Associate in Highway Engineering

Technology, 1988

Morrison Institute of Technology, Morrison, Illinois



Position Senior Project Manager / Land Planning & Surveying

Division

Registration &

Licensed Professional Land Surveyor—Illinois

Bituminous Concrete Field—Inspection Documentation Bridge and Culvert Hydraulics

Member of the Illinois Professional Land Surveyors Association

Member of the National Society of Professional Surveyors

- Extensive land planning and land surveying experience.
- Diverse survey experience includes residential, commercial, and industrial subdivisions.
- Over 25 years of land surveying and construction staking experience.



Project Specific Narrative Annual Street Maintenance

North Front Street, Village of Sublette, Sublette, IL – Project included the reconstruction of North Front

Street by adjusting the profile grades and providing new pavements, under-drains, curb, and curb and gutter. The project included preparing construction and bidding documents, assisting with receiving bids, and construction observation.

Santee Street, Village of Sublette, Sublette, IL – Project included the reconstruction of Santee Street by adjusting the profile grades and providing new pavements, under-drains, curb, and curb and gutter. The project included preparing construction and bidding documents, assisting with receiving bids, and construction observation.



City of Morrison – 2020 Street General Maintenance

 Wendler prepared general maintenance plans, specifications, and cost estimates for the City MFT street resurfacing program. Wendler also performed construction observation, prepared contractor pay requests, and completed MFT final reports.

City of Morrison – 2021 Street General Maintenance – Wendler prepared general maintenance plans, specifications, and cost estimates for the City MFT street resurfacing program. Wendler also performed construction observation, prepared contractor pay requests, and completed MFT final reports.

City of Dixon - 2021 Street Maintenance — Project included resurfacing various streets throughout Dixon. Services provided included resurfacing plans, design of ADA sidewalk ramps, and Phase III construction inspection. Funding for this over \$1.1 million project was provided through Motor Fuel Tax, Rebuilding Illinois, and local funding.

City of Morrison – Grove Hill Cemetery Pavement
Maintenance – The City of Morrison hired Wendler
to prepare recommendations to maintain and repair
the narrow roads that provide access to the burial
plots in Grove Hill Cemetery. Wendler prepared
cost estimates for road repair options. Wendler will



prepare bidding documents once the City Council selects the maintenance operations they want to pursue.



Project Specific Narrative Annual Street Maintenance

Village of Sublette, IL – East First, South Front, and Chestnut Street – These streets experience heavy truck traffic and frequent failures to the existing storm sewers. Wendler was hired to prepare plans, specifications, cost estimates, administer bid documents, and perform construction engineering services. This Non-MFT project was funded with local tax revenue.

City of Fulton, IL – Park Drive, First Avenue, Eighth Street – These streets in the City of Fulton were deficient in width, pavement quality, and drainage. The city selected Wendler to prepare



plans to completely reconstruct these streets. Wendler also assisted with preparing bid documents, construction staking, and performing construction engineering services.

Main Street Extension and Wirsing Drive, Sandwich, IL— Project included the design to extend existing city streets 1/2 mile to service a major hospital construction project in Sandwich. The design included a multi-lane urban street with curb & gutter, storm sewer, sanitary sewer, and water main plans being constructed on a new alignment.

Oakland Drive, City of DeKalb, IL – Project included the design and preparation of complete plans, specifications and cost estimate for construction of a municipal street extension. This \$450,000.00 project was funded by Motor Fuel Taxes, Economic Development, and T.A.R.P. Funds and was submitted to the Illinois Department of Transportation for review and approval. The project included pavement design, preparation of right of way plats, coordination with other public entities, and preparing environmental review forms.

Downtown Dixon Streetscape West - City of

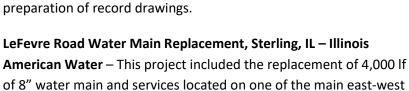
Dixon, IL - This streetscape project was located in the downtown business district. Reconstruction included new roadways, alleys, sidewalks, drainage structures, and lighting for six city blocks. Streetscape enhancements included decorative paver sidewalk bands, crosswalks, planters and accessible ramps. Services provided include site topographic surveys, ROW & easement plats, engineering design, preparing construction plans & specifications, IEPA permitting, coordination with the local municipality, prepare bidding documents, construction staking & construction observation.





