ORLAND PARK

REQUEST FOR QUALIFICATIONS

153rd Street and Ravinia Avenue Roundabout

Phase II Design
Engineering Services

October 9, 2023

GHA GEWALT HAMILTON ASSOCIATES, INC.
An Employee-Owned Company

625 Forest Edge Drive - Vernon Hills, IL 60061
847.478.9700 GHA-Engineers.com

October 9, 2023

Village of Orland Park
Office of the Village Clerk
14700 South Ravinia Avenue
Orland Park, Illinois 60462

GHA GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS
625 Forest Edge Drive ▪ Vernon Hills, IL 60061
847.478.9700 ▪ GHA-Engineers.com

Re: REQUEST FOR QUALIFICATIONS NO. 23049 – **Phase II Design Engineering**
153rd Street and Ravinia Avenue Roundabout
GHA Proposal No. 2023.T130

Dear Village of Orland Park,

The Village of Orland Park, in an effort to enhance traffic flow, safety, and community connectivity, is seeking a qualified engineering firm to provide Phase II Design Engineering Services for the 153rd Street and Ravinia Avenue Roundabout project. Gewalt Hamilton Associates, Inc. (GHA) is ready to take action to help create a safer route for the travelling public.

At GHA, we pride ourselves on being a trusted partner in delivering innovative engineering solutions that not only meet but exceed our clients' expectations. With over 40 years of experience in the field of engineering, we have successfully completed numerous projects of similar scale and complexity. Our team possesses the expertise, knowledge, and technical skills necessary to ensure the success of the 153rd Street and Ravinia Avenue Roundabout Project. Some key highlights of our capabilities include:

Expertise in Transportation Engineering: Our team has a deep understanding of transportation engineering principles, including traffic flow optimization, safety enhancements, and sustainable design practices.

Proven Track Record: Gewalt Hamilton has successfully completed numerous projects in collaboration with municipalities, demonstrating our ability to deliver on time and within budget while maintaining the highest quality standards.

Innovation and Sustainability: We are committed to providing innovative, environmentally conscious solutions that align with the goals and vision of the Village of Orland Park and promote sustainability to enhance the community's quality of life.

Community Engagement: We recognize the importance of involving the community and stakeholders in the project's development process and will work closely with the Village to ensure all project objectives are met.

Local Knowledge: Our team is familiar with the local regulations, permitting processes, and unique challenges that may arise during the project's lifecycle, ensuring smoother and more efficient execution.

We understand the significance of the 153rd Street and Ravinia Avenue Roundabout Project to the Village of Orland Park and its residents. Our approach to this project will be characterized by a commitment to excellence, open communication, and a dedication to achieving the project's goals in a timely and cost-effective manner.

Thank you for considering Gewalt Hamilton for Phase II Design Engineering Services for the 153rd Street and Ravinia Avenue Roundabout Project. We look forward to the possibility of collaborating with the Village of Orland Park to contribute to the successful outcome of this project.

Gewalt Hamilton Associates, Inc.

Matthew Turk

Matthew Turk, P.E., Director of Transportation Services
Direct: 847.821.6223 | MTurk@GHA-Engineers.com

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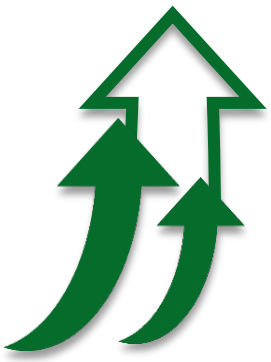
GHA's Vision - Now and Into the Future:



GHA will be the premiere consultant partner in the Midwest, providing high-quality services and designs for our clients and community.

GHA will be forward looking, working toward a common vision that includes diversity and inclusion, a feeling of belonging, and built upon strong internal and external relationships.

GHA will build and maintain a strong culture, one built upon trust and growth, and our common values of Integrity, Dedication, and Passion.

US 14 (NORTHWEST HWY) AT METRA PARKING ACCESS

Barrington, IL

CLIENT
Village of Barrington

LOCATION
Barrington, IL

IDOT LETTING
3-5-2021
Contract #61E91

PROJECT FEATURES
ADA Compliance
Federal Funding
HMA Widening and Resurfacing
Lightweight Cellular Concrete Fill
Pedestrian/Roadway Improvements
Utility Improvements

SCOPE OF SERVICES
Topographic/Boundary Survey
Plats of Highway
Agency Coordination
NPDES Compliance Monitoring
Stakeholder Coordination/Public Outreach
Roadway Phase I/II Design
Project Development Report
Transportation Planning
Traffic Study
Traffic Signal Design
Permitting Assistance
Stormwater Management

COST
$1.9 Million

REFERENCE
Marie Hansen, P.E.
Director of Development
200 South Hough Street
Barrington, Illinois 60010
847.304.3460
mhansen@barrington-il.gov

APWA Award Winner:
Transportation less than $5 million

PROJECT OVERVIEW
The Village of Barrington retained GHA to provide Phase I and Phase II engineering services for a long-envisioned project to improve access to the existing Metra Parking lot. The Village was able to secure STP funds for design and construction of a new signalized intersection along US Route 14 to serve as the primary access.

The proposed improvements consisted of roadway widening and resurfacing; utility relocations; minor drainage improvements; regulated substances coordination; concrete pavement; new sidewalk and curb and gutter; new traffic signal installation and interconnect; tree installations; and parkway restoration. Daily lane closures and detailed commuter lot staging were required throughout the duration of the project to maintain parking access.

Permits were obtained from:
- Village of Barrington
- Illinois Department of Transportation (IDOT)

US 12/45 (Lee Street) at Forest Avenue Phases I-II-III

Des Plaines, IL

CLIENT
City of Des Plaines

LOCATION
Des Plaines, IL

PROJECT FEATURES
Roadway Improvements
Improved Pedestrian Safety
Traffic Signals
Enhanced Drainage
Federal Funding
ADA Compliance

SCOPE OF SERVICES
Topographic Survey
Right-of-Way Survey
Public Engagement
Roadway Phase I Design
Roadway Phase II Design
Roadway Phase III Construction
Project Development Report
Traffic Study
Traffic Signal Design
Stormwater Management
Utility Design
Data Collection
Resident Engineering
Federal Paperwork

COST
$2.6 Million

REFERENCE
Jon Duddles, P.E., CFM
Assistant Director Public Works and Engineering
1420 Miner Street
Des Plaines, Illinois 60016
City of Des Plaines
847.391.6127
jduddles@desplaines.org

PROJECT OVERVIEW
Gewalt Hamilton Associates, Inc. (GHA) was retained by the City of Des Plaines to improve public safety. The City of Des Plaines initiated traffic signal and intersection improvements at FAU Route 330 U.S. Route 12/45 (Lee Street/Manheim Road) and Forest Avenue. Route 12/45 is a four to five-lane north/south principal arterial connecting the City of Des Plaines' downtown area with the Lee Street and Oakton Street business corridors with the majority of the project being in a highly commercialized area intermixed with residential housing.

The project includes the widening of Lee Street/Manheim Road to create separate left turn lanes at a new signalized intersection with Forest Avenue. The west leg of Forest Avenue will be widened to provide a 3-lane roadway section.

Property acquisition was required from 21 parcels to accommodate the proposed improvements. Frequent communication with affected property owners at the onset of the project was a necessity.

GHA served as the Resident Engineer for Phase III Construction Engineering, and performed duties in accordance with IDOT requirements for federally funded project. Construction required close coordination with residents and local business.

Permits were obtained from:

- Illinois Environmental Protection Agency – Water Main
- Illinois Environmental Protection Agency – NPDES
- Metropolitan Water Reclamation District

IL 43 & Westleigh Phase II

Lake Forest, IL

CLIENT
City of Lake Forest, IL

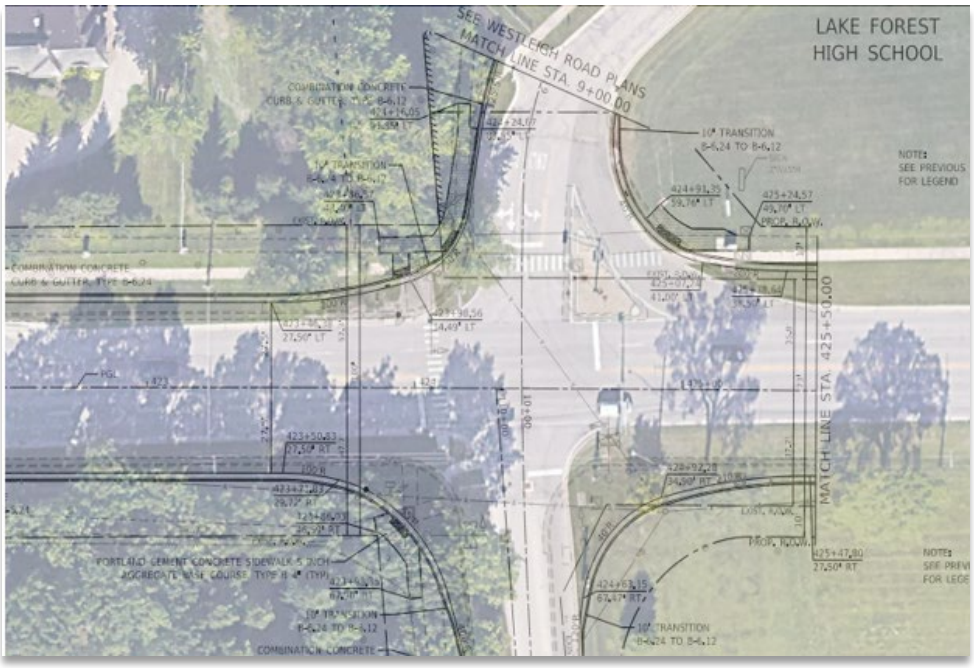
LOCATION
Lake Forest, IL

PROJECT FEATURES
Intersection Widening
Stormwater Improvements
Traffic Signal Modernization
Land Acquisition

SCOPE OF SERVICES
Topographic Survey
Boundary Survey
Plats of Highways
Highway/Roadway Phase II Design
Sidewalk & ADA Design
Drainage Improvements
Stormwater Management
Traffic Signal Design
Roadway Lighting Design
Permitting Assistance
Funding Coordination
Utility Coordination

COST
$2.64M (Projected)

REFERENCE
Byron Kutz, P.E.
Superintendent of Engineering
800 N. Field Drive
Lake Forest, Illinois 60045
847.810.3555
kutzb@cityoflakeforest.com



PROJECT OVERVIEW
The purpose of this intersection is to widen Illinois Route 43 (Waukegan Road) to create a southbound right turn lane, dedicated left turn lanes for all movements and a new signalized intersection at Westleigh Road. The project pursued financing through several funding sources including Surface Transportation Program (STP) funds. The east leg of the intersection served as the primary access to Lake Forest High School. GHA has been selected by the City of Lake Forest to complete Phase II Design services for this improvement. The specific project scope components include:

- Pavement widening at all quadrants of the intersection to facilitate increased footprint and land acquisition to accommodate.
- Traffic signal and interconnect replacement and modernization including new pedestrian signals.
- Intersection street lighting.
- Intersection Sidewalk & ADA ramp replacement as well as landscaping improvements.
- Drainage improvements including storm sewer extensions and ditch grading in accordance with the approved Phase I Report.

Permits were obtained from:
- Illinois Environmental Protection Agency - NPDES

ROUNDABOUT DESIGN

Mead & Hunt

meadhunt.com\Transpo
Mead & Hunt staff shares insights on transportation engineering and planning topics

1-888-364-7272
transportation@meadhunt.com

RECLAIM INTERSECTION SAFETY AND FUNCTIONALITY WITH ROUNDABOUTS

Mead & Hunt has a solid history of designing roundabouts for communities, counties and state departments of Transportation. Our transportation engineers stay abreast of the latest updates to roundabout design standards and consistently implement them in many types of urban and rural locations to improve safety and traffic flow and create lifecycle cost savings. Whether you are building a new intersection or upgrading an existing one, a modern roundabout can add an aesthetically pleasing and highly functional element to your transportation infrastructure. Mead & Hunt's roundabout design services include:

- Single and multi-lane roundabouts
- Traffic analysis
- Intersection control evaluation
- Oversize/overweight (OSOW) vehicle accommodations
- Public involvement, outreach and education
- Landscape, aesthetics and lighting design
- Irrigation systems
- Municipal facility design (storm sewer, sanitary main, water main)
- Construction staging

Relevant Work Categories

- Highways (Roads and Streets)

Role

- Preliminary and final design, environmental report, construction staging plans, public involvement, design reports, right-of-way plat, lighting design, signal design

Key Staff

- Troy Pankratz
- Jason Kleist
- Scott Hasburgh
- Chris Rossmiller

US 53 AND WIS 48 INTERCHANGE RECONSTRUCTION

WISCONSIN DEPARTMENT OF TRANSPORTATION – RICE LAKE, WISCONSIN

Ongoing development in the City of Rice Lake resulted in high volumes of traffic along WIS 48 and through the US 53/WIS 48 interchange. The interchange reconstruction addressed several issues throughout the corridor, including:

- High crash rates
- Substandard geometry
- Deteriorating pavement and poor ride quality
- Inconsistent bicycle and pedestrian accommodations

To address these safety, operational and geometric concerns, Mead & Hunt designed improvements to convert three existing intersections to roundabouts and one intersection to signalized control. While working with the stakeholders and public, Mead & Hunt learned that a key concern was keeping the interchange operational throughout construction. Our team designed construction staging plans to allow the interchange to be reconstructed while staying open to traffic.