Project Specific Narrative Water Supply / Distribution

Water Main Replacement, Sterling, IL - Illinois American Water — Wendler prepared construction plans, bidding documents and secured IEPA permits for the replacement of more than 29,000 ft of water main, fire hydrants and services throughout a variety of locations in the City of Sterling. Also responsible for obtaining IDOT utility permits when necessary, construction observation and preparation of record drawings.





collector streets in the City of Sterling. In addition to preparing plans, specifications and bidding documents Wendler secured IEPA permits and coordinated the project and traffic control with the city. During construction Wendler provided Resident Project Representative services and prepared record drawings.

Dillon Avenue Water Main Replacement, Sterling, IL – Illinois American Water – Wendler provided engineering and surveying services to replace 4,000 lf of 8" water main. The design included numerous interconnections at side streets and replacement of all water services within the right of way. Wendler secured the necessary permits and coordinated construction with the local municipality. During construction Resident Project Representative services were provided and record drawings were prepared.

Avenue L Water Main Replacement, Sterling, IL – Illinois American Water – Wendler provided engineering and surveying services to replace 4,600 lf of 8" water main. The design included numerous interconnections at side streets and replacement of all water services within the right of way. Wendler secured the necessary permits and coordinated construction with the local municipality. During construction Resident Project Representative services were provided and record drawings were prepared.

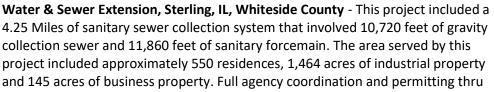


East 2nd Street Water Main Replacement, Sterling, IL – Illinois American Water – Wendler provided engineering and surveying services to replace 5,900 lf of 8" water main. The project included three directional bores of polyethylene pipe under IDOT roads. Traffic control plans were developed for lane closures and to reroute traffic during different stages of the project. All fire hydrants and water services within the right of way were replaced. Wendler secured the necessary permits (IEPA and IDOT) and coordinated construction with the local municipality. Resident Project Representative services were provided during construction and record drawings were prepared.



Project Specific Narrative Water Supply / Distribution

East 3rd Street Water Main Replacement, Sterling, IL – Illinois American Water – A main break in the heart of downtown Sterling necessitated the replacement of a 10" water main. The main was located on an IDOT route and crossed an IDOT route on each end. The project had to be fast tracked due to significant damage to the roadway and concern that the main may break again. Wendler took the lead to coordinate with Illinois-American, City of Sterling and IDOT to facilitate the replacement. The plan included directional boring a polyethylene pipe at the west end, installing insertion valves at various locations, installation of ductile iron water main and fire hydrants. A detailed traffic control plan was prepared to reroute the traffic around the work area. In addition to preparing plans and specifications Wendler secured IEPA and IDOT permits. During construction Wendler provided Resident Project Representative services and prepared record drawings.





the IEPA, IDNR, Illinois Historic Preservation Agency, U.S. Army Corps of Engineers, the Illinois Department of Commerce and Economic Opportunity was required, the Burlington Northern Railroad and the State of Illinois Department of Transportation. Borings were required to push the sewer main under the railroad tracks at Elkhorn Creek. The project also included 4.84 mi. of 16" watermain. Of which approximately 2000' were directional bored around a highway curve to stay within the right-of-way and eliminate open excavations

Watermain & Sanitary Sewer Relocation, Lee County Landfill, Amboy, IL – Republic Services, Inc – In order to make room for future expansion at the landfill existing underground utilities had to be relocated. Construction plans and specifications were prepared for 4700 ft of 12" water main, 3400 ft of sanitary force main and a lift station. Also provided project management and construction inspection.

Watermain & Sanitary Sewer Relocation, Lee County Landfill, Amboy, IL - Allied Waste Industries - Wendler designed and prepared contract plans and specifications for construction of 8000 feet of watermain and 5500 feet of sanitary forcemain including a lift station to service a landfill facility. The project included layout and design of 6400 feet of high use haul road pavement for access to the landfill cells.