In addition to the roadway concerns, the existing US 53 overpass structures had deficient vertical clearance. As a cost-savings solution, Mead & Hunt lowered the roadway profile of WIS 48 to address the clearance deficiency, allowing the existing structures to remain in place.

The new intersections will decrease the conflict points and reduce operating speeds to improve the safety performance and accommodate vehicular and non-vehicular traffic alike.

SIMILAR EXPERIENCE

TRANSPORTATION

Project Data

- Role: Concept design, traffic analysis, intersection design study, stakeholder outreach, public involvement, intersection visualization, storm sewer design, roadway and pedestrian lighting, construction phasing, bid documents

Dates

- Start: September 2018
- Completion: January 2019

CONSTRUCTION DESIGN - LYNN BOULEVARD ROUNDABOUT

CITY OF STERLING - WHITESIDE COUNTY, ILLINOIS

The City of Sterling had been experiencing significant growth in the business park. It was determined that the central intersection serving the business park needed improvements to mitigate traveler delays and safety concerns. A nearby recreational park draws significant pedestrian volumes near the intersection, so pedestrian safety was critical in the selected intersection configuration. An intersection design report was prepared to evaluate feasible options, with a single-lane roundabout being the selected alternative.

Mead & Hunt conducted stakeholder engagement and provided roundabout education, including the development of visualizations for the proposed roundabout. Coordination with local businesses resulted in the inclusion of an exterior truck apron to accommodate large truck trailers routed through the intersection. Design services also encompassed storm sewer design, roadway and pedestrian lighting, landscape design, construction phasing plans, and bid documents

Contact: Scott Shumard | 815-632-6624 | sshumard@sterling-il.gov
Client: City of Sterling | 212 Third Avenue | Sterling, IL 61081

OVERVIEW

GHA is a trusted employee-owned firm renowned for its multidisciplinary approach to civil engineering, surveying, and data collection services. GHA's dedication to serving a diverse client base, including municipalities, county and state agencies, school districts, hospitals, community colleges, park districts, senior care facilities, and private developers, showcases the company's commitment to delivering a wide array of high-quality professional services.

GHA boasts a rich background characterized by a history of successfully completed projects across various sectors. GHA provides a comprehensive suite of in-house capabilities that includes Capital Improvement Projects, Site Civil Engineering, Construction Engineering, Traffic Data Collection, GIS and Asset Management, Traffic & Parking Impact Studies, Land Surveying, Traffic Signals, Municipal Engineering/Public Works, Water Resources, Roadway/Highway Engineering, Water/Wastewater Operations, Signal Coordination and Timing (SCAT), Water System Modeling, Utility Design, Facilities & Utilities Management, Grants/Funding, Underground Asset Scanning, Construction Layout, Geospatial Analysis, and Landscape Architecture.

The breadth of our services reflects our dedication to serving our clients comprehensively, delivering innovative solutions, and contributing to the success of each project we undertake. GHA is prequalified with IDOT in 15 **categories**.

Illinois Department of Transportation

SEFC PREQUALIFICATIONS FOR GEWALT HAMILTON ASSOC., INC.

Special Studies - Signal Coordination & Timing (SCAT)
Special Studies - Traffic Studies
Hydraulic Reports: Waterways: Complex
Hydraulic Reports: Waterways: Typical
Special Studies - Location Drainage
Location Drainage Studies - Rehabilitation
Special Services - Construction Inspection
Location Design Studies - Reconstruction/Major Rehabilitation
Special Services - Sanitary
Special Studies - Feasibility
Special Plans - Traffic Signals
Highways - Roads & Streets
Special Studies - Surveying
Special Studies - Safety
Hydraulic Reports – Pump Stations

CAPACITY TO CARRY OUT SCOPE OF WORK

The Village of Orland Park will benefit from GHA's extensive expertise, deep regulatory knowledge, and sterling professional reputation in Illinois. Our comprehensive approach ensures every facet of the project is meticulously

considered, and each requirement is met with unwavering dedication. Our commitment to delivering the most cost-effective engineering services is supported by the following key strengths:

- ✓ **Collaborative Excellence:** GHA is committed to effective collaboration with Village staff. Whether it's in-person meetings or online interactions, GHA will be a constant presence, ready to provide insights, project status updates, promptly answer questions, and fine-tune designs to perfection.
- ✓ **Masterful Insight:** GHA's engineers are seasoned professionals, delving deep into Phase I Preliminary Design Reports and related documents. Their attention to detail unveils the project's intricacies, allowing them to build a solid foundation for the journey ahead.
- ✓ **Design Mastery:** GHA takes design to a higher level, crafting preliminary and final design drawings, specifications, and cost estimates that are dynamic throughout the project development providing real-time information to the Village. Our designs encompass a vast array of elements, from pavement design to drainage, maintenance of traffic to erosion control, and landscape enhancements to public coordination.
- ✓ **Regulatory Prowess:** GHA understands the permitting intricacies, orchestrating submissions, and acquisitions of necessary permits on the Village's behalf. We deftly coordinate with regulatory agencies, ensuring harmonious progress. Utility conflicts are deftly resolved, and relocations are seamlessly managed.
- ✓ **Cost Control:** GHA keeps financial matters in check, providing precise Engineer's Estimates of Probable Cost. Our commitment to up-to-date information allows swift responses to inquiries, fostering financial transparency throughout the project.
- ✓ **Quality Assurance:** At the core of GHA's operations is a robust Quality Control and Quality Assurance Plan that aligns with IDOT and regulatory requirements, ensuring the highest standards of excellence in our deliverables.
- ✓ **Bidding and Award:** GHA's expertise extends to preparing bidding documents, responding to inquiries, evaluating bids, and providing essential recommendations for construction contract award.
- ✓ **Funding Masters:** GHA doesn't just meet project needs; we actively seek out funding opportunities. Our proactive approach extends to securing funding from various Federal and State grants and programs, diligently applying for funds during the Phase II Design process and beyond. We are experts in STP funded projects, like this one, and will partner with the Village to meet all requirements for securing the anticipated funding.
- ✓ **Community Engagement:** In an effort to foster positive community relations, GHA offers a comprehensive "Good Neighbor" public relations program to keep residents and stakeholders well-informed about project developments.
- ✓ **Unwavering Dedication:** GHA's commitment extends to delivering the agreed-upon scope as per the final contract agreement and compensation. Our dedication to excellence means that requests for additional compensation are rare, and we work tirelessly to uphold the Village's vision.

Our strategy for success is founded on these principles, designed to furnish the Village with high-quality engineering services at rates that align with budgetary constraints, all while surpassing project deadlines and performance expectations. Your project's success is our primary objective, and we are fully equipped to deliver on this promise.

STAFF QUALIFICATIONS

GHA is ready to staff this project with a team full of Phase II roadway engineering experts. **Kevin Belgrave, P.E., PTOE** will serve as Project Manager, bringing 30 years of experience to lead in the successful delivery of this project. Supporting him as Project Engineer will be **Mike Vasak, P.E**. a key asset in GHA's Phase II expertise. Together, Kevin and Mike have delivered bidding documents for intersection improvement projects for municipalities throughout the Chicagoland area including Lake Forest, Des Plaines, and Barrington; many of which included coordination with local Council of Mayors to secure STP funding. GHA has the experience and knowledge base to excel at many aspects of this project including contract documents assembly and cost estimating; pickup topographical survey; plat of highway preparation; maintenance of traffic staging plans including temporary traffic signal design; drainage designs; erosion control plans; and pavement marking and signage details. Furthermore, GHA has recently brought on **Janet Cherbak, PLA, CPSI** our lead landscape architect, to ensure that this roundabout has the aesthetic appeal to coincide with the 147th Street at Ravinia Avenue roundabout, prominently displayed near the Orland Park Village Center.

GHA has assembled a complete project team, ready to tackle any and all challenges this project encounters.

To provide roundabout design expertise, GHA has partnered with Mead & Hunt. Troy Pankratz, will serve as project advisor and leverage his years of experience with roundabout implementation to guide the project team throughout the challenges encountered with the unique design, construction, and public perception of roundabouts.

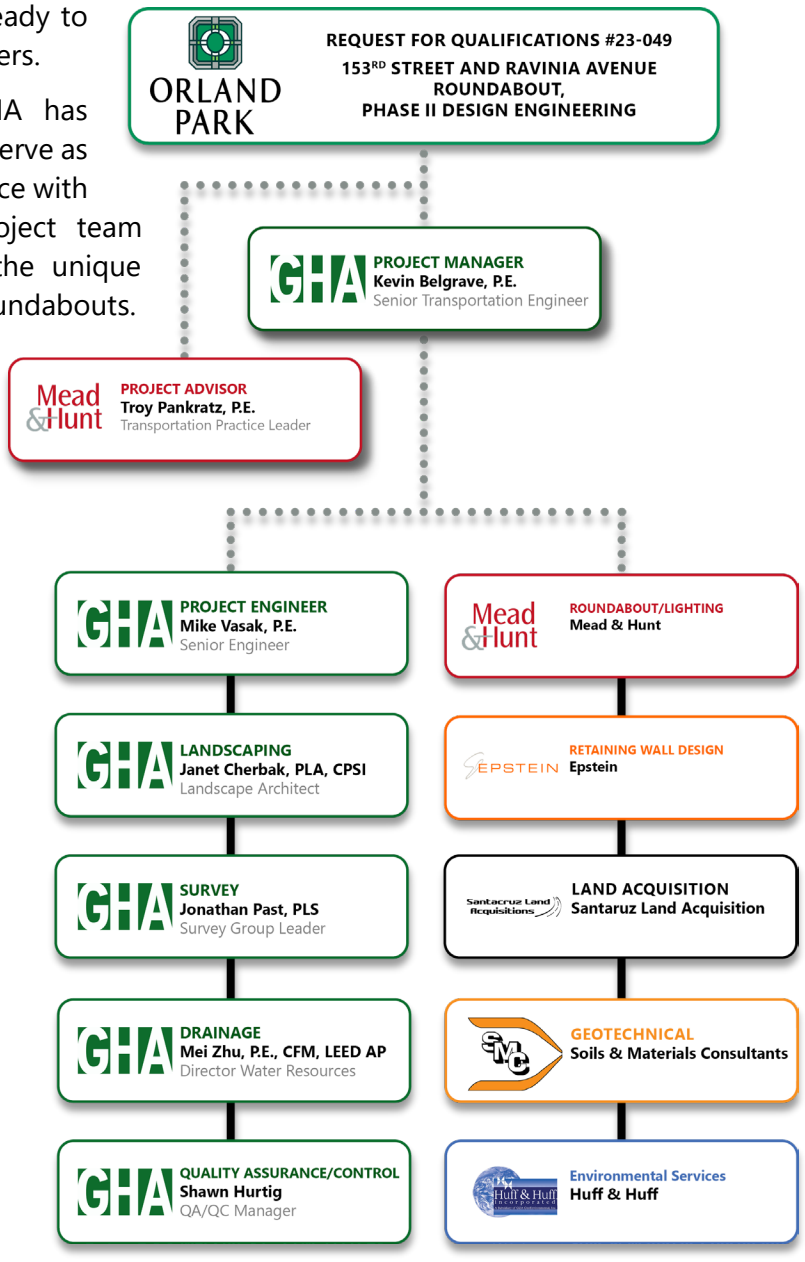
Additionally, GHA has partnered with Epstein to complete the retaining wall design identified in the northeast quadrant of the roundabout, near the Whole Foods.

Rounding out the project team includes:

Santacruz – Land Acquisition Services

Soils & Materials Consultants – Geotechnical Engineering and Structural Geotechnical Report

Huff & Huff – Environmental Services and Special Waste



Empowering Communities through Transportation Excellence

We understand the critical role that the transportation network and mitigating traffic impacts plays in developing and maintaining a successful, vibrant community

Project Manager

Kevin L. Belgrave, P.E., PTOE

Senior Transportation Engineer
Gewalt Hamilton Associates, Inc.
Direct: 847.821.6226
KBelgrave@GHA-Engineers.com

Education
Bachelor of Science, Civil Engineering, University of Illinois at Urbana, 1991

Professional Registration
State of Illinois Licensed Professional Engineer #062 051750

Professional Traffic Operations Engineer (PTOE) #2967

Memberships
American Public Works Association (APWA)

Illinois Association of Highway Engineers (IAHE)

International Erosion Control Association

Experience
Kevin Belgrave currently serves as the Phase II Manager overseeing all highway and roadway design projects for Gewalt Hamilton Associates. Mr. Belgrave is a Registered Professional Engineer practicing over 30 years as a Civil Engineer, with emphasis on highway and roadway geometrics, transportation engineering and roadway design.

Prior to joining GHA in 2005, Mr. Belgrave was in the employ of the Illinois Department of Transportation. He served as a Construction Inspector and Design Engineer from 1991 to 1999. Mr. Belgrave served as Area Permit Engineer from 1999 to 2005 as well as the interim IDOT District One Permit Engineer from 2004 to 2005, overseeing a staff of eight permit engineers/technicians. Responsibilities included plan review, field review, meeting with municipalities, consultants and developers on various projects, and final permit approval.

US Route 14 @ Metra Access, Barrington
This project included Phase II Design of the CMAQ Funded project which includes the addition of a new signalized access to US Route 14 to serve the Metra parking lot. This project includes the addition of a right-turn lane, drainage improvements, traffic signal and interconnect to serve the new intersection. Additionally, these improvements required internal circulation changes to the Metra parking lot, requiring structural retaining walls for the widening of a one-way roadway to accommodate two-way traffic. This project is estimated at $3.1 million and anticipated construction in 2021.

Nippersink Boulevard Improvements, Fox Lake
This project included the Phase I and Phase II design for the reconstruction of Nippersink Boulevard from Grand Avenue to Oak Street. This project is federally funded with Surface Transportation Program (STP) funds. The project consists of approximately 1/4-mile of roadway reconstruction, a 375-foot retaining wall, storm sewer, and street lighting. The project is estimated at $3.1 million and is to be constructed in 2021.

Buffalo Grove Road Phases I & II, Buffalo Grove
This project included the Phase I and Phase II design for the reconstruction of Buffalo Grove Road from Deerfield Parkway to IL Route 22. The project was funded by LCDOT and consisted of reconstruction of approximately 1.75 miles of roadway from a 2-lane road to a 4-lane roadway with auxiliary lanes.

The project included the drainage design for the entire storm sewer system, detention calculations, permitting, temporary and permanent traffic signals. This project was awarded at $16 million and began construction in 2020.

Orchard Lane – Hook Drive Improvements, Round Lake Beach
This project included the Phase I and Phase II design for the reconstruction of Orchard Lane from Rollins Road to Monaville Road and the resurfacing of Hook Drive from Orchard Lane to Rollins Road. This project was federally funded with Surface Transportation Program (STP) funds. The project consisted of complete reconstruction of approximately 1.4 miles of roadway, resurfacing of approximately 1.2 miles of roadway, construction of 800 feet of new shared-use path. This project was estimated at $5.2 million and began construction in 2019 with estimated completion in 2020.

US Route 12/45 (Lee Street) at Forest Avenue, Des Plaines
This project included the Phase I and Phase II design of the widening of Lee Street and Forest Avenue intersection to accommodate left turn lanes for the installation of a new traffic signal. This project was federally funded with Surface Transportation Program (STP) funds. This project was estimated at $2.6 million and began construction in 2020.

Robert Parker Coffin Road Improvements, Long Grove
This project included the Phase II design for the reconstruction of Robert Parker Coffin Road from the Old Bridge to Archer Avenue. The project was locally funded and consisted of approximately 1/4-mile of complete reconstruction along with new water main, drainage improvements, and street lighting. The project was awarded at $1.9 million and completed in 2019.

Randall Road & Big Timber Phase II, Kane County DOT
This project included the Phase II design for the Randall Road and Big Timber intersection improvement. The project consisted of widening Big Timber for an eastbound right-turn lane and improving the radius at the northeast corner of the intersection. Also included was the design of temporary and permanent traffic signals and interconnect, and temporary and permanent street lighting.

IDOT PTB 151, Item #7 Phase II Various Traffic Signal Projects
This project included the Phase II design of various traffic signal projects under PTB 151, Item #7. Between 2009 – 2013, GHA provided traffic signal design plans for various projects including 60+ intersections as well as Light Emitting Diode (LED) plans to upgrade over 350 intersections throughout Region One/District One.

Kensington Business Center Path, Mount Prospect
This project included the Phase II design for the reconstruction of approximately 1.0 miles of existing HMA multi-use path within the Kensington Business Center. The project included the replacement of the existing lighting along the path and installation of outdoor exercise equipment. This project was bid in two phases and awarded at $815,000.

Project Manager

Michael J. Vasak, P.E.

Senior Engineer
Gewalt Hamilton Associates, Inc.
Direct: 847.821.6286
MVasak@GHA-Engineers.com

Education
Bachelor of Science in Civil Engineering, University of Illinois Urbana-Champaign, 2008

IDOT Erosion and Sediment Control Planning and Design

Professional Registration
Illinois Licensed Professional Engineer No. 062-064621

Software Proficiency
Microstation
Geopak
HCS
Autoturn
Guidesign
ArcGIS
Bluebeam
Microsoft Project
Microsoft Excel
Microsoft Word

Experience
Michael Vasak is a licensed Professional Engineer with 15 years of experience in the design of transportation engineering projects. He has worked with state, county, municipal, and private clients performing Phase I Studies, Phase II Contract Plan Preparation, and Phase III Construction Inspection and Observation. Mr. Vasak's experience includes geometric roadway design and analysis, traffic studies, intersection design studies, highway capacity analysis, report and exhibit preparation, quantity calculations, development of contract specifications, construction progress schedule preparation, and maintenance of traffic concepts and plans.

Hook Drive East/Orchard Lane Ph II, Round Lake Beach
Project Manager for Phase II federally funded roadway improvement in the Village of Round Lake Beach on Orchard Lane from Rollins Road to Monaville Road a Hook Drive from Orchard Lane to Rollins Road. Improvements on Hook Drive consist of milling and resurfacing 1.2 miles of a two-lane road and the construction of 800 feet of new shared-use path. Orchard Lane improvements consist of full reconstruction of 1.4 miles of a two-lane road. Mr. Vasak also created a 3D corridor model for the improvements to Orchard Lane. Construction costs for the improvements are approximately $5.2 million.

Robert Parker Coffin Road Improvements, Long Grove
Engineer tasked with developing Phase II construction plans, project specifications, and bidding documents for the reconstruction of Robert Parker Coffin Road in downtown Long Grove, from the Old Bridge to Archer Road. This project also included the development of several streetscape and sidewalk concept alternates, and incorporating the Village's preferred alternate into the plans to achieve a cohesive design of the downtown area. Also included within the project was the construction of approximately 1,000 feet of new watermain and service lines for downtown businesses. Various drainage improvements were also required. Mr. Vasak also helped coordinate IEPA, Lake County SMC, LCDOT, and IDOT permitting for the project.

Hook Drive West Ph I, Round Lake Beach
Project Manager for the Phase I study for the construction of a new road connecting Orchard Lane to Nicole Lane in the Village of Round Lake Beach. It is anticipated that this new road will be a westward extension of existing Hook Drive. This Phase I study is following Federal guidelines and is being documented via a Categorical Exclusion (CE) Project Development Report. In addition to the standard Federal CE report, the project also requires noise and COSIM analysis, a "White Paper" discussing the purpose and deed for the project and how the

proposed concept alternates met those needs, and also a "White Paper" discussing the socioeconomic and environmental justice impacts of the project.

Old Willow Road/Seminole Lane Ph 1, Prospect Heights
Project Manager for the Phase I study for the resurfacing of Old Willow Road/Seminole Lane in the City of Prospect Heights. Initially scope as a reconstruction project, results of pavement cores showed that a resurfacing of the road would be sufficient. This Phase I study is following Federal guidelines in order to hopefully receive future Surface Transportation Program Funds for construction. This project is anticipated to be documented via a State Approved Categorical Exclusion Project via form BLR 22211. A portion of Old Willow Road/Seminole Lane is within the jurisdiction of the Village of Mount Prospect, and the project is being closely coordinated with the Village as a result.

Central Road at Emerson Street, Mount Prospect
Project Manager for a pedestrian and roadway improvement in the Village of Mount Prospect on Central Road at Emerson Street. Project improvements include construction of a new right-in/right-out median on Emerson Street north of Central Road, a new barrier median for pedestrian refuge on Central Road and associated pedestrian signage improvements. A plan set was developed for IDOT permitting and an operational review and analysis of traffic impacts was also performed. Sidewalk ramp details meeting all PROWAG and ADA requirements were also developed.

Green Bay Trail Expansion Preliminary Design, Kenilworth
Engineer tasked with developing a preliminary alignment and profile for an expansion of the Green Bay Trail shared-use path within the Village of Kenilworth. One of the only on-street portions of the Green Bay Trail currently follows a circuitous route through the Village, a route that often causes safety concerns. Developed an off-street alignment that generally split the UP Railroad ROW tying into the Village's bike parking shelter, while minimizing any impacts to the Townley Field facilities. Used the preferred alignment and profile to create a 3D corridor model showing the preliminary grading for the shared-use path which helped to estimate preliminary ROW requirements. Developed preliminary estimates of cost for the proposed project.

Wolf Road Pedestrian Crossing at Pleasantdale School, Burr Ridge
Project Manager for the improvement of an existing pedestrian crossing between the Pleasantdale Elementary School and Pleasant Dale park District in the Village of Burr Ridge. Signing and signal plans were developed for the installation of a pedestrian actuated flashing beacon. Coordination with the Cook County Department of Transportation and Highways (CCDOTH) was required and a CCDOTH permit was acquired for the construction work.

Mei Zhu, P.E., CFM, LEED AP

Director of Water Resources
Gewalt Hamilton Associates, Inc.
Direct: 847.821.6225
MZhu@GHA-Engineers.com

Education
Bachelor of Science, Civil Engineering, Tongji University, 1987

Master of Science, Civil Engineering, Xi'an Institute of Metallurgy and Construction Engineering, China, 1990

Master of Science, Civil Engineering, Louisiana State University, 1996

Professional Registration
Illinois Licensed Professional Engineer #062 056576

Certified Floodplain Manager

LEED AP, US Green Building Council

Designated Erosion Control Inspector, Lake County Stormwater Management Commission

Memberships
American Society of Civil Engineers

Illinois Association for Floodplain and Stormwater Management

Experience
Mei Zhu is a Registered Professional Engineer and a Certified Floodplain Manager practicing for 25 years as a Civil Engineer. Ms. Zhu specializes in site design and regulatory permitting, floodplain and stormwater management, hydrologic and hydraulic analysis, stream restoration, existing drainage assessment and remediation, green infrastructure practices, regulatory ordinance enforcement, and soil erosion and sediment control. Ms. Zhu has been in the employ of Gewalt Hamilton Associates, Inc. (GHA) since 2000.

Stormwater Consultant – Lake County Stormwater Management Commission
Ms. Zhu serves as the Project Manager providing engineering services to the Lake County Stormwater Management Commission, including review of stormwater permit applications/submittals for compliance with the Lake County Watershed Development Ordinance (WDO), and preparation of reports documenting deficiencies, recommendations, and/or compliance. Specific review categories included stormwater, floodplain and floodway, hydrologic and hydraulic modeling, and soil erosion and sediment control plans. Ms. Zhu's responsibility also includes providing general engineering design, plans and specifications, and permit applications for the LCSMC projects.

Stormwater Consultant, McHenry County Planning & Development Water Resources Division
Gewalt Hamilton has been providing stormwater consulting services to the McHenry County Planning & Development since 2011. Ms. Zhu serves as the Project Manager providing review of stormwater permit applications/submittals for compliance with the McHenry County Stormwater Management Ordinance.