Watermain & Sanitary Sewer Extension, Bailey's Subdivision – City of Princeton, IL - Wendler's professional services assisted with the design of approximately 3200 LF of watermain and 2700 LF sanitary sewer main extended to an existing residential subdivision annexed into the city. Services provided include site topographic surveys, construction plans & specifications, IEPA & IDOT permitting, coordination with local municipality, preping bidding documents, construction staking & construction observation.



Project Specific Narrative Multi / Shared Use Paths

Lynn Boulevard Path, Sterling, IL, Sterling Park District - Wendler performed Phase I, Phase 2, and Phase 3 Engineering services for a federally funded Safe Routes to School project. The scope of work included land surveying and engineering services evaluating different alignment options; preparing construction plans, specifications and cost estimates; preparing easement plats, and performing construction layout staking and construction observation. The project is located in an urban corridor and included the design of a pedestrian bridge and reconstructing existing curb ramps at crossings to comply with Americans with Disabilities Act (ADA) standards.



RB&W Trailhead Corridor, City of Rock Falls, IL, - Wendler successfully prepared application to receive federal ITEP funding in the 2010 selection cycle. Wendler

performed Phase I Engineering to construct shared-use recreation trail and trailhead plaza on an environmental Brownfield site of the former Reliant Manufacturing. This project connects the Hennepin Canal Parkway to the Cities of Sterling and Rock Falls.

Fairview Drive Bike Path, City of Dekalb, IL – Wendler prepared Phase I & Phase 2 Engineering services including preparation of project report, construction plans, specifications, and cost estimates to construct a shared-use path adjacent to Fairview Drive, scope of work included sidewalk connections, meeting ADA requirements at side streets and pedestrian signals at a State Highway crossing. Project also included real estate services to purchase additional right-of-way.



Sinnissippi Trail, Sterling, IL - Sterling Park District

Wendler was commissioned to perform engineering services to investigate the feasibility of providing a 10-foot-wide separated bicycle trail with parking from Sinnissippi Park to the Dillon Home, a distance of approximately 1.5 miles. This work included studying various alignment corridors to identify a preferred trail alignment. Services included preparing construction plans and cost estimates. The scope of work included general topographic survey and contour mapping at one foot intervals; preservation and protection of natural areas; identifying alignment options that are in compliance with AASHTO and ADA guidelines; and identifying the type, size and locations for all drainage

structures. Every year the Sterling Park District continues to construct segments of the path. Many segments have been done through various state & federal grants. The Sterling Park District received an Illinois Transportation Enhancement Program (ITEP) T21 Grant to develop a park and pedestrian/bicycle trail from the north end of the Sinnissippi Dam to the historic Dillon home in Sterling, Illinois. This project incorporated scenic overlooks, fishing piers, wrought iron fencing and brick pavers to transition the new footbridge into the historic Dillon home sites. This section of the trail is 800 feet long, crosses beneath the railroad thru an existing stone arch culvert and provides a needed pedestrian link between Sterling and Rock Falls.



Project Specific Narrative Multi / Shared Use Paths

Willow Creek Trail, Boone & Winnebago Counties, Illinois Department of Natural Resources - Wendler was commissioned to perform Phase I engineering services to investigate the feasibility of providing a 10-foot-wide separated bicycle trail with parking and trail head improvements from Rock Cut State Park's Olsen Annex to the Long Prairie Trail in the Village of Caledonia, a distance of approximately 6.5 miles. This work included studying various alignment corridors to identify a preferred trail alignment. Services included preparing an FHWA approved Project Development Report and preliminary construction plans and cost estimates. The scope of work included general topographic survey and contour mapping at one foot intervals; wetland delineation; preservation and protection of natural areas; identifying alignment options that are in compliance with AASHTO and ADA guidelines; and identifying the type, size and locations for all drainage structures ranging from small culverts to moderately large bridges.