US Cellular Field Drainage Improvements, Chicago
Ms. Zhu was the Drainage Engineer for the drainage investigation undertaken to determine the cause and remedy of periodic flooding occurring in the dug outs and lower levels of the stadium. The existing drainage conditions were analyzed using a PondPack model. A stormwater management system was designed to direct stormwater away from the existing pump system and discharge to an underground vault in an adjacent parking lot. The modeling showed that the reduced loading on the pump combined with the additional storage resulted in a significantly reduced likelihood of flooding for short intense storms. The improvements were designed and constructed with minimal disruption to the playing field and maintained release rates dictated by the City of Chicago's stormwater ordinance as to not add any additional burden to the City's combined sewer system. Coordination and permitting were required with the City of Chicago Department of Water Management.

Memberships continued

American Council of Engineering Companies, MWRD Committee

Lake County Technical Advisory Committee

MWRD Technical Advisory Committee

McHenry County Technical Advisory Committee

Streambank Restoration of Mahoney Creek & Mahoney Creek Tributary, Batavia

The project includes streambank restoration and stabilization of Mahoney Creek at Wilson Street and Mahoney Creek Tributary at Woodland Hills Park, through implementation of multiple best management practices. Work at Mahoney Creek includes both vegetative and structural streambank stabilization, and filter strips of deeply rooted vegetation for erosion control and pollutant removal. Improvements at Mahoney Creek Tributary includes both stream channel and streambank stabilization, the creation of floodplain terraces to promote infiltration, and a water quality basin for added floodplain storage. Ms. Zhu served as the Project Manager and Senior Water Resources Engineer for this project with responsibility for design and permitting through the Kane-DuPage Soil and Water Conservation District, the IDNR – Office of Water Resources, IEPA, City of Batavia, and the U.S. Army Corps of Engineers.

Causeway Removal & Pedestrian Crossing Improvements, Geneva

The project consisted of removal of the existing dilapidated pedestrian footbridge, which spanned from the west bank of the Fox River to the island, replacement of the old footbridge, and removal of a causeway immediately to the north which connects the island to the west bank. The causeway removal restores the flow of the Fox River on the west side of the island. Work also included shoreline stabilization and restoration along the west bank of the river and the west edge of the island. Ms. Zhu served as the Senior Water Resources Engineer for this Forest Preserve District of Kane County project, providing hydraulic modeling analysis and permitting assistance through the Kane-DuPage Soil and Water Conservation District, the IDNR – Office of Water Resources, IEPA, Kane County Water Resource Division, City of Geneva, and the U.S. Army Corps of Engineers.

Waukegan Community Sports Complex, Waukegan

Designed the stormwater management facilities for a new community sports park on an existing 140-acre golf course in Waukegan, Illinois. Site design included 16.5 acres of native plantings, bioswales and rain gardens to provide additional beauty and water quality treatment. Due to the presence of regulated wetlands and regulatory floodplains, the stormwater detention facilities were designed to meet the special regulations by ACOE, the IDNR, and Lake County SMC. Furthermore, due to the proximity of the Waukegan Regional Airport, the detention facilities were designed within specific drawdown time. This project received the Lake County Stormwater Management Commission's 2011 BMP/Development Project of the Year Award.

Lake Street Bridge Replacement Over Bull Creek, Libertyville

Prepared a detailed hydraulic analysis of Bull Creek in the vicinity of the existing Lake Street bridge structure and the proposed ConSpan bridge in the Village of Libertyville. Prepared engineering plan documents and obtained permits from the Illinois Department of Natural Resources and Lake County Stormwater Management Commission.

Shawn M. Hurtig

Senior Engineering Tech
Gewalt Hamilton Associates, Inc.
Direct: 847.821.6288
SHurtig@GHA-Engineers.com

Education
Master of Science
Project Management
University of Wisconsin - Platteville, 2012

Certifications
International Society of Arborists (ISA)
Certified Arborist, 2004

American Public Works Association (APWA)
Certified Public Works Inspector (CPII), 2009

Memberships
American Society of Civil Engineers

American Public Works Association

Background
Mr. Hurtig is a project manager with over twenty years of industry experience. Beginning his career at a small engineering firm in Elgin, IL, he quickly adapted to the spilt environment of design and construction. Soon afterwards he accepted a position with a municipality in which he was charged with executing the capital improvement plan. In his years at the Village, he worked on projects ranging anywhere from $20M wastewater treatment facilities to $10k urban pocket parks. Mr. Hurtig is experienced in working for and with the public and coordinating contractors and consultants. In addition to be being a project manager in his tenure within the industry Mr. Hurtig has wore several other hats including but not limited to field engineer technician, chief inspector, permit technician, GIS champion, government liaison, and construction manager.

Experience
Quality Assurance
Mr. Hurtig has been a head plans examiner for nearly two decades, reviewing hundreds of projects of all types and magnitude over that time. The detailed reviews he performs of project documents ensure not only that the intent of the design is met, but that all appurtenances of the project have been evaluated to conform to the highest quality standard.

Quality Control
The creation of quality control policies and procedures is a forte of Mr. Hurtig. The standards he has created have led to significant increases in the quality of inspection and construction on projects, which in turn have resulted in lower maintenance cost for clients as well as longer lasting asset life cycles. By integrating quality control in the production of estimating, budgeting provision writing, and contract document compilation, Mr. Hurtig has solved the challenge of producing top quality projects while maintaining or lowering the costs associated with design and construction.

Capital Improvement Planning, Community of 30k+ 2014-2019
Mr. Hurtig developed the capital improvement plan for several years culminating in a $110M dollar five-year plan. Working with staff, public officials, consultants, contractors, and constituents, Mr. Hurtig was able to create a realistic and challenging improvement plan that prioritized projects based on a multitude of inputs and constraints. The CIP that Mr. Hurtig created was the framework that launched the municipality into major downtown rehabilitation and revitalization plans.

Janet Cherbak, PLA, CPSI

Landscape Architect
Gewalt Hamilton Associates, Inc.
Direct: 847.821.6228
JCherbak@GHA-Engineers.com

Education
University of Illinois, Bachelor of Landscape Architecture

Professional Registration
State of Illinois Licensed Professional Landscape Architect #157-000862

State of Illinois

Certified Playground Safety Inspector #52909-125

Memberships
Illinois Landscape Contractors Association

Experience
Janet Cherbak is experienced in creating aesthetically pleasing, yet practical solutions for public, commercial and residential spaces. Ms. Cherbak is proficient in providing cost-effective and maintenance driven design solutions and seeing these opportunities through the construction phase. With previous roles as park planner and project manager, Ms. Cherbak works within GHA's Site Design Division optimizing her skills and knowledge in the field of Landscape Architecture.

Project Manager
Design and management of park developments, also overseeing building renovations, collaboration with architecture/engineering firms, grant writing and presentations.

Within a contracting firm, supervised construction projects, designing landscape development plans, and managed the bidding process of park district and other publicly bid construction work. Construction layout using AutoCAD Civil 3D.

Park Planner & Natural Resource Manager
Capital planning representative of administrative team, in-house design and master planning of capital projects, and oversight of publicly bid construction projects, and prescribed burns at Park District's natural areas. Facilitator/leader of master planning teams, both within organization and multi-agency.

Project Director
Responsible for all phases of the Design-Build process; from landscape design, sales, estimating, proposal writing, project layout, subcontractor negotiations to construction supervision.

Central Park OSLAD Project, Channahon Park District
Oversaw $650,000 OSLAD project at Central Park, including a baseball complex renovation with dugout construction and new fencing and backstops. Paving, a custom-built shelter and site furnishings were also part of the project.

Another feature of the renovated park were expansive perennial beds, with a gravel path, interpretive signage and a sitting area. This area, named the Sensory Garden, was taken out of the awarded contractor's scope. To reduce costs and enhance the user experience, Ms. Cherbak redesigned the project's Sensory Garden, bringing the beautiful perennials close to the park's central drive, and locating the taller natural area restoration planting as the backdrop of the garden experience. The redesigned portion of the project started as a cost-saving measure, but resulted in staff growing as a team and taking pride in what they had created together.

Jonathan F. Past, PLS

Survey Manager

Gewalt Hamilton Associates, Inc.
Direct: 847.821.6236
JPast@GHA-Engineers.com

Professional Registration
State of Illinois Licensed Professional Land Surveyor #035 003341

Memberships
Illinois Professional Land Surveyors Association, Northeast Chapter

National Society of Professional Surveyors

Leadership
Current President of NE Chapter of the Illinois Professional Land Surveyors Association

President, Illinois Professional Land Surveyors Association, Northeast Chapter, 2016-2017

Experience
Mr. Past is a Licensed Professional Surveyor with more than 35 years of industry experience in all types of surveys using a variety of technologies. As Manager of GHA's Survey Group, Mr. Past is responsible for scheduling and management of all survey staff, project procurement and pricing, QA/QC of completed work, and R&D for new innovations in land surveying.

Boundary Surveys
Retraces and monument title lines for ALTA/ACSM/NSPS land title surveys, new subdivisions and existing parcels requiring a current survey, including legal descriptions and plat preparation. Also prepares legal descriptions and plats for roadway and easement dedications, roadway and easement vacations and tax division or annexation parcels.

Route Surveys
Transportation related experience involving control surveys by GPS and classical methods. Determines existing centerline alignments and existing right-of-way from field surveys and public records. Also prepares plats of highway with legal descriptions for proposed right-of-way for small and large-scale land acquisition projects.

Engineering and Construction Surveys
Broad range of experience in small to very large private and public works projects involving settlement monitoring, roadway and site topographic surveys, centerline alignment surveys, and drainage and hydraulic surveys. Experience also includes construction layout and final as-built surveys. All experience has included residential, commercial, and industrial development, along with railroads, quarries, roadways, bridges and airports.

Control Surveys
Experience with all forms of plane and geodetic survey control for horizontal and vertical purposes. Includes control for photogrammetry, densification, and topographic and engineering surveys.

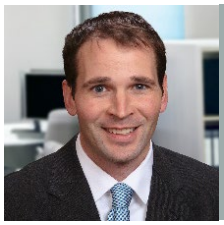
Subdivision Surveys
Preparation and execution Subdivision surveying for the development of several multi acre developments (Residential, Retail and Industrial Subdivisions). From project beginning to fulfillment including deed research, Boundary Survey, ALTA/ACSM/NSPS Land Title Survey, Plat of Subdivision, Individual Lot Plats. Field staking of development including layout of civil improvements, property lines houses, etc., in Lake, McHenry, Boone, DuPage, Kane and Cook Counties.

Monitoring Surveys

Experience with numerous and varied monitoring projects including but not limited to; Railroad track location monitoring at the McCook Quarry for the United States Army Corp of Engineers in 2008, 2009 & 2010. Subterranean Railroad tunnel (Washington Street Station) and historic building settlement monitoring during the construction phase of Block 37, Chicago Loop. Building and Chicago Transit Authority Earth Retention System settlement monitoring for existing structures surrounding current construction of the Alumni Student Center, Loyola University, Chicago, Illinois.