Lowell Trail Phases 1 and 2, Dixon, IL - Dixon Park District

Wendler assisted the Dixon Park District to apply for federal funding from the Illinois Transportation Enhancement Program (ITEP) & American Recovery & Reinvestment Act (ARRA). When the grants were awarded, Wendler prepared detailed construction plans, specifications and cost estimates for the multi-use trail. The new path partially utilizes a retaining wall to support it between the Galena and Peoria Avenue Bridges in Dixon Illinois. Planning and design required extensive coordination between the Dixon Park District, Illinois Department of Transportation, and the City of Dixon for concurrent construction of the path with the Peoria Avenue Bridge.



Path Connection: Hoover Park to Sauk Valley Community College, Sterling Park District

Wendler has been assisting the park district with planning a route to extend the existing park district trail system to Sauk Valley Community College. Wendler performed Phase 1 Engineering for this approximately four mile extension and continues to perform Phase 2 and Phase 3 Engineering at various locations on the alignment as funding is secured and easements are purchased.



Bridge Services

Bridge Inspection Services

Wendler is responsible for completing and submitting the regular bridge inspections for over 260 structures. Wendler is the program manager for Northern Illinois University, The City of Rochelle, the Village of Washburn, the Village of Roanoke, and Woodford County. Wendler also performs structural load ratings for various bridges and culverts throughout northern Illinois.

Bridge and Culvert Design

Wendler has had the opportunity to be a part of a variety of bridge and culvert projects throughout Illinois. Below

you can find a summary of some representative projects

Wendler has had the privilege of designing:

School Avenue Bridge over Kyte River, City of Rochelle,

IL – Wendler created the plans and specifications for the bridge, watermain, and roadway realignment of School Avenue and Turkinton Terrace. The three-span slab bridge also included 8 foot and 5 foot sidewalks and spill through abutments. Wendler was also responsible for permitting the proposed watermain relocation through the Illinois Environmental Protection Agency and creating the Right of Way and easement Plats.



First Avenue Bridge over First Creek, City of Mendota,

IL – This project included the replacement of a concrete slab bridge with a new cast in place concrete double box culvert 7.5' rise by 12.5' span. This 162foot-long culvert was curved to reduce downstream erosion and better fit the existing drainage path. This project also included roadway approach reconstruction with new concrete sidewalks.

Motel Road Bridge Replacement, DeKalb County Highway Department – Wendler performed the design and plan preparation for the replacement of the existing Motel Road box beam bridge near Sycamore with a new three-span I beam girder bridge measuring 167' back to back of abutments. This project included coordination with the Illinois Department of Natural Resources and Army Corps of Engineers due to work being done within the flood plain and impacts to wetland areas.





Bridge Services

Structure 019-3040 carrying County Highway 29 (Kirkland Road) over South Branch of the Kishwaukee River in DeKalb County, IL, DeKalb County Highway Department - Wendler performed a bridge rehabilitation study and prepared plans, specifications & estimates for superstructure replacement for the five-span bridge, measuring 244 feet back to back of abutments, skewed 45 degrees right ahead. The existing precast reinforced concrete deck beam superstructure was replaced with a reinforced concrete deck slab on steel beams bearing on existing pile bent abutments and piers.

Blackhawk Road Bridge over Mill Creek, Illinois
Department of Transportation - Wendler
designed and prepared construction plans to
replace and widen a single-span concrete slab
bridge. Due to the structure's historical
significance, arches under the structure were
repaired and handrails were reconstructed to
restore the structure's original appearance. Due to
the complexity of the project and the architectural
significance of the bridge, Wendler received the
Consulting Engineers Council of Illinois Engineering
Excellence Merit Award for the project.



Cherry Valley Road over Kingsbury Creek, Dekalb County Highway Department - Wendler designed and prepared construction plans for the roadway component of a single span bridge replacement including 1200 feet of roadway improvements. The project involved reconfiguring a rural intersection and addition of a turn lane, all on a horizontal curve.

Structure 102-3131, carrying County Highway 7 over Panther Creek in Woodford County, IL Woodford County Highway Department - Wendler prepared plans, specifications & estimates for superstructure replacement for the four-span bridge, measuring 160 feet back to back of abutments.