Specific Project Experience:

- I-355 at I-88 Reconstruction 2010-2011
- I-294 Topographic/ROW Survey at 95th Street
- I-355 Control and Alignment for Tollway Extension
- Subdivisions for Kennedy Homes, Westridge Homes, Cambridge (D. R. Horton) Homes.
- United States Army Corp of Engineers Project Control Monument Survey
- United States Army Corp Of Engineers Big Bend Lake Survey
- United States Army Corp Of Engineers McCook Railroad Settlement Monitoring 2008-2010
- Building & Chicago Transit Authority Earth Retention System Settlement Monitoring during construction of the Alumni Student Center, Loyola University, Chicago, Illinois
- Subterranean Railroad Tunnel (Washington Street Station) & Historic Building Settlement Monitoring during construction of Block 37, Chicago Loop
- Central DuPage Hospital, Winfield, Illinois
- Honeywell/Celotex Site, Chicago
- Chicago Rawhide Manufacturing Facility; Elgin Illinois
- Fort Sheridan, Forrestal Village and Great Lakes Naval Air Force
- Washington Street Plat of Highways, Lake County DOT
- Bliven Road Plat of Highways, McHenry County DOT
- Big Timber Road Plat of Highways, Kane County DOT
- 75th Street Plat of Highways, DuPage County DOT
- Hewitt East Campus, Lincolnshire
- US Rte. 14/CN Railroad, Barrington
- ITW Headquarters Campus, Glenview
- McCook Quarry Settlement Monitoring
- Cancer Treatment Centers of America, Midwest Regional Medical Center, Zion
- Advocate Good Shepherd Hospital, Barrington
- Barrington Village Center Subdivision
- Buffalo Grove Road Plat of Highways, Lake County DOT



Troy Pankratz, PE

TRANSPORTATION PRACTICE LEADER/PROJECT MANAGER

Areas of Expertise

Transportation engineering

Roundabout analysis and design

Project management

Design and quality control review

Education

BS, Civil Engineering, University of Wisconsin - Platteville, 1999

Registration/Certifications

Licensed Professional Engineer – Arizona, Colorado, Georgia, Hawaii, Maine, Minnesota, Montana, New Mexico, North Carolina, Utah, Wisconsin, South Carolina, Illinois

WisDOT Level 3 Roundabout Designer

Memberships

Institute of Transportation Engineers (ITE)

Training and Seminars

PSMJ Project Manager Boot Camp

Two-day Roundabout Training Course, Georgia Department of Transportation, Trainer

Presentations

SCAPWA, “What to Look for When Reviewing a Roundabout”, June 15, 2021

SCLTAP, “Roundabout Design Checks”, May 19, 2021

IDOT/ACEC Lunch and Learn, “Roundabout Design Checks”, March 19, 2021

APWA Wisconsin Chapter Fall Conference, 2018, "Lacy Road: Balancing Stakeholder Desires in a Developing Urban Environment"

Transportation Research Board International Roundabout Conference, 2014; “Design Considerations for 5 and 6 Leg Roundabouts”

Troy has 22 years of experience managing roundabout projects with a high level of involvement in roadway and traffic design. Troy specializes in the geometric design of high-capacity roundabouts with complex geometry and multiple roundabout corridors. He is a certified Level III Roundabout Designer, the highest-level certification from the Wisconsin Department of Transportation (WisDOT), which is honored by various agencies throughout the United States. Troy has been the primary designer of more than 250 roundabouts, including more than 100 multi-lane roundabouts. For each of these projects, Troy was involved from the start of the project through final plans. This allowed him to implement proper modern roundabout design principles and see that best practices in design had been used. In addition to primary design, Troy has been involved in over 200 roundabouts in a peer reviewer or advisor capacity. Troy also shares his knowledge with the design community. He conducted roundabout design training for the Georgia Department of Transportation (GDOT). This two-day workshop provided a focus on modern roundabout design principles and guidelines with an emphasis on detailed design considerations.

PROJECT EXPERIENCE

Roadway Reconstruction, Lacy Road
City of Fitchburg
Fitchburg, Wisconsin

Troy served as the project manager for this award-winning project that reconstructed 1.3 miles of Lacy Road to include 10-foot lanes and buffered bicycle lanes that connect to the new shared-use path, existing bicycle trails, businesses, homes, and recreational areas. A single-lane roundabout was also constructed at the Fahey Glen intersection to increase safety and efficiency. Public involvement was crucial to this project, and our team led multiple public meetings, prepared exhibits, and published website materials. Mead & Hunt provided survey, alternative analysis, preliminary and final design, design reports, environmental documentation, wetland delineation, structure design, traffic analysis, signal design, transportation project plats, lighting design, construction staging, and PS&E preparation services.

Interstate 70 Corridor
Colorado Department of Transportation
Grand Junction to Vail, Colorado

The Colorado Department of Transportation has been converting many of the interchanges along I-70 to roundabout interchanges. The closely spaced ramp and frontage road intersections typical of this grade constrained corridor are ideal candidates for conversion to roundabout intersections. Troy was involved with the analysis and design of 27 roundabouts at 10 of these interchanges. Troy was instrumental in the feasibility analysis and final design for these interchanges. The roundabouts were designed to achieve modern roundabout operating principles within the tight constraints of the mountainous corridor. This project was completed while Troy was employed with another firm.

Georgia American Society of Highway Engineers, 2013; "Roundabout Design Process: Strategy and Details"

Institute of Transportation Engineers, 2012; "The Art of Roundabout Design"

Purdue Road School, 2012; "Principles Process and Documentation"

Arizona Roads and Streets, 2008; "State of the Practice of Modern Roundabouts"

Past Employment

GHD, Inc.

Ourston Roundabout Engineering

Strand Associates, Inc.

No. of Years with Mead & Hunt

Hired 11/03/2014

No. of Years with Other Firms

15

LinkedIn URL

www.linkedin.com/in/troypankratz

Roundabout Peer Review – Various Locations
Franklin County Engineer's Office
Franklin County, Ohio

Troy was the project manager and lead designer for this on-call contract that involved providing roundabout peer reviews for roundabouts located within Franklin County, Ohio. Troy led the peer review of various roundabout designs and provided improvement suggestions. The intersections ranged from single-lane rural designs to multi-lane urban corridors. Troy provided design oversight and direction to the County to maintain good design practice and uniformity among intersections. This project was completed while Troy was employed with another firm.

USH 41 Roundabout Design
Wisconsin Department of Transportation (WisDOT)
Winnebago and Brown County, Wisconsin

The USH 41 project is one of Wisconsin's largest ever road construction projects. As part of the project, WisDOT contracted a study to determine the feasibility of utilizing modern roundabouts at the interchanges. Troy was the lead designer and analyst for the feasibility study of the roundabout intersections. Roundabouts were determined to be the preferred alternative at forty-seven of the fifty-two intersections studied. Troy worked with WisDOT to complete the final operational analysis and horizontal design of the roundabouts at eight interchanges. He also provided design oversight for all of the roundabout related plan components including: vertical design, jointing, construction staging, signing, pavement marking, lighting, and landscaping. This project was completed while Troy was employed with another firm.

Five Points Intersection Martin Luther King Jr. Drive, East Newnan Road, Poplar Road, and Turkey Creek Road
Georgia Department of Transportation
Newnan, Georgia

Troy provided design services for a roundabout at the intersection of Martin Luther King Jr. Drive, East Newnan Road, Poplar Road, and Turkey Creek Road in Newnan, Georgia. This was a joint project between Coweta County and the City of Newnan to implement traffic operations and safety improvements at the "Five Points" intersection. Several alternative intersection designs were studied including roadway realignments, traffic signals, stop controlled intersections, single roundabouts, and double roundabouts. Troy provided traffic engineering services to confirm operational analysis and lane configuration for a single-lane roundabout intersection. Troy also prepared the horizontal geometrics based on composition of circle location, alignment of approaches, and validation of the critical parameters of functionality of the roundabout.

Brush Creek Road / Kearns Road / Wood Road Intersection
Snowmass Village
Snowmass Village, Colorado

Troy prepared a single lane roundabout design and operational analysis for this roundabout to be located at the main intersection of a ski resort community. The horizontal design of the roundabout was complicated by the very steep terrain of the surrounding area. Several roundabout layout alternatives were prepared and refined to optimize the geometry for desirable speed paths, access to local businesses, and for safe pedestrian crossings. A detailed comparison of variations of right-turn geometry was conducted including an analysis of operational performance variations. The peak flow characteristics of this ski community created unique traffic challenges for the roadway network. Several software packages were utilized to analyze this intersection including RODEL, ARCADY, and HCS. This project was completed while Troy was employed with another firm

Joanna Bush, PE

Civil Engineer

Areas of Expertise

Project Management
Traffic Signal Design
Railroad Preemption
Signing & Marking
Traffic Operations Analysis

Education

BS, Engineering, University of Wisconsin, Madison, 1999

Registration/Certifications

Licensed Professional Engineer – Wisconsin (#37147-6, 2004, expires 07/31/2024), Minnesota (#56041, 2018, expires 06/30/2024), Illinois (#062070696, 2018, expires 11/30/2023), North Carolina (#055437, 2023, expires 12/31/2023), Virginia (#0402066271, 2023, expires 2/28/2025)

Memberships

Panel Member, NCHRP 3-90, NCHRP 3-95 & NCHRP 47-15 Synthesis

Training and Seminars

Presentations

Awards

Past Employment

CBS Squared Inc.
TranSmart/EJM Corporation
Wisconsin Department of Transportation
Short Elliott Hendrickson (SEH) Inc.

No. of Years with Mead & Hunt

Hired 06/2022

No. of Years with Other Firms

23

Joanna is an experienced traffic engineer with 24 years in the industry working on traffic design (signals, signing, marking, traffic control, lighting and ITS) projects throughout the Midwest. She spent a decade as the State Traffic Signal Systems Engineer for the Wisconsin Department of Transportation where she was responsible for the development of policy and guidance surrounding the design of traffic signals. She was responsible for final design approval of all state-owned traffic signals to ensure MUTCD compliance, as well as the development of Part 4 of the Wisconsin Supplement to the MUTCD, so has a thorough understanding of how crucial MUTCD compliance is in all traffic design work that she leads. She currently manages a team of ten professionals dedicated to all aspects of traffic design throughout the Midwest, often playing the role of QA or QC on the various project designs.

PROJECT EXPERIENCE

Rest Area 51/52
Wisconsin Department of Transportation (WisDOT), Central Office
Manitowoc County, WI

Lead Traffic Design Engineer. Joanna is the lead designer responsible for the lighting design for two rest areas located in Manitowoc County, WI. The lighting design includes high-mast lighting for the parking lot, street lighting for the ramps and pedestrian lighting for the plaza area. AGI models were created and submitted to the Northeast Region office for approval as they will be responsible for maintaining the lighting once the project is complete. 60% plans have been submitted to WisDOT for review and final plans, specifications and quantities are anticipated to be completed by the first quarter of 2024.

Lawrence Drive, Fortune Avenue to Scheuring Road
City of De Pere, WI
De Pere, WI

Lead Traffic Design Engineer. Joanna is the lead designer responsible for the traffic signal and lighting design along Lawrence Drive. The existing traffic signal will be impacted by the replacement of the roadway surface and sidewalk through the intersection of Fortune Avenue and the lighting will be replaced with the latest LED standard lighting as part of the project. An AGI model was created to determine the appropriate spacing of the new light poles. 90% plans, specifications and quantities have been submitted to the city and WisDOT Northeast region for review. Final plans, quantities and specifications are anticipated to be completed by the end of the calendar year.

Railroad Preemption Support Services
Wisconsin Department of Transportation (WisDOT) Bureau of Transit, Local Roads, Railroads and Harbors
Madison, WI

Project Manager. Joanna has been providing on-call support services to the Railroads and Harbors Section in the review of preempted at-grade railroad crossings throughout the state that are involved in any State or Federally funded projects since 2018. To date she has completed the review of advance preemption calculations for all state owned signals with railroad preemption as well as at least two dozen locally owned signals, developed new documentation format and policy for preemption cutover (connection between railroad bungalow and traffic signal controller), participated

LinkedIn URL
www.linkedin.com/in/joanna-bush-6051446

in dozens of preemption cutovers, assisted in the annual joint review of crossings, and updated other policies and procedures for WisDOT, including the treatment of rapid rectangular flashing beacons (RRFBs) near crossings.

Bureau of Traffic Operations
Wisconsin Department of Transportation (WisDOT), Central Office
Madison, WI

State Traffic Signal Systems Engineer. For a decade, Joanna served as the statewide lead for the traffic signal program area. In this role, she was responsible for oversight and development of all policies related to traffic signals. She continually updated WisDOT signal design and operations manuals to ensure they reflected industry best practices and covered emerging technology. Joanna reviewed and provided final approval to signal design plans for all state-owned signal installations and in so doing, ensured WisMUTCD and WisDOT signal design standard compliance. In addition, she was responsible for the review and final approval of all traffic signal warrant analyses for any new traffic signal proposed to be installed on the state trunk highway network. Joanna wrote the specifications and led the procurement contracts for several pieces of equipment, including various forms of non-intrusive detection and the traffic signal cabinet and controllers, which she migrated from TS1 to TS2 standards. She was also responsible for overseeing operations at the Electrical Shop where vendor supplied cabinets were brought into the shop for testing.

11th Street NE & Constitution Avenue NE
District of Columbia Department of Transportation (DDOT), Traffic Engineering and Safety Division

Project Engineer. Joanna served as the lead traffic engineer on this study which looked at the existing traffic signal to determine if it still met warrants and to determine if it was contributing to speeding along the corridor and would be more appropriate to remove the traffic signal and replace with all-way stop control. The analysis and findings supported the removal of the unwarranted signal and replacement with all-way stop control.

Georgia Avenue at Juniper Street NW
District of Columbia Department of Transportation (DDOT), Traffic Engineering and Safety Division

Project Engineer. Joanna served as the lead traffic engineer on this study which looked at the existing tee-intersection traffic control to determine if either a traffic signal or form of pedestrian control (Pedestrian Hybrid Beacon or RRFB) were warranted. The analysis and findings supported the installation of a Pedestrian Hybrid Beacon.

Jeffrey Weaver

Senior Project Manager

Areas of Expertise

Lighting design
Electrical design
Traffic signal design
Closed Circuit Television (CCTV) design
Maintenance of Traffic (MOT)
Manual on Uniform Traffic Control Devices (MUTCD)
Survey
GIS
Project management
CADD

Education

Electrical Engineering Coursework, 54 credit hours, 2008-2014

Memberships

Institute of Transportation Engineers (ITE)
Illuminating Engineering Society (IES), Present
IES Lighting Subcommittee - Roadway Standard Practice Task Group, Present

Training and Seminars

AGI32 Advanced Illumination Engineer Course, 2011
Cooper Lighting, LED Lighting Workshop, 2011
ACEC Project Management Workshop, 2005
AGI32 Professional Illumination Engineering Course, 2004
MUTCD Course, 2001
Traffic Control Devices Short Course, 2000
PSMJ Project Management Basecamp, 2022

Awards

Engineering Excellence Award, ACEC/MD, 2017-2018, Klingle Valley Trail Project

No. of Years with Mead & Hunt

Hired 12/2001

Jeff has 38 years of experience in design and management of traffic engineering design projects, specifically lighting, traffic signals, and Intelligent Transportation Systems (ITS). He has prepared over 350 lighting projects for continuous roadway, partial roadway, roundabout, intersection, sidewalks/ bikeways, culvert, underpass, tunnel, sign, high-mast, parking lot, work zones, toll plazas, and site lighting designs. Many of these lighting projects included photometric analysis, 3D modeling, light trespass analysis, and voltage drop calculations. Jeff is an expert in the use of photometric analysis software (AGI32 and Visual Professional). He is also an expert at using CAD software (MicroStation and AutoCAD). He is intimately familiar with AASHTO Roadway Lighting Design Guide GL-7, IESNA RP-8 American National Standard Practice for Design and Maintenance of Roadway and Parking Facility Lighting, Federal Highway Administration (FHWA) Lighting Handbook, FHWA RD-00-067 Roundabouts, an Informational Guide, and AASHTO LTS-4-M Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. He has also prepared over 200 traffic signal projects and several ITS projects.

PROJECT EXPERIENCE

Robinwood Corridor II, Contract #PUR-1078
Washington County
Hagerstown, Maryland

Project Manager. Jeff was responsible for overseeing the development of continuous roadway lighting along Robinwood Drive and roundabout lighting at the entrance to the Hagerstown Community College. The roundabout lighting was developed following criteria taken from IES DG-19-08, Design Guide for Roundabout Lighting. The photometric analysis was developed using AGI32 lighting software to determine proper pole spacing for average horizontal, uniformity ratios, veiling luminance ratios, and minimum vertical illumination levels for the continuous roadway lighting as well as the roundabout lighting. The project included coordination with Washington County to assist in their selection of an LED type light fixture for use on this project. The design also included coordination with Hagerstown Community College to replace in-kind existing college owned light poles located in the footprint of the new roundabout geometry. The lighting circuit layout was based on voltage drop calculations to confirm a maximum 5% voltage drop. The project included contact and coordination with the local power company as well as the development of special provisions and engineer's estimate. The project also included Phase V services which included reviewing shops drawings and addressing contractor presented questions.

Rehabilitation of Charles Street from 25th Street to University Parkway, Contract BC 814
Baltimore City Department of Transportation (BCDOT)
Baltimore City, Maryland

Senior Project Engineer. Jeff was responsible for the preparation of contract documents, special provisions, and engineer's estimates utilizing City of Baltimore guidelines. Work included design and photometric analysis of roadway and pedestrian lighting utilizing lighting design software. The analysis determined levels of illumination and uniformity ratios. The design utilized both decorative pedestrian and roadway light poles and required coordination with BGE to determine electrical feeds

No. of Years with Other Firms
17

to energize the lighting system. The design included coordination with the artist designing the art features including special lighting for this project which required additional photometric analysis to confirm that the illumination from the roadway and pedestrian lights would not reduce the effect of the special lighting for the art features.

Pentagon City Multi-Modal Improvement Project, Contract 416-10-2
Arlington County
Arlington, Virginia

Project Manager. Jeff was responsible for overseeing the development of street lighting along South Hayes Street between Army Navy Drive and 15th Street South. The design involved electrical lighting design plans and photometric plans to improve and upgrade street lighting, including accent lighting encompassed within the project limits. The design incorporated LED light fixtures and included an underground conduit and receptacle design following Arlington County lighting standards. The design also included coordination with the local power company to obtain acceptance of power feeds and for the approval of existing street lighting removal plans.

Department of Homeland Security (DHS) Access Improvements
District of Columbia Department of Transportation (DDOT)
Washington, District of Columbia

Project Manager. Jeff was responsible for the design and photometric analysis of intersection lighting and continuous roadway lighting at each signalized intersection, as well as along the St. Elizabeth's Access Road and an extension of Eaton Road from Firth Sterling Avenue to Barry Road. The analysis determined levels of illumination and uniformity ratios. The lighting design was prepared in accordance with DDOT lighting guidelines using Pendant Posts, Cobra-Head type LED fixtures, and Twin-20 Posts with Decorative Tear-Drop fixtures. The design included schematic layouts of the lighting circuits, which were determined by performing voltage drop calculations. The design included coordination with PEPCO to determine the location and number of power sources required to energize the lighting system.

Timothy Gall, PE, SE

Chief Bridge Engineer, Associate Vice President

Mr. Gall joined Epstein in 2016, bringing with him more than 16 years of transportation engineering experience. Tim has worked on all aspects of structural design and analysis for major transportation systems, including roadway and railway bridges, earth retaining systems, and facilities. His responsibilities have included the role of project manager and/or lead engineer for a variety of design projects, many of them in congested urban locations. He also has experience in design for retrofit, and repair and reconstruction of bridge structures, has performed detailed inspections and acted as the on-site engineer for construction activities providing related construction services.

Education

University of Illinois, Chicago, Illinois Master of Science in Civil Engineering, 2004

University of Illinois, Urbana, Illinois Bachelor of Science in Civil Engineering, 2000

Licenses/Registrations

Structural Engineer: Illinois, No. 081-006644, Exp. 11/30/2024, Issued 7/01/2008
Professional Engineer: Illinois, No. 062-058313, Exp. 11/30/2023, Issued 10/30/2005

Certifications

Safety Inspection of In-Service Bridges, FHWA-NHI-130055

Tunnel Safety Inspection, FHWA-NHI-130110

Fracture Critical inspection Techniques for Steel Bridges, FHWA-NHI Certification 130078

Element Level Certified
Illinois Department of Transportation Qualified (NBIS) Program Manager/ Element #958

EPSTEIN EXPERIENCE

Western Springs Pedestrian Underpass at Prospect Avenue and BNSF Railroad

WESTERN SPRINGS, ILLINOIS

Chief Bridge Engineer for the Phase II engineering services of a new railroad bridge on the BNSF line near the Western Springs Metra station to create a new pedestrian grade separation. The design includes a three track BNSF railroad bridge spanning over a pedestrian “tub” structure through the existing embankment. The alternative chosen is a single span bridge with prestressed precast concrete (PPC) Box Beams supported on precast abutment caps and steel piles. The embankment below the bridge is excavated and replaced with a soldier pile wall and concrete slab floor “tub” walkway beneath the bridge. Epstein is responsible for the railroad bridge and its subconsultants are designing the solder pile wall and pedestrian path. The railroad bridge is in accordance with BNSF standards and was

reviewed by BNSF. Coordination with the adjacent replacement of the BNSF Bridge over I-294 is required.

Will County Division of Transportation CH 16 (Bell Road) & CH 37 (143rd Street)
HOMER GLEN, ILLINOIS
Lead Structural Engineer for the Phase II design of the $20M improvement to Bell Road and 143rd Street including three signalized intersections and nearly two miles of roadway widening. The project will provide three through lanes on Bell Road, two through lanes on 143rd Street, dual left turn lanes, dedicated right turn lanes, raised medians, ADA ramps, shared use path, drainage with oversized pipes for detention and maintenance of traffic. Four existing segmental block retaining walls are impacted by the construction and new retaining walls are needed as replacements or due to grading and ROW issues with a maximum height of 8 feet. The project involves federal funds and will be let through the Illinois Department of Transportation Bureau of Local Roads.

Illinois State Toll Highway Authority, Eastbound Archer Avenue over 79th Street and Westbound Archer over LaGrange Road
COOK COUNTY, ILLINOIS
Structural Engineer for two structure replacement of Eastbound and Westbound Archer Avenue near the interchange with I-294. The existing structures consist of 3-span superstructure supported on concrete abutments and multi-column concrete piers. The proposed structures are 82 and 105 feet long (respectively), single span bridges with prestressed precast concrete (PPC) I Beams supported on semi-integral abutments with a 45 degree skew to the substructure. The structures are nearly 40 feet out to out of deck. Mechanically stabilized earth (MSE) retaining walls wrap around both abutments.

Illinois State Toll Highway Authority, Plainfield Road Bridge over Tri-State Tollway, I-294
COOK COUNTY, ILLINOIS
Structural Engineer for the structure replacement of Plainfield Road Bridge (SN 249) over I-294 and Flagg Creek. The existing structure consists of 3-span superstructure supported on concrete abutments and multi-column concrete piers. The proposed structure is a 416 feet long, 3-span bridge with prestressed precast concrete (PPC) I Beams supported on integral abutments and multicolumn concrete piers with a 23 degree skew to the substructure. The structure is nearly 77 feet out to out of deck. Mechanically stabilized earth (MSE) retaining walls wrap around both abutments. The bridge incorporates Accelerated Bridge Construction techniques through the use of precast approach slab and pier elements.

Will County, Gougar Road at CN Railroad Grade Separation Phase II
NEW LENOX, ILLINOIS
Project Manager for Phase II engineering for a new structure over the CN Railroad at Gougar Road. Project includes an alternatives analysis to evaluate a single span bridge with MSE walls retaining embankment versus a multi-span structure to avoid impacts to eight different regional pipelines. The design is following the Federal Aid process and guidelines. The project is estimated to cost $30M and will be advertised through Illinois Department of Transportation Bureau of Local Roads Letting.

Santacruz Land Acquisitions

222 Northfield Road · Suite 201· Northfield, IL 60093
Telephone: 847.251.5800 | Facsimile: 847.868.9620
www.santacruz-associates.com

Providing Right-of-Way Acquisition services since 1992

STATEMENT OF QUALIFICATIONS

Santacruz Land Acquisitions specializes in negotiating and acquiring parcels of land for right-of-way use by governmental bodies in roadway construction and other public infrastructure projects. Founded in 1992, we have been helping our clients acquire right-of-way on budget and in a timely manner to keep their projects on schedule. We have worked extensively with the Illinois Department of Transportation (IDOT), the Illinois State Toll Highway Authority (ISTHA), Cook County, Lake County, Will County and other local municipalities in facilitating property owners through the acquisition process with great success.

Representative Project Experience:

- O'Hare Modernization Program, O'Hare Airport expansion for the City of Chicago – Right-of-Way Agent. Completed the acquisition or referral for condemnation of over 300 parcels in a seven month period. Coordinated the acquisition process with relocation agents assigned to provide relocation benefits to displaced property owners under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.
- Washington Street in Lake County, Illinois, Lake County Division of Transportation – Right-of-way Agent. Engaged to provide negotiation/acquisition and appraisal services for 135 parcels over a 2.5 mile corridor. Project involved roadway widening and a grade separation of METRA rails from the roadway.
- Grand Avenue Grade Separation, Grand Avenue Railroad Relocation Authority, Franklin Park, Illinois – Right-of-way Agent. Provided negotiation services and facilitated acquisition of over eighty parcels of right-of-way necessary to complete a rail-road grade separation along Grand Avenue in Franklin Park involving the Soo Line Railroad, CP Rail Systems, Wisconsin Central and Indiana Harbor Belt Railroad.
- I-57 and I-294 Interchange, Illinois State Toll Highway Authority – Right-of-Way Agent. Engaged to provide a combination of negotiation/acquisition and appraisal services for over one hundred parcels for the construction of an interchange connecting two major interstates.

Santacruz Land Acquisitions has the versatility, experience and qualifications to deliver the land acquisition needs for transportation projects.