Structure 098-3045 carrying Pilgrim Road (County Highway 34) over Rock Creek in Whiteside County, IL Whiteside County Highway Department - Wendler performed a bridge rehabilitation study and prepared plans, specifications & estimates for superstructure repair/replacement for the three-span bridge, measuring 174 feet back to back of abutments.

Structure 019-4809 carrying Bethany Road over South Branch Kishwaukee River in DeKalb County, IL DeKalb County Highway Department - Wendler performed a bridge rehabilitation study and prepared plans, specifications & estimates for superstructure replacement of the two-span bridge, measuring 77 feet back to back of abutments.

Structure 089-3036, carrying County Highway 21 over Yellow Creek in Stephenson County, IL Stephenson County Highway Department - Wendler prepared plans, specifications & estimates for superstructure replacement for the three-span bridge, measuring 141 feet back to back of abutments.



Project Specific Narrative Intersection Reconstruction

While not traditionally a point of emphasis, Wendler Engineering has had the opportunity to work on a variety of intersection reconstruction projects. Below are some example projects Wendler has been a part of:

Dresser/Normal Road Intersection, Section 09-00175-00-SP, City of DeKalb — Project Manager and Design Engineer to perform Phase I and Phase 2 Engineering Services to widen the pavement and add turn lanes at an existing intersection to accommodate the construction of a new high school and other development. Drainage was also improved by providing curb and gutter and inlets to storm sewer outfalls.

Intersection of Matthew Road & U.S. Route 30, Whiteside County — Project included the design and preparation of an Intersection Design Study and construction plans to create turn lanes and widen the intersection to accommodate a high volume of large semi traffic. The design of this \$1.1 million dollar construction project was completed on time and under budget to meet an accelerated schedule. The project included roadway and pavement design, intersection analysis, traffic staging plans, box culvert extensions, pavement design, preparation of right-of-way plats, coordination with other entities, and preparing environmental review forms.

Primm Prairie Subdivision, Sycamore, IL — Project manager to prepare Intersection Design Study, Traffic Signal Plan, and Pavement Widening and Resurfacing construction plans at Illinois Route 23 and Northgate Drive. Project included interconnecting and re-optimizing traffic signals.

Northgate Drive Intersection with Illinois Route 23, Sycamore, IL – Project manager and design engineer to prepare an Intersection Design Study for a new street into a commercial and residential subdivision near Sycamore, Illinois. The work resulted in successfully securing an access permit from the Illinois Department of Transportation.

Buchanan and Deerfield Drive Intersection with Illinois Route 23, Waterman, IL – Project manager to prepare two Intersection Design Studies for new entrances into a large residential subdivision near Waterman, Illinois. The work resulted in successfully securing access permits from the Illinois Department of Transportation.

Genoa-Kingston Community Unit School District #424, Genoa, IL - Project Manager & Design engineer on a project that consisted of constructing a new high school on a 60 acres tract of property. Design services included site layout and grading plans, traffic analysis, intersection design, storm water management plans, utility extensions and permitting. Scope of services included the design for the new athletic fields including regulation size football field, track, pole vault, long jump, shot put, high jump, baseball diamond, softball diamond and soccer fields. Professional services included surveying, engineering design, securing applicable permits, construction specifications, construction inspection and construction staking.



Engineering Service Models

Wendler's unique project experience and location make this company especially well-suited to serve the city. For over thirty years, Wendler has been a part of the DeKalb community and remains committed to the region. Wendler's DeKalb branch is currently located in downtown DeKalb, and Wendler is part of the DeKalb Chamber of Commerce and DeKalb County Economic Development Corporation. Additionally, Wendler has been a part of numerous public and private projects in the region including projects with Northern Illinois University, the DeKalb County Forest Preserve, and the DeKalb County Highway Department. Wendler's commitment to the region makes it especially easy for us to efficiently communicate with the city and understand the city's needs.

References

Wendler has long standing clients and a reputation for attention to detail. We encourage you to discuss our qualifications with these references.

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