- Years of successful on-time delivery of right of way land acquisition services to various other agencies
- Diverse set of real estate acquisition disciplines including backgrounds in law and civil engineering
- Title review experience, including familiarity with all types of recorded documents affecting real estate and knowledge on how to the clear title
- Expertise with the Uniform Relocation Assistance and Real Property Act of 1970, as amended (Uniform Act), Illinois Eminent Domain Act (735 ILCS 30), IDOT Land Acquisition Guidelines.
- Familiarity with IDOT policies and procedures related to land acquisition and appraisals.

Santacruz Land Acquisitions

THE TEAM

Javier Steve Santacruz – President and Project Manager

Javier has more than 25 years of experience in providing right-of-way services for a variety of governmental agencies. He has assisted on planning of right-of-way during plan development stages, as well as worked as a right-of-way agent in the acquisition and facilitation of right-of-way necessary for the completion of a project. Hehas extensive experience working with the Illinois Department of Transportation and the Illinois State Toll Highway Authority gaining a thorough understanding of the policies and procedures of those agencies in meeting their right-of-way requirements. Javier has his B.S. in Accounting and a Juris Doctorate from DePaul University.

Jonathan Abplanalp – Vice President and Negotiator

Jonathan graduated from the University of Illinois with a B.S. in Architectural Studies. He has been with Santacruz since 2011 and has experience in all aspects of the land acquisition process. He is approved by IDOT – District 1 as a fee negotiator.

Thomas 'Tommy' Ball - Negotiator

Tommy graduated magna cum laude from Wabash College where he obtained a B.A. in Mathematics. He also graduated from Georgetown University with a Juris Doctorate and is licensed to practice law in Illinois. He has been with Santacruz since 2017 and has experience in all aspects of the land acquisition process. He is approved by IDOT – District 1 as a fee negotiator. Tommy also speaks Spanish.

REFERENCES

Sheila Derka
Illinois Department of Transportation
Land Acquisition Bureau – Chief Negotiator
201 Center Court
Schaumburg, IL 60196
847-705-4291 (Sheila.Derka@illinois.gov)

Al Giertych
Lake County Division of Highways
Assistant County Engineer
600 West Winchester Road
Libertyville, IL 60048-1381
847-377-7410 (agiertych@lakecountyil.gov)

Michael Woodward
Illinois State Toll Highway Authority
Land Acquisition Manager
2700 Ogden Avenue
Downers Grove, IL 60515
630-241-6800 x 3950 (mwoodward@getipass.com)

Santacruz Land Acquisitions is certified as a Disadvantaged Business Enterprise (DBE) by the State of Illinois, Department of Transportation and a Minority Business Enterprise (MBE) with the City of Chicago and Cook County.

SOIL AND MATERIAL CONSULTANTS, INC.

8 W. College Drive Arlington Heights, IL 60004 Phone: 847-870-0544 Fax: 847-870-0661

Since 1981, Soil and Material Consultants, Inc., a Small Business Enterprise, has provided consulting civil engineering services in the soil and construction material fields. Our services have been used by municipal, county, state, federal and other agencies; by engineers, architects, developers, land planners, contractors and builders; by material suppliers, manufacturers, realtors and others.

Our engineering staff averages over 20 years of experience in geotechnical investigations, pavement investigations, construction material testing, material quality control and associated services. We have provided services on more than 11,000 improvements to date. Our staff is trained and equipped to provide quality control, geotechnical, and engineering services to meet our client needs.

Services offered in house include engineering, testing, inspection, and quality control of soils and construction materials. Our staff includes civil engineers, geologists, engineering technicians, supervisory personnel and supporting services. All staff work is completed under the direction of experienced Registered Professional Engineers.

SMC drill rigs are staffed with qualified personnel to obtain subsurface soil and ground water information. We provide detailed soil investigations as well as detailed pavement investigations. Our full-service laboratory provides physical testing of the soil samples. We provide engineering analysis, recommendations, geotechnical and pavement investigation reports, and consultation.

Qualified personnel inspect and test soils including the removal of unsuitable soils and the proper placement of fill during site development. Soil and ground water conditions are evaluated at foundation and subgrade elevations.

Construction materials such as concrete and asphalt are inspected at the plant and on the job site. Our materials laboratory provides the supplemental laboratory testing. We provide coring services to sample in-place materials for laboratory testing.

The services offered by Soil and Material Consultants, Inc. include:

- *Soil investigation, including soil borings on land and water, classification, testing, evaluation, and reports.*
- *Coring and testing of construction materials.*
- *Soil and material related parameters for structural investigations and design.*
- *Pavement recycling, including initial pavement condition survey, laboratory testing, mix design, inspection and quality control during reconstruction.*
- *Stabilized base and subgrade control, including mix designs, plant and field inspections and laboratory testing.*
- *Concrete, including mix designs, plant and field inspections, and laboratory testing.*
- *Asphalt, including mix designs, plant and field inspections, and laboratory testing.*
- *Caisson and pile foundation inspection during installation.*

We propose to provide all Geotechnical Engineering and Material Testing services using in-house staff and equipment. We are prequalified by the Illinois Department of Transportation to perform General Geotechnical Services, Subsurface Explorations, and Structure Geotechnical Reports. Our laboratory is AASHTO accredited and prequalified by the Illinois Department of Transportation to perform testing and inspection of HMA, PCC, Aggregates and Soils.

Soil and Material Consultants, Inc. has a full-time staff of 12 employees with various current IDOT certifications in HMA, PCC, Aggregates and Soils testing. We maintain the depth and experience necessary to serve our clients. Our services will be provided to the Client in a professional, timely and high caliber manner.

Huff & Huff, Inc., a Subsidiary of GZA (H&H) is a multi-disciplined firm, located in Oak Brook, Illinois, providing environmental and civil engineering services as well as natural resource assessments. Founded in 1979, the Oak Brook office is comprised of 35 professional engineers and scientists plus 3 support staff. GZA is a professional services consulting firm focused on geotechnical, environmental, water, ecological, and construction management services with a staff of more than 560 engineers, scientists, and technical support staff in over 28 offices throughout the United States that serve clients in the architecture and engineering, contracting, governmental, industrial, infrastructure, institutional, oil and gas, power, and real estate industries.

The diversity of the firm's expertise allows effective solutions for clients. Wastewater, water quality, wetlands, vegetative management/monitoring, groundwater remediation, air pollution, water pollution, hazardous waste, waste management, noise & vibration, NEPA documents, compliance assessments, environmental site assessments, underground storage tanks, landscape architecture and risk assessments are all areas where H&H routinely provides engineering services. The diversity of H&H's environmental practice is complemented by the additional resources provided by GZA. This combination will allow H&H to continue to expand and develop its practice areas and serve a wider client base, while still maintaining the level of service our clients expect. Our work has been recognized with 11 Engineering Excellence awards for water quality projects, noise, remediation, and wastewater. Currently H&H is the Tollway's environmental consultant, the Illinois Department of Transportation's (IDOT) statewide noise consultant, and IDOT District 1's Wetland Consultant. These responsibilities are indicative of the quality and effectiveness of H&H's work.

H&H is committed to helping people and organizations work toward their sustainability goals through landscape architecture, a discipline that combines art, science, and ecology. Understanding that every site contains a unique and everchanging part of the global system and that every design solution requires innovation is a core philosophy of the landscape architects at H&H. H&H has provided solutions to environmental issues for public and private-sector clients. We utilize our experience and innovative approaches to make a difference for our clients. We make this difference through effective resolution of issues, being responsive, and listening to our clients.

Huff & Huff, Inc.

A Subsidiary of GZA GeoEnvironmental, Inc.

915 Harger Road, Suite 330, Oak Brook, Illinois 60523

(630) 684-9100 telephone / (630) 684-9120 fax

www.huffnhuff.com / www.gza.com

ASSESSMENT OF PROJECT CHALLENGES

Project Challenges

GHA has reviewed the Project Development Report and conducted a site visit to assess the anticipated challenges that the project team will encounter during the design.

A key element to our approach to delivering a successful project is producing a 3D model of the proposed design. This will create a centralized asset for design information, including drainage and utilities, and will fuel our approaches to tackling these challenges.

Construction Staging and Maintenance of Traffic

- Our strategy is to utilize the model to assess each phase of construction to ensure that proper horizontal and vertical clearances are provided for traffic and pedestrian movements. This will be part of a constructability review of each project area examining vehicle movements as well as PROWAG compliance.

Right of Way Evaluation

- Right-of-Way acquisition is typically on the critical path when it comes to roadway project schedules. Therefore, it is imperative to confirm the limits of construction and subsequent right-of-way needs early in the project so the land acquisition process can commence. Our strategy is to assess the model, and specifically examine constructability of the limits of construction to confirm the limits of any proposed right-of-way or easements so that plat of highway preparations can begin quickly. **GHA has the capacity to prepare these plats in-house, minimizing coordination time.**

Utility Coordination

- Utility coordination is another project element that benefits from a 3D model representation of the project. The project team will review the existing utility information available in the PDR and include the utilities in the model based on conventional bury depths or as-built information. **Having this information viewable in a model format increases visibility of conflicts or constructability issues, and; thereby, makes coordination and elimination of those conflicts smoother.** Relocation concepts, such as the 4" Nicor gas main that runs along the west side of Ravinia Avenue, will also be quickly vetted with a complete model. In the instance where more detailed location information is needed, GHA has previously partnered with other firms to perform higher level Subsurface Utility Engineering locates. ***Should Village utilities need to be relocated, GHA has the staff available in-house to perform these services***.

Communication with Residents

- Several concerns were raised in the public meeting regarding cut-through traffic during construction and some of the plantings in the center island. The model can be easily utilized for public viewing to assist in communicating how the finished intersection will look.

Project Permitting

- GHA is well versed in the permitting requirements for this project. It's anticipated that MWRD permitting will be required, as well as IEPA Notice of Intent permit. Should water main relocations be necessary, GHA has the expertise to design and permit the relocations.

Council of Mayors Coordination/IDOT Bureau of Local Roads

- Construction and Construction Engineering funding is currently programmed in the Southwest Council's STP list for 2026. GHA will keep an active project calendar that will indicate deadlines for submittals of contract documents and agreements for approvals to remain on schedule for funding.

REQUIRED FORMS

The next few pages contain the following completed forms, as requested.

- ✓ Proposal Summary Sheet
- ✓ Certificate of Compliance
- ✓ References
- ✓ Insurance Requirements: Certificate of Insurance

PROPOSAL SUMMARY SHEET

RFQ #23-049
153rd Street and Ravinia Avenue Roundabout,
Phase II Design Engineering

IN WITNESS WHEREOF, the parties hereto have executed this proposal as of date shown below.

Organization Name: Gewalt Hamilton Associates, Inc.

Street Address: 625 Forest Edge Drive

City, State, Zip: Vernon Hills, IL 60061

Contact Name: Matt Turk, P.E.

Phone: 847.821.6223 Fax: 847.478.9701

E-Mail address: MTurk@GHA-Engineers.com

Signature of Authorized Signee: Matthew Turk

Title: Director of Transportation Services

Date: October 9, 2023

ACCEPTANCE: This proposal is valid for ninety (90) calendar days from the date of submittal.

ORLAND PARK

CERTIFICATE OF COMPLIANCE

The undersigned Matt Turk, P.E., as Director of Transportation
(Enter Name of Person Making Certification) (*Enter Title of Person Making Certification)*

and on behalf of Gewalt Hamilton Associates, Inc., certifies that:
(Enter Name of Business Organization)

1) BUSINESS ORGANIZATION:

The Proposer is authorized to do business in Illinois: Yes [✓] No [ ]

Federal Employer I.D.#: 36-3426053
(or Social Security # if a sole proprietor or individual)

The form of business organization of the Proposer is (*check one*):

___ Sole Proprietor
___ Independent Contractor *(Individual)*
___ Partnership
___ LLC
__✓__ Corporation Illinois *(State of Incorporation)* August 20, 1981 *(Date of Incorporation)*

2) STATUS OF OWNERSHIP

Illinois Public Act 102-0265, approved August 2021, requires the Village of Orland Park to collect "Status of Ownership" information. This information is collected for reporting purposes only. Please check the following that applies to the ownership of your business and include any certifications for the categories checked with the proposal. Business ownership categories are as defined in the Business Enterprise for Minorities, Women, and Persons with Disabilities Act, 30 ILCS 575/0.01 *et seq.*

Minority-Owned [ ]
Women-Owned [ ]
Veteran-Owned [ ]
Disabled-Owned [ ]
Small Business [ ] (SBA standards)
Prefer not to disclose [ ]
Not Applicable [✓]

How are you certifying? **Certificates Attached [ ]** **Self-Certifying [ ]**

STATUS OF OWNERSHIP FOR SUBCONTRACTORS

This information is collected for reporting purposes only. Please check the following that applies to the ownership of subcontractors.

Minority-Owned [ ]
Women-Owned [ ]
Veteran-Owned [ ]
Disabled-Owned [ ]
Small Business [ ] (SBA standards)
Prefer not to disclose [ ]
Not Applicable [✓]

3) ELIGIBILITY TO ENTER INTO PUBLIC CONTRACTS: Yes [✓] No [ ]

The Proposer is eligible to enter into public contracts, and is not barred from contracting with any unit of state or local government as a result of a violation of either Section 33E-3, or 33E-4 of the Illinois Criminal Code, or of any similar offense of "Bid-rigging" or "Bid-rotating" of any state or of the United States.

4) SEXUAL HARASSMENT POLICY: Yes [✓] No [ ]

Please be advised that Public Act 87-1257, effective July 1, 1993, 775 ILCS 5/2-105 (A) has been amended to provide that every party to a public contract must have a written sexual harassment policy in place in full compliance with 775 ILCS 5/2-105 (A) (4) and includes, at a minimum, the following information: (I) the illegality of sexual harassment; (II) the definition of sexual harassment under State law; (III) a description of sexual harassment, utilizing examples; (IV) the vendor's internal complaint process including penalties; (V) the legal recourse, investigative and complaint process available through the Department of Human Rights (the "Department") and the Human Rights Commission (the "Commission"); (VI) directions on how to contact the Department and Commission; and (VII) protection against retaliation as provided by Section 6-101 of the Act. (Illinois Human Rights Act). (emphasis added). Pursuant to 775 ILCS 5/1-103 (M) (2002), a "public contract" includes "...every contract to which the State, any of its political subdivisions or any municipal corporation is a party."

5) EQUAL EMPLOYMENT OPPORTUNITY COMPLIANCE: Yes [✓] No [ ]

During the performance of this Project, Proposer agrees to comply with the "Illinois Human Rights Act", 775 ILCS Title 5 and the Rules and Regulations of the Illinois Department of Human Rights published at 44 Illinois Administrative Code Section 750, et seq. The

Proposer shall: (I) not discriminate against any employee or applicant for employment because of race, color, religion, sex, marital status, national origin or ancestry, age, or physical or mental handicap unrelated to ability, or an unfavorable discharge from military service; (II) examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization; (III) ensure all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, marital status, national origin or ancestry, age, or physical or mental handicap unrelated to ability, or an unfavorable discharge from military service; (IV) send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Vendor's obligations under the Illinois Human Rights Act and Department's Rules and Regulations for Public Contract; (V) submit reports as required by the Department's Rules and Regulations for Public Contracts, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and Department's Rules and Regulations for Public Contracts; (VI) permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and Department for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and Department's Rules and Regulations for Public Contracts; and (VII) include verbatim or by reference the provisions of this Equal Employment Opportunity Clause in every subcontract it awards under which any portion of this Agreement obligations are undertaken or assumed, so that such provisions will be binding upon such subcontractor. In the same manner as the other provisions of this Agreement, the Proposer will be liable for compliance with applicable provisions of this clause by such subcontractors; and further it will promptly notify the contracting agency and the Department in the event any subcontractor fails or refuses to comply therewith. In addition, the Proposer will not utilize any subcontractor declared by the Illinois Human Rights Department to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations. Subcontract" means any agreement, arrangement or understanding, written or otherwise, between the Proposer and any person under which any portion of the Proposer's obligations under one or more public contracts is performed, undertaken or assumed; the term "subcontract", however, shall not include any agreement, arrangement or understanding in which the parties stand in the relationship of an employer and an employee, or between a Proposer or other organization and its customers. In the event of the Proposer's noncompliance with any provision of this Equal Employment Opportunity Clause, the Illinois Human Right Act, or the Rules and Regulations for Public Contracts of the Department of Human Rights the Proposer may be declared non-responsible and therefore ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and this agreement may be canceled or avoided in whole or in part, and such other sanctions or penalties may be imposed or remedies involved as provided by statute or regulation.

6) TAX CERTIFICATION: Yes [✓] No [ ]

Contractor is current in the payment of any tax administered by the Illinois Department of Revenue, or if it is: (a) it is contesting its liability for the tax or the amount of tax in accordance with procedures established by the appropriate Revenue Act; or (b) it has entered into an agreement with the Department of Revenue for payment of all taxes due and is currently in compliance with that agreement.

7) AUTHORIZATION & SIGNATURE:

I certify that I am authorized to execute this Certificate of Compliance on behalf of the Contractor set forth on the Proposal, that I have personal knowledge of all the information set forth herein and that all statements, representations, that the Proposal is genuine and not collusive, and information provided in or with this Certificate are true and accurate. The undersigned, having become familiar with the Project specified, proposes to provide and furnish all of the labor, materials, necessary tools, expendable equipment and all utility and transportation services necessary to perform and complete in a workmanlike manner all of the work required for the Project.

ACKNOWLEDGED AND AGREED TO:

Matthew Turk
Signature of Authorized Officer

Matt Turk, P.E.
Name of Authorized Officer

Director of Transportation
Title

October 9, 2023
Date

REFERENCES

Provide three (3) references for which your organization has performed similar work.

Bidder's Name: Gewalt Hamilton Associates, Inc.
(Enter Name of Business Organization)

1. ORGANIZATION Village of Barrington
   ADDRESS 200 S. Hough Street, Barrington, IL 60010
   PHONE NUMBER 847.304.3460
   CONTACT PERSON Marie Hansen, P.E.
   YEAR OF PROJECT 6/2018-12/2019

2. ORGANIZATION City of Des Plaines
   ADDRESS 1420 Miner Street, Des Plaines, IL 60016
   PHONE NUMBER 847.391.5390
   CONTACT PERSON Tim Oakley P.E, CFM
   YEAR OF PROJECT 3/2020-still active

3. ORGANIZATION City of Lake Forest
   ADDRESS 800 N. Field Drive, Lake Forest, IL 60045
   PHONE NUMBER 847.810.3555
   CONTACT PERSON Byron Kutz, P.E.
   YEAR OF PROJECT 06/2021-still active

ORLAND PARK

INSURANCE REQUIREMENTS

Please provide a policy Specimen Certificate of Insurance showing current coverage's along with this form

WORKERS' COMPENSATION & EMPLOYER LIABILITY
Full Statutory Limits - Employers Liability
$500,000 – Each Accident $500,000 – Each Employee
$500,000 – Policy Limit
Waiver of Subrogation in favor of the Village of Orland Park

AUTOMOBILE LIABILITY (ISO Form CA 0001)
$1,000,000 – Combined Single Limit Per Occurrence
Bodily Injury & Property Damage

GENERAL LIABILITY (Occurrence basis) (ISO Form CG 0001)
$1,000,000 – Combined Single Limit Per Occurrence
Bodily Injury & Property Damage
$2,000,000 – General Aggregate Limit
$1,000,000 – Personal & Advertising Injury
$2,000,000 – Products/Completed Operations Aggregate
Additional Insured Endorsements: *(not applicable for Goods Only)*
ISO CG 20 10 or CG 20 26
and
CG 20 01 Primary & Non-Contributory
Blanket Waiver of Subrogation in favor of the Village of Orland Park

☐ CG 20 37 Additional Insured – Completed Operations (provide if box is checked)

In addition to the above, please provide the following coverage, if box is checked.

☑ **LIABILITY UMBRELLA (Follow Form Policy)**
☑ $1,000,000 – Each Occurrence $1,000,000 – Aggregate
☐ $2,000,000 – Each Occurrence $2,000,000 – Aggregate
☐ Other: _____
EXCESS MUST COVER: General Liability, Automobile Liability, Employers' Liability

☑ **PROFESSIONAL LIABILITY**
☐ $1,000,000 Limit – Claims Made Form, Indicate Retroactive Date
☑ $2,000,000 Limit – Claims Made Form, Indicate Retroactive Date
☐ Other: _____
Deductible not-to-exceed $50,000 without prior written approval

☐ **BUILDERS RISK**
Completed Property Full Replacement Cost Limits – Structures under construction

☐ **ENVIRONMENTAL IMPAIRMENT/POLLUTION LIABILITY**
$1,000,000 Limit for bodily injury, property damage and remediation costs
resulting from a pollution incident at, on or mitigating beyond the job site

☐ **CYBER LIABILITY**
$1,000,000 Limit per Data Breach for liability, notification, response,
credit monitoring service costs, and software/property damage

Any insurance policies providing the coverages required of the Consultant, excluding Professional Liability, shall be specifically endorsed to identify **"The Village of Orland Park, and their respective officers, trustees, directors, officials, employees, volunteers and agents as Additional Insureds on a primary/non-contributory basis with respect to all claims arising out of operations by or on behalf of the named insured."** The required

Additional Insured coverage shall be provided on the Insurance Service Office (ISO) CG 20 10 or CG 20 26 endorsements or an endorsement at least as broad as the above noted endorsements as determined by the Village of Orland Park. Any Village of Orland Park insurance coverage shall be deemed to be on an excess or contingent basis as confirmed by the required (ISO) CG 20 01 Additional Insured Primary & Non-Contributory Endorsement. The policies shall also contain a Waiver of Subrogation in favor of the Additional Insureds in regard to General Liability and Workers' Compensation coverage. The certificate of insurance shall also state this information on its face. Any insurance company providing coverage must hold an A-, VII rating according to Best's Key Rating Guide. Each insurance policy required shall have the Village of Orland Park expressly endorsed onto the policy as a Cancellation Notice Recipient. Should any of the policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions. Permitting the contractor, or any subcontractor, to proceed with any work prior to our receipt of the foregoing certificate and endorsements shall not be a waiver of the contractor's obligation to provide all the above insurance.

Consultant agrees that prior to any commencement of work to furnish evidence of Insurance coverage providing for at minimum the coverages, endorsements and limits described above directly to the Village of Orland Park, 14700 S. Ravinia Avenue, Orland Park, IL 60462. Failure to provide this evidence in the time frame specified and prior to beginning of work may result in the termination of the Village's relationship with the contractor.

ACCEPTED & AGREED THIS 9th DAY OF October, 2023

Matthew Turk
Signature

Authorized to execute agreements for:

Matt Turk, P.E., Director of Transportation
Printed Name & Title

Gewalt Hamilton Associates, Inc.
Name of Company

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 09/24/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Anne Christy	
Crissie Insurance Group 6400 Shafer Court Suite 600 Rosemont IL 60018	PHONE (A/C, No, Ext): (847) 296-0655	FAX (A/C, No):
	E-MAIL ADDRESS: annec@crissieins.com	

INSURED	INSURER(S) AFFORDING COVERAGE	NAIC #
Gewalt Hamilton Associates, Inc. 625 Forest Edge Drive Vernon Hills IL 60061	INSURER A : National Fire Insurance Company of Hartford	20478
	INSURER B : Continental Casualty Company	20443
	INSURER C : Underwriters at Lloyds of London	
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** 2023-2024 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	[X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [X] PRO-JECT [ ] LOC [ ] OTHER:			6043217108	09/30/2023	09/30/2024	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG 	$ 1,000,000 $ 100,000 $ 15,000 $ 1,000,000 $ 2,000,000 $ 2,000,000 $
B	AUTOMOBILE LIABILITY [X] ANY AUTO [ ] OWNED AUTOS ONLY [ ] SCHEDULED AUTOS [X] HIRED AUTOS ONLY [X] NON-OWNED AUTOS ONLY			6043217092	09/30/2023	09/30/2024	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) 	$ 1,000,000 $ $ $ $
B	[X] UMBRELLA LIAB [X] OCCUR [ ] EXCESS LIAB [ ] CLAIMS-MADE [ ] DED [X] RETENTION $ 10,000			6043217089	09/30/2023	09/30/2024	EACH OCCURRENCE AGGREGATE 	$ 10,000,000 $ 10,000,000 $
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y / N: N If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		6049525032	09/30/2023	09/30/2024	[X] PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000
C	Architects and Engineers Professional Liability			ANE1118020-21	09/10/2023	09/10/2024	Each Claim $75K Ded. Aggregate $225K Ded.	$2,000,000 $4,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

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CERTIFICATE HOLDER

Proof of insurance

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE