

August 24, 2021

Mr. Sean Marquez, PE
Village Engineer
Village of Orland Park

**Subject: John Humphrey Drive at 143rd Street Intersection,
Phase II Design Engineering Services**

Dear Mr. Marquez,

Thank you for the opportunity to electronically submit our Statement of Qualifications, Required Forms and Financial Documents to provide Phase II Design Engineering Services for the John Humphrey Drive at 143rd Street Intersection improvement. Ciorba Group has a long history of performing Phase II design engineering services on STP funded projects for numerous Chicago area counties and municipalities.

We have assembled a Project Team with the knowledge and relevant experience that will meet the needs of the Village and the requirements of the Illinois Department of Transportation's Bureau of Local Roads & Street (IDOT BLR&S). Our Team is the best choice for the Village due not only to our Team's expertise but also our understanding of the non-engineering skills necessary for the project. Timely communication with Village staff and elected officials as well as professionally interacting with project stakeholders are required for the successful completion of the project. Our Project Team leaders all have strong professional relationships with the IDOT BLR&S staff which will greatly assist in expediting the plan review process.

We look forward to being selected and beginning a long-term professional relationship with the Village of Orland Park. Should you have any questions about our submittal, please contact me at 773.355.2922 or at gheimsoth@ciorba.com.

Sincerely,

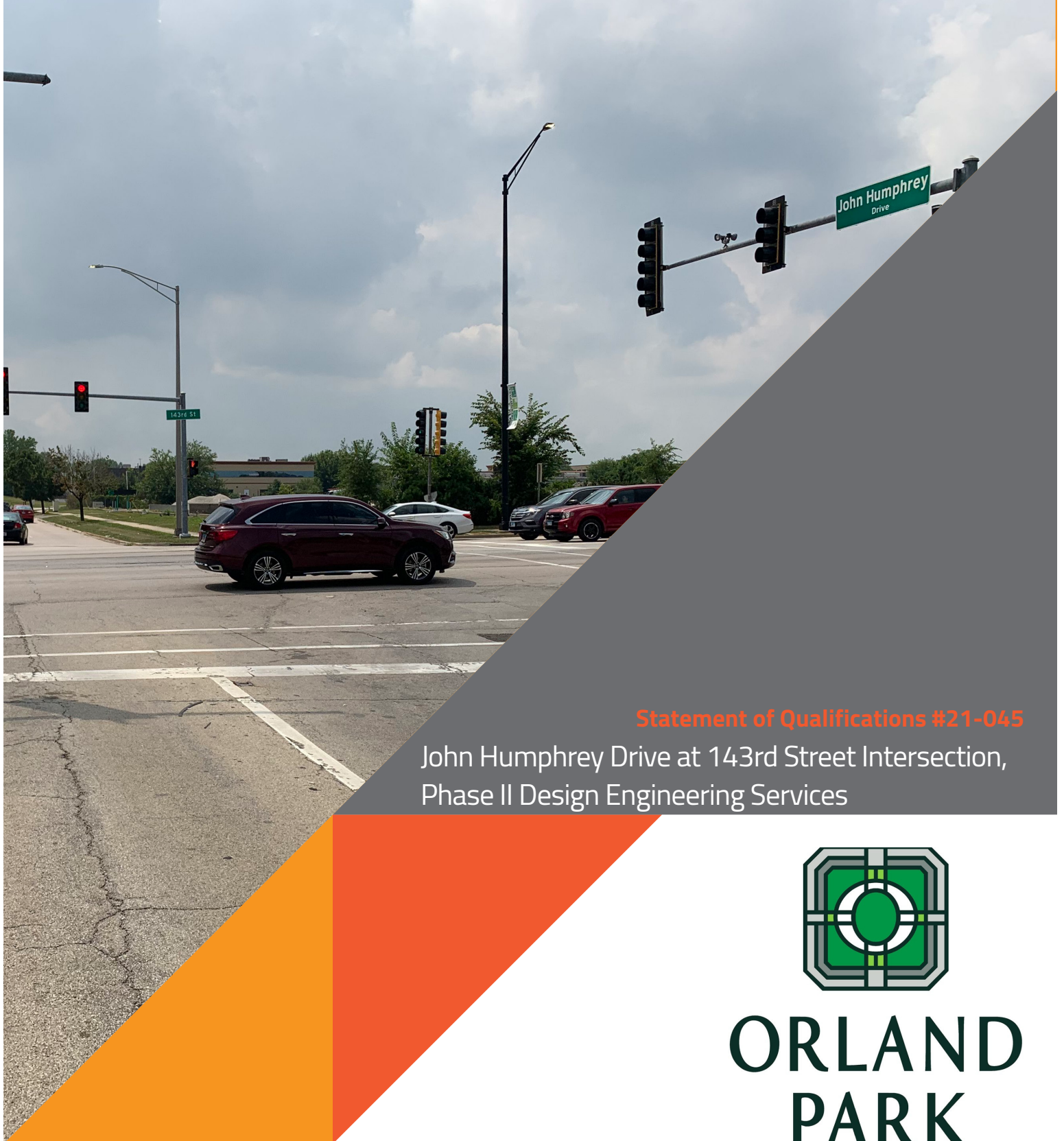
Ciorba Group, Inc.



Gerald W. Heimsoth, PE
Chief Executive Officer

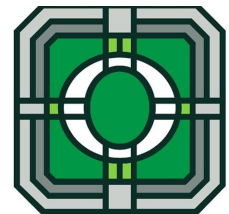


CiorbaGroup
CONSULTING ENGINEERS



Statement of Qualifications #21-045

John Humphrey Drive at 143rd Street Intersection,
Phase II Design Engineering Services



**ORLAND
PARK**

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Introduction

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1. Company Experience

EXPERIENCE SUMMARY

Descriptions of recent Ciorba Group projects that have similar improvements to the John Humphrey Drive/143rd Street intersection reconstruction are included on the following pages. Below is a summary of the relevant major work tasks for each of these projects.

Project	Phase II Design	STP Funded	Roadway Reconstruction	Bridge Construction	Stormwater Management	Traffic Signals	Roadway Lighting
80th Avenue Reconstruction Will County Division of Transportation	✓	✓	✓	✓	✓	✓	✓
Clavey Road Reconstruction City of Highland Park	✓	✓	✓	✓	✓	✓	
State Street (US 20 BR) at Perryville Road Intersection Improvements Illinois Department of Transportation, D2	✓		✓		✓	✓	
Lake Street Reconstruction Chicago Department of Transportation	✓	✓	✓		✓	✓	✓
John Deere Road (IL 5) Widening & Reconstruction Illinois Department of Transportation, D2	✓		✓	✓	✓	✓	
Peotone-Beecher Road over the Exline Slough Will County Division of Transportation	✓		✓	✓	✓		

1. Company Experience

80th Avenue Reconstruction



PROJECT DESCRIPTION

Ciorba Group was selected to provide design engineering services for the reconstruction of 80th Avenue from 191st Street to 183rd Street, within the Villages of Tinley Park and Mokena. The construction will be partially paid for using STP funds so the plans, specifications and cost estimates were reviewed and approved by IDOT BLR&S. The road will be widened from a two lane rural section to a four lane urban section with auxiliary turn lanes added at cross streets. Improvements will be made to the intersections with 183rd Street, 185th Street, 186th Street, 189th Street, 191st Street. The existing two lane bridge carrying 80th Avenue over I-80 will be replaced with a new four lane structure. New structures are also planned for the 80th Avenue crossings over Union Ditch and a Union Ditch tributary.

Other improvements will include designing a new enclosed drainage system, replacement of Tinley Park 24" transmission water main, new roadway lighting, and traffic signals at 183rd, 185th, and 191st Streets. A 10 foot wide multi-

use path will be designed for the entire length of the project, a total distance of about 5,800 feet. The new bridges over I-80 and the Union Ditch will be designed to accommodate the new multi-use path. Stormwater detention is required to meet the Will County's stormwater ordinance and compensatory storage will be provided for the fill generated by the crossing of the Union Ditch. Environmental concerns include minimizing impacts to wetlands along the roadway, and identifying and quantifying for removal areas of special waste materials.

Aesthetic treatments on the bridge over I-80 included form liner with colored concrete to resemble a limestone facade, decorative lighting, decorative railing, and the street name and Village of Tinley Park logo embossed in the concrete parapet. The intersections of 183rd and 185th Streets will be improved with colored and stamped concrete and asphalt crosswalks and landscaping.

LOCATION

Will County, IL

CLIENT

Will County Division of Transportation

CONTACT

Mr. Jeff Ronaldson, PE
Director of Transportation/
County Engineer
815.727.8476

CONSTRUCTION COST

\$49 Million

PROJECT TEAM

Project Manager
Duane O'Laughlin, PE
Project Engineer
Eric Spina, PE, ENV SP
Lead Structural Engineer
Brett Sauter, PE, SE
Lead Water Resources Engineer
Tony Wolff, PE, CFM
Lead Roadway Engineer
Joseph Attanaseo, PE
Lead Traffic Signal Engineer
Joseph Vondra, PE, LC

SCOPE OF SERVICE

► Final Design



1. Company Experience

Clavey Road Reconstruction



PROJECT DESCRIPTION

Ciorba Group was selected to provide design and construction engineering services for the reconstruction of Clavey Road from US 41 to Green Bay Road within the City of Highland Park. Construction will be paid for with local, Lake County Council of Mayors STP-L and STP-BR funds. The pavement will be reconstructed due to its poor condition but will remain a two lane urban collector street. The roadway alignment will be shifted two feet to the north to accommodate a new multi-use path within the south side parkway for the entire length of the project a distance of 5,400 feet. The path will be designed to minimize tree removal where possible while also meeting ADA and AASHTO standards for horizontal alignment. New roadway and pedestrian bridge will be constructed to replace the existing structures over the Skokie River.

Other improvements will include a new water main along the length of the project, replacing the storm sewer system, and new traffic signals at the Green Bay Road intersection. Environmental concerns include minimizing impacts to wetlands for the new bridge over

the river and identifying areas with special waste materials. Construction will be staged to provide two-way traffic at all times through the use of temporary pavement and a temporary traffic signal at the bridge. Maintaining two way traffic is necessary to provide access to the Ravinia Music Festival at the east end of the project. Our Team also conducted extensive public involvement activities to present project challenges and alternate solutions to stakeholders for their review and input.

The improvements will be constructed in two contracts. The first contract will involve constructing the new bridge over the Skokie River and installing the new water main. Also under this contract, temporary pavement will be constructed to maintain two way traffic along Clavey Road during the second contract. This second contract will include reconstructing the pavement, installing the new storm sewer system and traffic signal, and constructing the new multi-use path.

LOCATION

Highland Park, IL

CLIENT

City of Highland Park

CONTACT

Mr. Ramesh Kanapareddy
Public Works Director
847.432.0807

CONSTRUCTION COST

\$11 Million

PROJECT TEAM

Project Manager
Duane O'Laughlin, PE
Project Engineer
Eric Spina, PE, ENV SP
Lead Structural Engineer
Brett Sauter, PE, SE
Lead Water Resources Engineer
Tony Wolff, PE, CFM
Lead Roadway Engineer
Timothy Heuer, PE
Lead Traffic Signal Engineer
Joseph Vondra, PE, LC
Resident Engineer
Mike Kowalski, PE

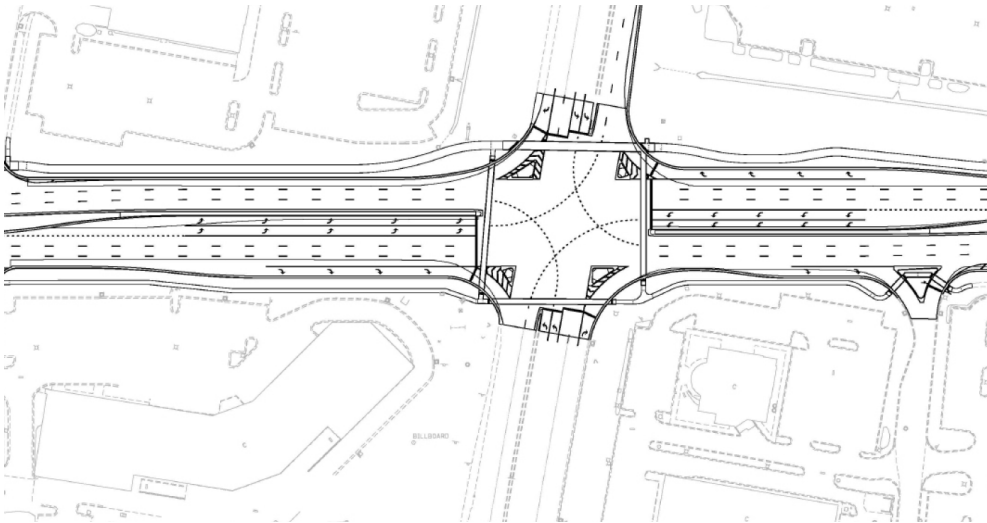
SCOPE OF SERVICE

- Final Design
- Construction Observation



1. Company Experience

State Street (US 20 BR) at Perryville Road Intersection Improvements



PROJECT DESCRIPTION

Ciorba Group prepared the final plans, specifications, and cost estimates for improvements to the intersection of State Street (US 20 BR) and Perryville Road, a Winnebago County highway. State Street is a major east-west route through Rockford, Illinois that provides a critical link to I-90 east of Rockford and US 20 west of Rockford. State Street is a six-lane, divided rural highway with average daily traffic (ADT) exceeding 31,000 vehicles. Perryville Road is a four-lane highway with an ADT exceeding 25,000 vehicles. Left turn lanes are provided on both legs of State Street while Perryville Road has dual left turn lanes. The land use along both roadways is largely retail businesses with single/multi-family homes immediately outside of the commercial area. The high traffic volumes and diversity of vehicle types causes a high level of intersection congestion and delay.

To improve capacity and safety at the intersection, the State Street pavement will be

widened to accommodate a second left turn and a dedicated right turn lane on both legs. Improvements will include resurfacing 0.56 miles of State Street from Mill Road to Buckley Drive and removing the outside shoulders to provide an urban cross section with a closed drainage system. 3,930 feet of multi-use path and 2,250 feet of sidewalk will be added to meet Complete Streets policy. Concrete segmental block retaining walls will be constructed at various locations to minimize right-of-way impacts. The improvements require new traffic signals at the intersection while the existing traffic signals at Mill Road and Buckley Drive will be modernized with an interconnect system installed between the three signals due to their close spacing.

This project was completed by Ciorba as part of a Task Order (Various/Various) type of contract with the Illinois Department of Transportation (IDOT) District Two.

LOCATION

Rock Island County, IL

CLIENT

Illinois Department of Transportation,
District Two

CONTACT

Ms. Rebecca Marruffo, PE
Project Engineer – Studies & Plans
815.284.5902

CONSTRUCTION COST

\$4.0 Million

PROJECT TEAM

Project Manager
Duane O'Laughlin, PE
Project Engineer
Eric Spina, PE
Lead Water Resources Engineer
Tony Wolff, PE, CFM
Lead Traffic Signal Engineer
Joseph Vondra, PE, LC
QA/QC Engineer
Mark Johnson, PE, PTOE

SCOPE OF SERVICE

► Final Design

1. Company Experience

Lake Street Reconstruction



PROJECT DESCRIPTION

Ciorba Group is providing preliminary and final design engineering services to the City of Chicago for the reconstruction of Lake Street from Ashland Avenue to Halsted Street, 1.3 miles total. The improvements consist of the removal and replacement of the existing pavement, curb and gutter, and sidewalks. Other improvements include installation of new street lighting, modernizing two existing traffic signals, installation of two new traffic signals, sewer structure replacements and repairs, and landscaping to improve the aesthetics of the corridor. The CTA Green Line elevated track ("the EL") runs the entire length of the improvement. The pavement elevation will be lowered to improve the vertical clearance between the elevated track and the street. A variable height curb head will be used along the entire project length to maintain proper drainage and meet ADA requirements. STP funding will be used for construction; therefore, all work will be done in accordance with IDOT Bureau of Local Road and Streets (BLR&S) and FHWA requirements.

The preliminary services involve updating the 17-year-old Project Development Report (PDR) to meet current design standards and City requirements. The horizontal geometrics will be revised to accommodate bicycle lanes and install curb bump outs at the intersections to improve pedestrian visibility and safety. The profile will be reviewed along the length of the entire project to verify conformance to ADA guidelines while providing 14 feet clearance with the elevated track. Other Phase I services include completing a five-year crash analysis, traffic signal warrant analysis,

renewing the environmental clearances, and updating intersection design studies including capacity analysis. The proposed revisions to the preliminary engineering study have to be coordinated with the Randolph Street/Fulton Market Association, representing local businesses, to obtain input on the proposed roadway improvements. The design will be modified based on their input as directed by the City. Once all the preliminary engineering study updates are completed, a standalone PDR will be prepared and submitted to the IDOT BLR&S and FHWA for review and approval.

The final design services for the preparation of plans, specifications and estimates include evaluating two LED lighting options: underpass-type fixtures attached to the existing EL track structure or decorative acorn style luminaires mounted on 14 to 16 foot mounting height poles. For buildings with existing vaulted sidewalks, Ciorba will contact the owners to determine if they should be filled in as part of the improvements or the owner will obtain a permit for its continued use. Other coordination efforts involve working with the CTA to evaluate the effects that the pavement lowering will have on the piers for the elevated tracks.

Coordination with the various utility companies/agencies will be conducted to identify and resolve potential conflicts between their existing facilities and the proposed improvements. Streetscape elements will be coordinated with City landscape architects. All permits necessary for construction will be secured during the final design phase.

LOCATION

Chicago, IL

CLIENT

Chicago Department of Transportation

CONTACT

Mr. David Miller
Coordinating Engineer I
312.744.0488

CONSTRUCTION COST

\$13 Million

PROJECT TEAM

Project Manager
Duane O'Laughlin, PE
Project Engineer
Eric Spina, PE
Lead Water Resources Engineer
Tony Wolff, PE, CFM
Lead Lighting/Traffic Signal Engineer
Joseph Vondra, PE, LC

SCOPE OF SERVICE

- Preliminary Engineering
- Final Design

1. Company Experience

John Deere Road (IL 5) Widening & Reconstruction



PROJECT DESCRIPTION

Ciorba was selected by Illinois Department of Transportation, District Two for final design of a major arterial road in Moline, Illinois. John Deere Road (IL 5) was originally constructed as a four-lane, divided highway with a frontage road system in the early 1970s. Today, John Deere Road is the major east-west access to the Moline/Rock Island area north of the Rock River. It provides the critical link between US 67 to the west and the I-80/I-88 interchange to the east. With no alternative east-west arterial route for this area, almost all traffic within the area uses John Deere Road. The land use along the roadway is largely retail businesses with single/multi-family homes immediately north and south of the commercial area. The closely spaced intersections coupled with the large diversity of vehicle types caused a high level of intersection congestion and delay.

Ciorba Group prepared the final plans, specifications and cost estimates for widening and reconstructing 2.5 miles of John Deere Road from the I-74 interchange to 70th Street. The widening improved safety and capacity by adding a third lane in each direction to the mainline pavement. Dual left turn lanes and a right turn lane were added to four of the six mainline intersections within the project limits. The frontage road system

was not reconstructed; however, geometric improvements were made at selected intersections. Approximately 0.6 miles of the roadway was raised to mitigate flooding impacts caused by the nearby Rock River.

The project included the reconstruction of fourteen side streets on new and existing alignments that intersect with the IL 5 mainline and frontage roads. New or modernized traffic signals were installed at ten intersections along IL 5 and the frontage road system. The existing signalized intersection at John Deere Road and 38th Street was eliminated and replaced with a new crossover bridge and roadway (41 St Drive connector) connecting to 38th Street. To minimize wetland impacts, 2,000 feet of Mechanically Stabilized Earth (MSE) walls were built along the new roadway and bridge instead of earth embankment. The new two span bridge has abutments on spread footings atop the MSE walls.

Other improvements included replacement of all across road culverts, drainage improvements, the addition of multi-use paths, and the construction of three retaining walls with a total length of 3,500 feet. One of the retaining walls has 2,250 feet of noise wall mounted onto it. Ciorba coordinated the improvements with the City of Moline.

LOCATION

Rock Island County, IL

CLIENT

Illinois Department of Transportation,
District Two

CONTACT

Ms. Rebecca Marruffo, PE
Project Engineer - Studies & Plans
Illinois Department of Transportation
815.284.5902

CONSTRUCTION COST

\$67 Million

PROJECT TEAM

Project Manager
Duane O'Laughlin, PE
Project Engineer
Eric Spina, PE
Lead Structural Engineer
Brett Sauter, PE, SE
Lead Water Resources Engineer
Tony Wolff, PE, CFM
Lead Traffic Signal Engineer
Joseph Vondra, PE, LC
QA/QC Engineer
Mark Johnson, PE, PTOE

SCOPE OF SERVICE

► Final Design



1. Company Experience

Peotone-Beecher Road over the Exline Slough



PROJECT DESCRIPTION

Ciorba Group, Inc. was selected by the Will County Division of Transportation (WCDOT) to provide preliminary and final design engineering services for the replacement of a concrete T-beam bridge over the Exline Slough. Peotone-Beecher Road is a two lane rural collector carrying over 2,000 vehicles per day in Will County.

Previous bridge inspections indicated that the superstructure was in serious condition. WCDOT wanted to replace the existing structure allowing for special loads of 120 kips to accommodate heavy truck traffic from nearby intermodal transportation centers.

Ciorba performed preliminary engineering studies that included an in-depth bridge inspection, condition report, and a bridge type study. In addition to investigating different bridge options and scope for the bridge replacement, Ciorba studied drainage and roadway improvements at the approaches. A hydraulic analysis was completed to determine the required bridge opening. A floodplain analysis was conducted to determine compensatory storage requirements. The

required compensatory storage volume was provided in the adjacent ditches and waterway. The recommended alternate for the bridge replacement was a 21 inch PPC deck beam superstructure with a 5 inch reinforced concrete wearing surface and integral-type abutments. The proposed abutments do not have any expansion joints to minimize future maintenance. The improvement was designed using the Load and Resistance Factor Design (LRFD) code.

To expedite construction, Peotone-Beecher Road at the bridge was closed and traffic detoured on an approved route. The roadway profile was raised approximately 4 inches at the center of the bridge due to the thicker wearing surface. The existing drop box was removed and replaced with rip rap. The proposed abutments were built behind the existing abutments which were kept in place and reused as retaining walls. Roadway improvements included replacing of 200 feet of the existing pavement with a new full depth hot-mix asphalt pavement, with 8 foot shoulders and new guardrail.

LOCATION

Will County, IL

CLIENT

Will County Division of Transportation

CONTACT

Mr. Brian Gieseke, PE
Assistant County Engineer
815.727.8476

CONSTRUCTION COST

\$1.4 Million

PROJECT TEAM

Project Manager
Brett Sauter, PE, SE
Project Engineer
Joseph Attanaseo, PE
Lead Structural Engineer
Alexander Durbak, PE, SE
Lead Water Resources Engineer
Tony Wolff, PE, CFM

SCOPE OF SERVICE

- Bridge Inspection
- Preliminary Engineering
- Final Design



2. Operating History

COMPANY BACKGROUND



History

Since 1927, Ciorba Group, Inc. has provided comprehensive engineering solutions for water resources, transportation, structural, municipal, construction, and site development projects. Ciorba's engineers and technicians are dedicated to providing practical designs while maintaining project schedules and budgets. For more complex projects, we develop distinctive and innovative solutions that minimize both construction time and project cost. Ciorba maintains high professional standards, and we sustain a proactive attitude for all projects, no matter the size. We deliver people-first engineering solutions that add value to communities, solve real-world problems and improve lives; meeting the needs of our clients and making their jobs easier. And we do it all collaboratively and with respect for each other, those we work with, and the environment. At Ciorba, we've built our community to better serve yours.

Total Employees: 53

Professional Engineers: 29

Licensed to do Business: Illinois, Indiana, Iowa, Louisiana, Michigan, Texas, and Wisconsin

IDOT Annual Fee Capacity Rating: \$20 million

IDOT Prequalifications

Structures

- Highway: Simple-Complex
- Major River Bridges

Location Design Studies

- Rehabilitation
- Reconstruction / Major Rehabilitation
- New Construction / Major Reconstruction

Special Studies

- Feasibility
- Location Drainage
- Traffic Studies
- Safety

Special Services

- Construction Inspection
- Electrical Engineering
- Mechanical Engineering

Hydraulic Reports

- Pump Stations
- Waterways: Typical
- Waterways: Complex

Highways

- Roads and Streets
- Freeways

Special Plans

- Pump Stations
- Traffic Signals
- Lighting: Complex

Contact Us

📍 8725 W. Higgins Road, Suite 600|Chicago, IL 60631

📞 773.775.4009

🌐 www.ciorba.com



Services / Capabilities

Ciorba offers an array of engineering services, which include studies and reports, design plans and specifications, and construction engineering in the following areas.

MUNICIPAL SERVICES

- Topographic Surveys
- Capital Improvement Budgeting
- Grant Applications and Management
- Facility Assessment Studies
- Developer Plan and Agreement Review
- Utility Coordination
- Updates to Municipal Standards and Maps
- Meeting Attendance (Village Board, Plan Commission, Etc.)

ROADWAY

- Expressway, Arterial, Collector and Local Street Improvements
- Shared Use Paths
- Traffic Studies
- Feasibility Studies
- Safety Studies
- Streetscaping

WATER RESOURCES

- Stormwater Management Studies and Design
- Floodplain Management
- Soil Erosion / Sediment Control Design and Inspection
- Streambank and Shoreline Restoration
- FEMA Map Revisions
- Water Distribution Analysis and Design
- Wastewater Collection Analysis and Design
- Lift/Pump Station Planning and Design
- Water Storage Planning and Design

STRUCTURAL

- Concept and Feasibility Studies
- Bridge Inspection and Condition Reports
- Bridge Type Studies
- Bridge Design
- Bridge Aesthetics

ELECTRICAL & LIGHTING

- Traffic Signal Design
- ITS Design
- Lighting Analysis and Design
- Electrical Design
- Program Management

CONSTRUCTION

- Construction Observation
- Manage Bid Process
- Preconstruction Services
- Project Documentation
- Project Closeout

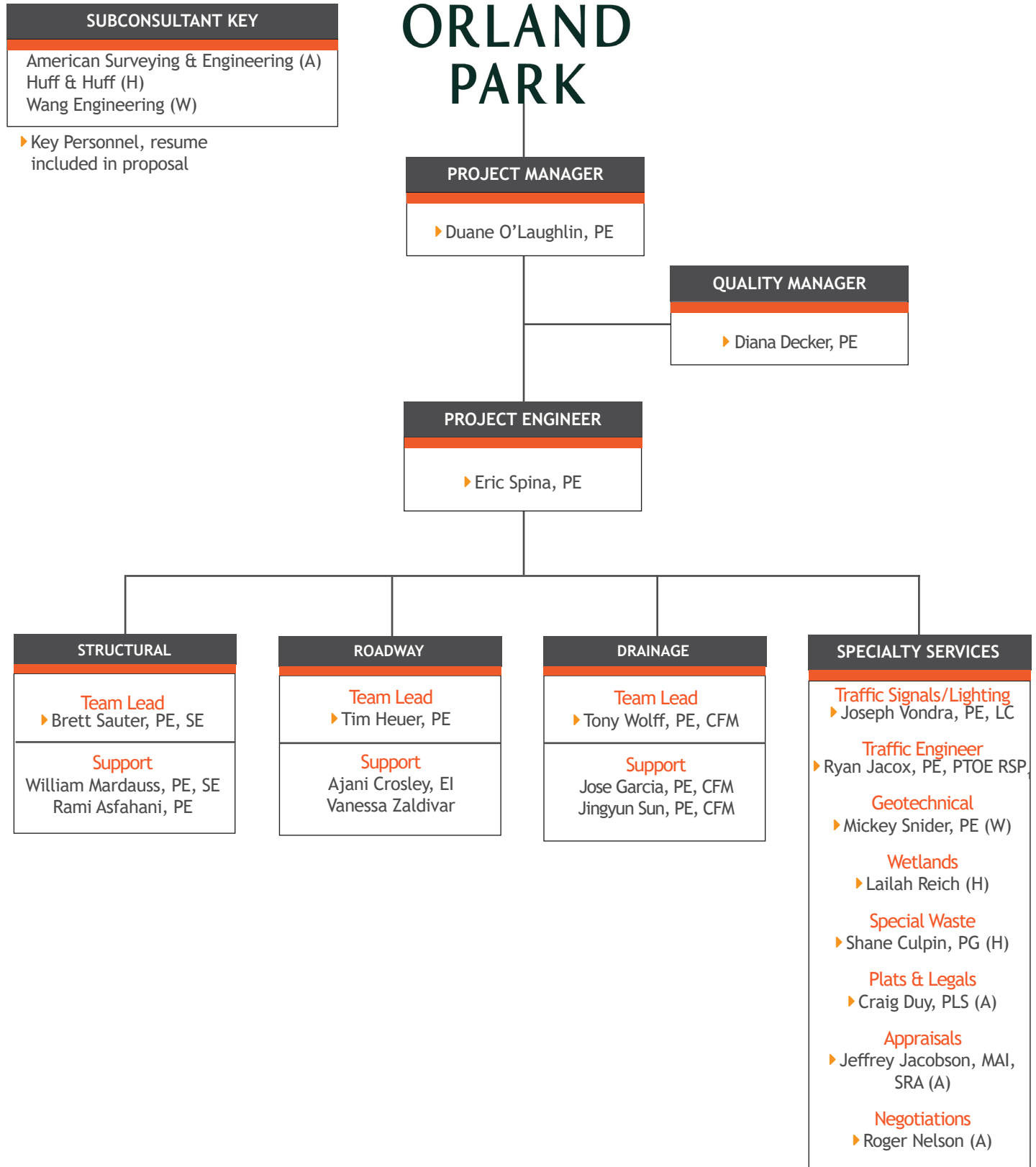


3. Qualifications of Project Team



ORLAND PARK

ORGANIZATIONAL CHART



3. Qualifications of Project Team

QUALIFICATIONS OF THE PROJECT TEAM

Ciorba Group has assemble a Project Team that is the right choice to perform the Phase II preliminary engineering services for the Village of Orland Park’s John Humphrey Drive at 143rd Street Intersection project. We are prequalified by the Illinois Department of Transportation in all the necessary categories including **Highways - Roads and Streets, Special Plans - Traffic Signals, Special Plans - Lighting and Structures - Highway: Simple through Major River Bridges**. Our Project Team’s success in providing professional services is based on the team member’s engineering capabilities and knowledge of IDOT Bureau of Local Roads & Streets (BLR&S) requirements. Besides this knowledge, the team members have an outstanding professional relationship with the IDOT BLR&S personnel who oversee the Phase II engineering review process. Ciorba Group has or is currently providing engineering services on 14 STP funded projects over the last 3 years. Through our municipal experience, the team members also have a thorough understanding of the local public agency environment. We have added the following subconsultants to our Project Team for their special expertise.



American Surveying & Engineering, PC (ASE) for preparation of plats and legal descriptions, appraisals and negotiations for right of way/easement acquisition.



Huff and Huff, Inc.(H&H) for environmental services including CCDD and wetlands.



Wang Engineering, Inc. (Wang) for geotechnical services and to our Project Team to provide the necessary services for the project.

Ciorba Group has long term professional relationships with all three firms so we are able to act together as one team to accomplish the work.

Key personnel assigned to the project will include:

Duane O’Laughlin, PE	Project Manager
Eric Spina, PE	Project Engineer
Brett Sauter, PE, SE	Structural Team Lead
Tim Heuer, PE	Roadway Team Lead
Tony Wolff, PE, CFM	Drainage Team Lead
Diana Decker, PE	Quality Manager
Mickey Snider, PE (Wang)	Geotechnical Engineer
Lailah Reich, PWS (H&H)	Wetland Specialist
Shane Cuplin, PG (H&H)	Special Waste
Craig Duy, PLS (ASE)	Plats and Legal Descriptions
Jefferey Jacobson MAI, SRA (ASE)	Lead Appraiser
Roger Nelson (ASE)	Negotiator

Brief summaries of key personnel capabilities and experience are provided below with resumes following at the end of this section of the SOQ.

Duane O’Laughlin, PE - Project Manager

Duane O’Laughlin will lead the Project Team’s effort in completing all the work tasks for the Phase II engineering. Mr. O’Laughlin serves as a Project Manager for preliminary, design and construction engineering services. These projects have included the reconstruction or rehabilitation of expressways, state arterial streets, county highways,

3. Qualifications of Project Team

and local arterial and collector streets as well as the installation of new multi-use paths. Trained in implementing Context Sensitive Solution procedures, Duane has experience in public involvement for all three phases of an improvement. His experience on STP funded local roadway improvement projects includes the recently completed Clavey Road reconstruction (\$11 million, Highland Park) and the 80th Avenue reconstruction and widening (\$49 million, Will County).

Duane will be a “hands-on” Project Manager, responsible for creating a cohesive unit amongst the various disciplines that will reach the common goal of preparing high quality plans, specifications and cost estimates. As Project Manager, he will also be the main contact person with the Village during the engineering services. Duane will always be available to address any issues or concerns that may arise during the project. Monitoring conformance to the project schedule for milestone submittals, implementation of the QC/QA Plan and overseeing staffing needs for the project will all be part of Duane’s duties.

Eric Spina, PE- Project Engineer

Mr. Spina has over 15 years of experience in preliminary, design, and construction engineering services for infrastructure improvement projects. For design engineering, Eric has lead teams in the plan preparation for improvements to expressways, state arterial streets, county highways and local arterial and collector streets. He has also supervised the plan preparation for annual street improvement programs for local agencies. Eric’s experience as a Resident/Construction Engineer on roadway improvement projects gives him special insight on the importance of a well developed and defined set of contract documents. He recently served with Duane as the Project Engineer on the above mentioned Clavey Road and 80th Avenue STP funded reconstruction projects.

Brett Sauter, PE, SE- Structural Team Lead

Brett Sauter leads Ciorba’s Structural Group and his experience includes concept studies and final design for bridge projects of various levels of complexity for various state Departments of Transportation, the Illinois Tollway, counties and municipalities. Mr. Sauter has the proven ability to positively interact with other disciplines (roadway, water resources, electrical) and with owners to define the project constraints and to prepare accurate project scopes and cost estimates. Brett recently worked with Duane on the STP funded Clavey Road reconstruction and 80th Avenue reconstruction and widening projects.

Timothy Heuer, PE - Roadway Team Lead

Tim Heuer is experienced in preliminary engineering and final design of improvements to transportation infrastructure. Clients have included state, county, and municipal agencies on projects involving expressways, arterial streets, county highways, local streets and multi-use paths. His key strengths lie in geometric design, developing 3D models, and assisting in the public involvement process. Tim recently worked with Duane and Eric on the Clavey Road reconstruction project in Highland Park.

Tony Wolff, PE, CFM - Drainage Team Lead

Mr. Wolff has over 27 years of experience in water resources engineering. Tony oversees Ciorba’s Water Resources staff and manages or directs projects related to the study and design of stream crossings, stormwater management facilities, water supply systems, and sanitary collection systems. He recently served as the Lead Water Resources Engineer for the STP funded Clavey Road reconstruction and the 80th Avenue reconstruction and widening projects. These projects involved the design of new storm sewer systems, stormwater detention and water main replacement.

Diana Decker, PE - Quality Manager

Ms. Decker has over 26 years of experience in the study and design of improvements to transportation facilities including expressways, arterial streets, county highways, and local roads. She has overseen geometric design, traffic and safety studies, value engineering and preparation of contract plans and specifications. Diana is also experienced in coordination with regional and local government agencies as well as public involvement. She recently served as the Quality Manager for the Clavey Road reconstruction and 80th Avenue reconstruction and widening projects.

3. Qualifications of Project Team

Mickey Snider, PE (Wang) - Geotechnical Engineer

Mr. Snider geotechnical engineering experience includes projects involving shallow foundations, pile and drilled shaft (deep) foundations, earth retention and retaining walls, slope stability, settlement analyses, and bridge abutment analysis. He has conducted extensive laboratory testing such as consolidated-undrained triaxial, one-dimensional consolidation, and direct shear testing as well as geotechnical field investigations involving driven piles, drilled shafts, and stone column ground improvements.

Lailah Reich, PWS (H&H) - Wetland Specialist

Lailah Reich is a wetland scientist and ecologist with over 16 years' experience conducting wetland delineations, Section 404 and 401 permitting, and water quality and best management practices concepts related to transportation projects. Ms. Reich is a Society for Wetland Scientists certified Professional Wetland Scientist (#2835), a Lake and McHenry County Certified Wetland Specialist, a Kane County Wetland Review Specialist, and a Lake County Designated Erosion Control Inspector.

Shane Cuplin, PG (H&H) - Special Waste

Mr. Cuplin has over 19 years of experience as an environmental consultant. Shane's transportation project experience includes special and hazardous waste screening and direction of soils to clean construction and demolition debris (CCDD) landfills, Preliminary Environmental Site Assessments (PESA) and Preliminary Site Investigations (PSI).

Craig Duy, PLS (ASE) - Plats and Legal Descriptions

Mr. Duy has over 30 years of experience in land surveying services. He is involved not only in conducting the field surveys and preparation of land acquisition documents but also the acquisition process and procedures for roadway improvement projects. Craig has extensive field and research experience in Kane, Kendall, DeKalb, DuPage, Cook and LaSalle Counties.

Jefferey Jacobson MAI, SRA (ASE) - Lead Appraiser

Mr. Jacobson is a Certified General Appraiser and is on the IDOT list of Certified Commercial and Residential Appraisers. He is experienced working with IDOT and various counties and municipalities throughout the State of Illinois.

Roger Nelson (ASE) - Negotiator

Mr. Nelsen is a certified Land Acquisition Negotiator for IDOT. His knowledge of the Financial Industry allows him to understand all the different types of legal holdings including Trusts. Mr. Nelsen is also a student of Eminent Domain process. He has worked on projects for IDOT and various counties and municipalities throughout the State of Illinois.

3. Qualifications of Project Team



EDUCATION

Master of Science in Civil Engineering
University of Florida

Bachelor of Science in Civil Engineering
United States Military Academy

PROFESSIONAL REGISTRATION

Professional Engineer
Illinois #062-252501 (1998)
Iowa #17617 (2005)
Virginia #0408-027414 (1996)
Indiana #PE11400608 (2014)
Michigan #6201061255 (2014)

EXPERTISE

Construction Observation
Highways
Municipal Streets
Parking Lots
Studies and Reports

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers
Active Transportation Alliance
American Public Works Association
Illinois Road and Transportation Builders Association
ACEC – Illinois
League of Illinois Bicyclists

Duane O'Laughlin, PE

Project Manager

ABOUT DUANE

Mr. O'Laughlin is Ciorba's Vice President - Director of Engineering and serves as a Project Manager for preliminary, design and construction engineering services. These projects have included the reconstruction or rehabilitation of expressways, arterial streets, county highways and local streets as well as the installation of new drainage systems, water mains, traffic signals, and lighting. Trained in implementing Context Sensitive Solution procedures, Duane has experience in public involvement for all three phases of an improvement. He has more than 36 years of experience working on projects for federal agencies, the Illinois Department of Transportation, Illinois Tollway, counties, municipalities and private clients.

REPRESENTATIVE PROJECT EXPERIENCE

80th Avenue Reconstruction, Will County Division of Transportation.

Project Manager overseeing final design engineering for the reconstruction of 80th Avenue from 191st Street to 183rd Street. STP funding is being used for construction. The road will be widened from a two lane rural section to a four lane urban section. Improvements including new turn lanes will be made to the intersections with 189th Street, 186th Street, 185th Street, and 183rd Street. The existing two lane bridge carrying 80th Avenue over I-80 will be replaced with a new four lane structure. New structures were also designed for the 80th Avenue crossings over Union Ditch and a Union Ditch tributary. Other improvements included designing traffic signals, street lighting, water main, storm sewer system, a multi-use path, and landscaping along the corridor. Duane conducted public involvement activities to present project challenges and alternate solutions to stakeholders for their review and input.

Clavey Road Reconstruction, City of Highland Park

Project Manager overseeing final design for the reconstruction of Clavey Road from US 41 to Green Bay Road. STP funding is being used for construction. The pavement will be reconstructed due to its poor condition but will remain a two lane urban collector street. The roadway alignment will be shifted two feet to the north to accommodate a new multi-use path within the south side parkway for the entire length of the project. The path will be designed to minimize tree removal while meeting ADA and AASHTO standards for horizontal alignment. A new roadway bridge with pedestrian facilities will be constructed to replace the existing roadway and pedestrian structures over the Skokie River. Other improvements include a new traffic signal at Green Bay Road, a new storm sewer system and a new water main the length of the project.

Lake Street Reconstruction, Chicago Department of Transportation.

Project Manager supervising the update to the Project Development Report and the preparation of plans, specifications, and cost estimates for the reconstruction of 1.1 miles of Lake Street. Project limits are from Ashland Ave to I-90/94 (Kennedy Expressway). The CTA Green Line elevated tracks run along the entire length of project. The project will lower the street profile to increase clearance for the CTA overhead structure. Improvements also include the installation of new street lighting, traffic signal modernizations, drainage system improvements and the removal of hazardous materials. Landscape and streetscape enhancements will improve the corridor aesthetics. Ciorba coordinated with adjacent property owners for the removal or replacement of existing vaulted sidewalks. Federal STP funds will be used for construction so all plan documents to be prepared in accordance with IDOT requirements.

State Street (US 20 BR) and Perryville Road Intersection Improvements, Illinois Department of Transportation, District Two.

Project Manager for the design engineering services to improve the intersection of State Street (US 20 BR) and Perryville Road. State Street is a major six-lane, divided rural highway through Rockford, Illinois while Perryville Road is a four lane Winnebago County highway. To improve capacity and safety at the intersection, the State Street pavement will be widened to accommodate a second left turn and a dedicated right turn lane on both legs. Improvements will also include resurfacing 0.56 miles of State Street from Mill Road to Buckley Drive, removing the outside shoulders to provide an urban cross section with a closed drainage system. A new multi-use path and sidewalk will be added to meet Complete Streets policy. Retaining walls will be constructed at various locations to minimize right-of-way impacts. The improvements require new traffic signals at the intersection while the existing traffic signals at Mill Road and Buckley Drive will be modernized with an interconnect system installed between the three signals.

3. Qualifications of Project Team



Eric Spina, PE

Project Engineer

ABOUT ERIC

Mr. Spina has over 15 years of experience in preliminary, design, and construction engineering services for infrastructure improvement projects. His expertise includes roadway geometric studies, intersection design studies, capacity analysis, and crash data analysis for improvements to arterial streets and local roads. For design engineering, Eric has lead teams in the plan preparation for improvements to expressways and arterial streets. He has also supervised the plan preparation for annual street improvement programs for local agencies. Eric has served as a Resident/Construction Engineer on arterial and local road improvements, stormwater facility construction, and water main replacement projects. Eric has received the training required to serve as a Materials Coordinator on construction projects.

REPRESENTATIVE PROJECT EXPERIENCE

80th Avenue Reconstruction, Will County Division of Transportation.

Project Engineer supervising final design engineering for the reconstruction of 80th Avenue from 191st Street to 183rd Street. STP funding is being used for construction. The road will be widened from a two lane rural section to a four lane urban section. Improvements including new turn lanes will be made to the intersections with 189th Street, 186th Street, 185th Street, and 183rd Street. The existing two lane bridge carrying 80th Avenue over I-80 will be replaced with a new four lane structure. New structures were also designed for the 80th Avenue crossings over Union Ditch and a Union Ditch tributary. Other improvements included designing traffic signals, street lighting, water main, storm sewer system, a multi-use path, and landscaping along the corridor.

Clavey Road Reconstruction, City of Highland Park

Project Engineer for the final design for the reconstruction of Clavey Road from US 41 to Green Bay Road. STP funding is being used for construction. The pavement will be reconstructed due to its poor condition but will remain a two lane urban collector street. The roadway alignment will be shifted two feet to the north to accommodate a new multi-use path within the south side parkway for the entire length of the project. The path will be designed to minimize tree removal while meeting ADA and AASHTO standards for horizontal alignment. A new roadway bridge with pedestrian facilities will be constructed to replace the existing roadway and pedestrian structures over the Skokie River. Other improvements include a new traffic signal at Green Bay Road, a new storm sewer system and a new water main the length of the project.

State Street (US 20 BR) and Perryville Road Intersection Improvements, Illinois Department of Transportation, District Two.

Project Engineer supervising the preparation of the final design plans, specifications, and estimates for the improvement to the intersection of State Street (US 20 BR) and Perryville Road. State Street is a major six-lane, divided rural highway through Rockford, Illinois while Perryville Road is a four lane Winnebago County highway. To improve capacity and safety at the intersection, the State Street pavement will be widened to accommodate a second left turn and a dedicated right turn lane on both legs. Improvements will also include resurfacing 0.56 miles of State Street from Mill Road to Buckley Drive, removing the outside shoulders to provide an urban cross section with a closed drainage system. A new multi-use path and sidewalk will be added to meet Complete Streets policy. Retaining walls will be constructed at various locations to minimize right-of-way impacts. The improvements require new traffic signals at the intersection while the existing traffic signals at Mill Road and Buckley Drive will be modernized with an interconnect system installed between the three signals.

Lake Street Reconstruction, Chicago Department of Transportation.

Project Engineer for the preparation of plans, specifications, and cost estimates for the reconstruction of 1.1 miles of Lake Street. Project limits are from Ashland Ave to I-90/94 (Kennedy Expressway). The CTA Green Line elevated tracks run along the entire length of project. The project will lower the street profile at some locations to increase clearance for the CTA overhead structure. Improvements also include the installation of new street lighting, traffic signal modernizations, drainage system improvements and the removal of hazardous materials. Landscape and streetscape enhancements will improve the corridor aesthetics. Ciorba coordinated with adjacent property owners for the removal or replacement of existing vaulted sidewalks. Federal STP funds will be used for construction so all plan documents will be prepared in accordance with IDOT BLR&S requirements.

EDUCATION

Bachelor of Science Civil Engineering
Illinois Institute of Technology

PROFESSIONAL REGISTRATION

Professional Engineer
Illinois #062-065508 (2013)
Indiana # PE1100742 (2018)

CERTIFICATION

ASCE - Envision Sustainability Professional
APWA - Certified Public Infrastructure
Inspector
LCSMC - Designated Erosion Control Inspector
IDOT - Documentation of Contract Quantities

EXPERTISE

Construction Observation
Highways
Municipal Streets
Parking Lots
Studies and Reports

3. Qualifications of Project Team



EDUCATION

Master of Science Civil Engineering
University of Illinois- Chicago

Bachelor of Science Civil Engineering
Valparaiso University

PROFESSIONAL REGISTRATION

Structural Engineer
Illinois #081-006844 (2009)

Professional Engineer
Illinois #062-060429 (2008)
Indiana #11300159 (2013)
Louisiana #40930 (2016)
Michigan #621060664 (2013)
Wisconsin #43430-6 (2014)

CERTIFICATION

FHWA/NHI - Inspection of Fracture Critical Members Course

FHWA/NHI- Safety Inspection of In Service Bridges

IDOT - Element Level Inspection

IDOT - Documentation of Contract Quantities (#10-0563)

IDOT - Program Manager for Bridge Inspection

INDOT - Certified Bridge Inspection Team Leader (IN000483-2019-ATL)

OSHA - Confined Space Training

EXPERTISE

Bridges and Structures

Concept / Feasibility Studies

Structural Inspection Load Ratings and Condition Reports

Construction Services

PROFESSIONAL AFFILIATIONS

American Council of Engineering Companies
IDOT Bridge Committee

American Society of Civil Engineers

Structural Engineers Association of Illinois

Structural Engineering Institute
Illinois Chapter Past Chair

International Association of Bridge and Structural Engineering

American Railway Engineering and Maintenance-of-Way Association

Brett Sauter, PE, SE

Lead Structural Engineer

ABOUT BRETT

Brett Sauter is a Vice President who leads Ciorba's Structural Group, his experience includes concept studies and final design for bridge projects of various levels of complexity for the Illinois Department of Transportation, the Indiana Department of Transportation, the Illinois Tollway and various municipalities and counties. His design experience includes post-tensioned and prestressed concrete structures, long steel plate girder bridges, railroad bridges and bridges with complex geometry and staging. Mr. Sauter has the proven ability to positively interact with other disciplines such as roadway, water resources and with owners to define the project constraints, to prepare accurate project scopes and cost estimates. His knowledge of the construction process gives him a unique ability to engineer complex construction staging procedures, to provide design support to bridge contractors for demolition and erection plans and to successfully operate in a Design-Build team.

REPRESENTATIVE PROJECT EXPERIENCE

80th Avenue Reconstruction, Will County Division of Transportation.

Lead Structural Engineer for final design engineering for the reconstruction of 80th Avenue from 191st Street to 183rd Street, within the Villages of Tinley Park and Mokena. The road will be widened from a two lane rural section to a four lane urban section with auxiliary turn lanes added at cross streets. Improvements will be made to the intersections with 189th Street, 186th Street, 185th Street, and 183rd Street. The existing two lane bridge carrying 80th Avenue over I-80 will be replaced with a new four lane structure. A second bridge crossing over the Union Drainage Ditch was designed to replace existing triple corrugated metal pipes. Due to poor soil conditions, a load transfer platform was designed north and south of the bridge to stabilize the roadway embankment.

Clavey Road Reconstruction, City of Highland Park

Lead Structural Engineer for the bridge replacement associated with the reconstruction of Clavey Road from US 41 to Green Bay Road. The proposed bridge is a 68' long single span steel rolled beam structure using galvanized beams and semi-integral abutments to extend the life of the structure. Aesthetic formliner and concrete staining was incorporated into the bridge plans. The new roadway bridge included a barrier protected shared use path that allowed for the removal of an adjacent deteriorated pedestrian bridge.

John Deere Road (IL 5) Widening and Reconstruction, Illinois Department of Transportation, District Two.

Lead Structural Engineer for final plans preparation for the widening and reconstruction of 2.5 miles of IL 5 in the City of Moline. The improvements add a third lane in each direction and dual left turn lanes and right turn lanes at all five major intersections. The existing signalized intersection at John Deere Road and 38th Street was eliminated and replaced with a new flyover bridge and a new roadway connecting 38th Street to Coalton Road. The proposed bridge features stub abutments on spread footings atop Mechanically Stabilized Earth (MSE) walls used instead of earth embankment to minimize wetland impacts. The project includes the reconstruction of various two-cell box culverts, retaining and noise walls.

Peotone Beecher Road Bridge over the Exline Slough, Will County Division of Transportation.

Project Manager for preliminary and final design engineering for a single span bridge replacement. A hydraulic model was completed to determine the required bridge opening and profile adjustments. Because of the presence of deep strata of unsuitable soil during the Bridge Type Study it was determined to use Geofoam material to limit the amount of earth work and to reduce future settlement of the approaches. The existing roadway was closed and traffic detoured during construction. The replacement structure consisted of 36" PPC I-beam superstructure with an 8" reinforced concrete deck will be utilized together with integral-type abutments. The project was paid for with County funds.

Des Plaines River Trail South Extension, Village of Brookfield

Lead Structural Engineer to provide preliminary engineering services for approximately 5 miles of new bike trails along new alignments. The new trails are at four separate locations that extend and connect different sections of the Des Plaines River Trail system. Other services provided will include a full topographic survey, environmental studies, crash analysis, identifying right of way acquisition needs, and construction cost estimates. All studies will be summarized in a Project Development Report (PDR). With the use of STP funds, all engineering studies will follow IDOT BLR&S guidelines.

3. Qualifications of Project Team



EDUCATION

Bachelor of Civil Engineering
University of Dayton

PROFESSIONAL REGISTRATION

Professional Engineer
Illinois #062.069545
Indiana #PE11700649

CERTIFICATION

ACEC – IDOT Phase 1 Training
ACEC – Environmental Resource Permitting for
Engineers in Illinois

EXPERTISE

Highways
Studies and Reports

Timothy Heuer, PE

Roadway Team Lead

ABOUT TIMOTHY

Timothy Heuer is experienced in preliminary engineering studies and design plan preparation for transportation infrastructure improvement projects. This work has been completed for state, county, and other local public agencies. Tim's preliminary engineering experience involves conducting roadway alignment and geometric studies (including new roundabouts), intersection design studies, bicycle safety studies, and crash analysis. Tim has prepared final design plans, specifications, and cost estimates for improvements to arterial streets and collector roads. He has also developed 3D models and gained experience on freight rail and transit projects.

REPRESENTATIVE PROJECT EXPERIENCE

Clavey Road Reconstruction, City of Highland Park

Senior Engineer for the final design for the reconstruction of Clavey Road from US 41 to Green Bay Road. STP funding is being used for construction. The pavement will be reconstructed due to its poor condition but will remain a two lane urban collector street. The roadway alignment will be shifted two feet to the north to accommodate a new multi-use path within the south side parkway for the entire length of the project. The path will be designed to minimize tree removal while meeting ADA and AASHTO standards for horizontal alignment. A new roadway bridge with pedestrian facilities will be constructed to replace the existing roadway and pedestrian structures over the Skokie River. Other improvements include a new traffic signal at Green Bay Road, a new storm sewer system and a new water main the length of the project.

Washington Street over West Branch of DuPage River, City of Naperville.

Senior Engineer for the final design engineering services required to replace the three-span Washington Street Bridge over West Branch of the DuPage River with a two-span wider bridge with a post-tensioned concrete superstructure. The profile will be adjusted to improve hydraulics. Roadway improvements will consist of widening from 51 ft south of Aurora Avenue to Chicago Avenue with left turn lanes on the bridge. The project includes intersection improvements at Chicago Avenue and Aurora Avenue and design of the low flow walkway connection under the bridge. The contract includes relocation of various existing utilities are in conflict with the proposed bridge replacement and with the adjacent roadways which include sanitary sewer and siphon, water main and electric duct. All work is to be completed with staged construction. STP-BR funding will be used for construction.

Wadsworth Road Improvements, Lake County Division of Transportation.

Senior Engineer for preliminary and design engineering services for the roadway, drainage and structural improvements to Wadsworth Road between Green Bay Road and Sheridan Road in Waukegan and Beach Park, Illinois. The project will utilize 3R criteria to extend the service life of the existing pavement, enhance roadside safety and improve drainage and also includes the addition of bicycle and pedestrian facilities. Proposed roadway improvements are anticipated to be patching, milling, and resurfacing with other areas requiring full depth widening or reconstruction. Drainage improvements may consist of ditch regrading, new storm sewer and stormwater detention. The existing box culvert carrying Wadsworth Road over the North Branch of Bull Creek is anticipated to be extended due to proposed pavement widening. Several retaining walls may also be necessary due to pavement widening and to stabilize failing embankment slopes.

25th Avenue Intersection Improvements, Village of Melrose Park.

Traffic/Geometric Engineer for the preliminary engineering studies to improve the 25th Avenue intersections at Lake Street, Division Street and North Avenue intersections. Traffic signals exist at the Lake Street and North Avenue intersections, while the Division Street intersection is currently 4-way stop controlled. Intersection Design Studies were developed at each intersection. Studies also included correcting offset through lanes at the 25th Avenue intersections with North Avenue and Division Street.

3. Qualifications of Project Team



Tony Wolff, PE, CFM

Drainage Team Lead

ABOUT TONY

Mr. Wolff has over 27 years of experience in water resources engineering including serving 10 years with the Lake County Stormwater Management Commission. Prior to joining Ciorba Group, he was the Commission's Chief Engineer. With Ciorba, Tony oversees the Water Resources staff and manages or directs projects related to the study and design of stream crossings, stormwater management facilities, water supply systems, and sanitary collection systems.

REPRESENTATIVE PROJECT EXPERIENCE

80th Avenue Reconstruction, Will County Division of Transportation.

Lead Water Resources Engineer supervising the drainage design for the reconstruction of 80th Avenue from 191st Street to 183rd Street, within the Villages of Tinley Park and Mokena. The road will be widened from a two-lane rural section to a four-lane urban section with auxiliary turn lanes added at cross streets. The widened roadway requires a new storm sewer system as well as significant detention storage and culvert replacements. Improvements include replacing the bridge over the Union Drainage Ditch and rehabilitating the large culvert carrying the Tributary to the Union Drainage Ditch under 80th Avenue. Permit applications were developed for the USACE and the IDNR for Waters of the U.S. and floodway impacts, respectively.

Clavey Road Reconstruction, City of Highland Park

Water Resources Manager for the reconstruction of Clavey Road from US 41 to Green Bay Road within the City of Highland Park. The pavement will be reconstructed due to its poor condition but will remain a two lane urban collector street. The roadway alignment will be shifted two feet to the north to accommodate a new multi-use path within the south side parkway for the entire length of the project. A new storm sewer system was designed to accommodate the new roadway alignment. A new bridge will be constructed to replace the existing structure over the Skokie River. Developed permit applications in accordance with USACE and IDNR requirements.

Lake Street Reconstruction, Chicago Department of Transportation.

Water Resources Manager for the update to the Project Development Report and the preparation of plans, specifications, and cost estimates for the reconstruction of 1.1 miles of Lake Street. Project limits are from Ashland Ave to I-90/94 (Kennedy Expressway). The CTA Green Line elevated tracks run along the entire length of project. The project will lower the street profile to increase clearance for the CTA overhead structure. Improvements also include the installation of new street lighting, traffic signal modernizations, drainage system improvements and the removal of hazardous materials. Landscape and streetscape enhancements will improve the corridor aesthetics. Ciorba coordinated with adjacent property owners for the removal or replacement of existing vaulted sidewalks. Federal STP funds will be used for construction so all plan documents to be prepared in accordance with IDOT requirements.

John Deere Road (IL 5) Widening & Reconstruction, Illinois Department of Transportation, District Two.

Lead Water Resources Engineer for the preparation of drainage plans and specifications for the widening and reconstruction of John Deere Road. The improvement included adding a third lane in each direction with dual left turn lanes and right turn lanes at all major intersections. Drainage improvements included new storm sewer and ditch systems and the replacement of several cross-road culverts.

Peotone Beecher Road Bridge over the Exline Slough, Will County Division of Transportation.

Water Resources Manager for preliminary and design engineering for a single span bridge replacement. A hydraulic model was completed to determine the required bridge opening and assess scour potential. The existing roadway was closed and traffic detoured during construction. The replacement structure consisted of 36" PPC I-Beam superstructure with an 8" reinforced concrete deck utilized together with integral-type abutments. The project was paid for with County funds.

EDUCATION

Bachelor of Science Civil Engineering
University of Illinois

Master of Science Environmental Engineering
Northwestern University

PROFESSIONAL REGISTRATION

Professional Engineer
Illinois #062-052081 (1998)
Indiana #PE11300436 (2013)
Iowa #21374 (2012)
Michigan #6201060612 (2013)
Wisconsin #40707-006 (2009)

CERTIFICATION

Certified Floodplain Manager
Illinois #02-00089
Kane County Qualified Engineer Review Specialist
#E-217
Lake County Stormwater Management Commission
Enforcement Officer

EXPERTISE

Water Resources Infrastructure
Stormwater Management
Floodplain Management
Permitting

PROFESSIONAL AFFILIATIONS

American Council of Engineering Companies (ACEC)
USACE Committee
American Public Works Association (APWA)
Lake Branch Past President
American Society of Civil Engineers (ASCE)
Illinois Association for Floodplain and Stormwater Management (IAFSM)
Illinois Road and Transportation Builders Association
Landscaping and Erosion Control Committee
Illinois Society of Professional Engineers (ISPE)

3. Qualifications of Project Team



EDUCATION

Bachelor of Science Civil Engineering
University of Illinois

PROFESSIONAL REGISTRATION

Professional Engineer
Illinois #062-055846 (2002)
Indiana #PE10708785 (2007)

CERTIFICATION

Lighting Certified
National Council on Qualifications for the Lighting Professions

EXPERTISE

Lighting Certified - National Council on Qualifications for the Lighting Professions

PROFESSIONAL AFFILIATIONS

Illuminating Engineering Society (IES)

Joseph Vondra, PE, LC

Traffic Signals /Lighting Engineer

ABOUT JOE

Joe has over 24 years of experience in designing lighting systems for residential, collector and arterial streets; interstate expressways; and parking lots. These projects were completed for municipalities, counties, IDOT, and the Illinois Tollway. Joe oversees the photometric analysis, equipment selection and layout, control cabinet design, voltage drop calculations, and preparation of specifications for new lighting systems. He has also worked with lighting manufacturers to troubleshoot problems in existing systems and coordinate owner requirements for new systems.

REPRESENTATIVE PROJECT EXPERIENCE

80th Avenue Reconstruction, Will County Division of Transportation.

Lead Traffic Signal/Lighting Engineer supervising the preparation of design plans and specifications for the complete replacement of the traffic signal installation at the intersection of 80th Avenue with 183rd Street and a new signal installation at the intersection of 80th Avenue with 185th Street. This project also included 1.5 miles of decorative roadway lighting along 80th Avenue and 183rd Street, temporary and permanent roadway lighting along I-80, underpass lighting for the 80th Avenue bridge crossing over along I-80 and site lighting within the Village of Tinley Park's Public Works Facility.

Clavey Road Reconstruction, City of Highland Park

Lead Traffic Signal Engineer for the reconstruction of Clavey Road from US 41 to Green Bay Road within the City of Highland Park. The pavement will be reconstructed due to its poor condition but will remain a two lane urban collector street. A new traffic signal installation was designed for the Clavey Road at Green Bay Road intersection.

State Street (US 20 BR) and Perryville Road Intersection Improvements, Illinois Department of Transportation, District Two.

Lead Traffic Signal Engineer preparing the design plans and specifications for a new traffic signal as part of the intersection improvements at State Street and Perryville Road in Rockford, IL. The existing traffic signals at the adjacent State Street intersections with Mill Road and Buckley Drive were also modernized as part of the project. Improvements included new post and mast arm mounted signals, controller, cables, conduit, handholes and electric service. The existing interconnect was maintained during construction for the temporary traffic signals.

John Deere Road (IL 5) Widening & Reconstruction, Illinois Department of Transportation, District Two.

Lead Traffic Signal Engineer assisting in the preparation of design plans and specifications for the modernization/new construction and interconnection of ten traffic signals along 2.5 miles of IL 5. Improvements included adding a third lane in each direction with dual left turn lanes and right turn lanes at all major intersections.

Lake Street Reconstruction, Chicago Department of Transportation.

Lead Lighting Engineer responsible for the preparation of design plans, specifications and estimates for a new lighting system associated with reconstruction of 1.1 miles of Lake Street in the City of Chicago. A new lighting system will be installed the entire length of the project. Chicago Transit Authority (CTA) Green Line elevated tracks run along the entire length of project which will be taken into account for the design. STP funds will be used for construction so all services are provided in accordance with IDOT BLR&S requirements.

I-80/US 30 Interchange Reconstruction, Illinois Department of Transportation, District One.

Lead Lighting Engineer supervising the design of a replacement lighting system for the I-80/US 30 interchange. This work included lighting design for 5000 feet of continuous freeway, full interchange, underpass, railroad, pedestrian path and 1,500 feet of urban arterial lighting.

3. Qualifications of Project Team



MICKEY SNIDER, PE
Senior Geotechnical Engineer/Technical Manager



EDUCATION

M.S., Geotechnical Engineering,
Northwestern University, 2003

B.S., Civil Engineering, Valparaiso
University, 1997

REGISTRATIONS

Professional Engineer (PE):
Illinois, 2005 (062-058045)
Indiana, 2006 (10607136)

PROFESSIONAL AFFILIATIONS

ACEC-Illinois Bridge Committee
Member; Liason Group

ASCE–American Society of Civil
Engineers

Geo Institute of ASCE

EMPLOYMENT HISTORY

2003 – Present, Wang Engineering, Inc.

2001-2003, Northwestern University,

2000-2001, T.Y. Lin International

1998-2000, United States Peace Corps

1996-1997, RUST Environment and
Infrastructure

TRAINING & CERTIFICATIONS

2015 ACEC Future Leaders in Illinois
Conference Series, Jan to May, 2015

Great Lakes Geotechnical and
Geoenvironmental Conferences, 2004,
2006, 2008, 2010, 2012, 2014, 2016

Geo-Institute Congress, Denver, CO,
Feb. 18-21, 2007

Durham Geo-Slope Indicator
Inclinometer Course, July 14, 2010

EXPERIENCE PROFILE

Mr. Snider has served as consultant, design engineer, and research assistant on geotechnical engineering, municipal environmental management and roadway engineering projects including shallow foundations, pile and drilled shaft (deep) foundations, earth retention and retaining walls, slope stability, settlement analyses, bridge abutments and cofferdam analysis; extensive laboratory testing education and experience including consolidated-undrained triaxial, one-dimensional consolidation, and direct shear testing; geotechnical field investigations including the installation of driven piles, drilled shafts, and stone column ground improvements; research, instrumentation and analysis of geodynamic blasting and construction vibrations and structural response; environmental assessments; cost-effective management solutions; and roadway geometry design. He is familiar with standards, specifications, and practices of various transportation agencies in both Illinois and Indiana.

PROJECT EXPERIENCE

Subsurface Exploration and Geotechnical Engineering Design for the Illinois Route 53 Timber Pile and GeoSynthetically-Reinforced Embankment System along the Elgin O'Hare Western Access - DuPage County, Illinois

Mr. Snider served as a Senior Geotechnical Engineer responsible for geotechnical analyses, laboratory testing programs and design for the installation of a piled embankment along IL 53. The piled embankment design included timber pile design and geosynthetically-supported load transfer platform to support the roadway over peat and soft clay.

Subsurface Exploration and Geotechnical Engineering Analysis and Design of Ground Improvement along Hart Road at US Route 14 and Randall Road - Lake and McHenry Counties, Illinois

Mr. Snider served as a Senior Geotechnical Engineer responsible for geotechnical analyses, laboratory testing programs and design of ground improvement programs at two roadway expansion projects over soft and compressible soils. Wang has performed the subsurface exploration, laboratory testing and geotechnical engineering analyses to provide the design for prefabricated vertical drains (PVDs) and geogrid-reinforced slopes along the Hart Road embankment expansion into an adjoining wetland. Along Randall Road in McHenry County, two MSE retaining walls through areas of peat soils are constructed above timber piling and geosynthetic-reinforced load transfer platforms.

Subsurface Exploration and Geotechnical Engineering Analysis and Recommendations for the Burlington Northern and Santa Fe Railroad Bridge over Interstate 294 - Cook County, Illinois

Mr. Snider serves as a Senior Geotechnical Engineer responsible for geotechnical analyses, laboratory testing programs and design recommendations for the replacement of the BNSF Bridge over Interstate 294 along the Central Tri-State Tollway. The rail bridge replacement will involve the construction of a shoofly embankment, track, and bridge to maintain rail traffic at all times. The shoofly embankment stretches over an area of peat deposit that will be supported by timber piling and geosynthetic-reinforced load transfer platforms. The improvements require four temporary retaining walls and three permanent retaining walls, as well as culvert replacements and pipe-jacking for replacement of storm management lines.

Subsurface Exploration and Geotechnical Engineering Design for MSE Retaining Walls on Timber Pile-Support Load Transfer Platform along Randall Road - McHenry County, Illinois

Mr. Snider served as a Senior Geotechnical Engineer responsible for geotechnical analyses, laboratory testing programs and design for the construction of two, 14-foot high MSE walls through wetlands containing deposits of peat and soft clay. The MSE walls, designed to support the widening of Randall Road, are being constructed above timber piles topped with concrete caps a three foot thick load transfer platform. Wang's design included timber pile sizing and length, as well as the design of geogrid reinforcement and load transfer platform thickness required for the transfer of retaining wall loads to competent soils 35 to 40 feet below the roadway elevation.

3. Qualifications of Project Team

LAILAH R. REICH, PWS, ISA Certified Arborist
Senior Technical Specialist
16 Years H&H Experience
6 Years other Environmental Experience



Expertise: Wetland Delineation/Mitigation Design
Ecological Issues/Habitat Restoration
Tree Surveys/Preservation Plans

Threatened and Endangered Species Studies/Coordination
Section 404/401, Stormwater, and NPDES Permitting
Soil and Erosion and Sediment Control

Summary of Experience:

Lailah Reich is a wetland scientist and ecologist with over 16 years' experience conducting wetland delineations, Section 404 and 401 permitting, local and regional stormwater permitting, tree surveys, soil and erosion control plan review and inspections, and water quality and best management practices concepts related to transportation, utility, commercial, and industrial developments as well as mitigation and restoration projects. She has been involved in rare and threatened and endangered flora studies and surveys for over 20 years. Ms. Reich has conducted hundreds of wetland delineations within the Illinois, Wisconsin, Michigan, and Indiana. She is competent in 404/401 permitting process (individual, nationwide, and regional), NPDES permitting, Chicago area stormwater permitting, Incidental Take Authorizations, and threatened and endangered species consultations. She has also designed a mitigation bank in southern Wisconsin and has assisted within restoration/mitigation design for riparian mitigation, wetland mitigation, as well as restoration of sensitive habitats for listed species.

Lailah has completed analysis for threatened and endangered species, natural resources, wetlands, and agriculture sections of NEPA documents for transportation projects. In addition, she has completed fauna surveys for numerous species including shrews, Franklin ground squirrels, rusty-patched bumble bee, snakes, macro-invertebrates, and listed bird species, and listed bat species.

Ms. Reich is a Society for Wetland Scientists certified Professional Wetland Scientist (#2835) and an International Society of Arboriculture, Certified Arborist (IL-9047A), a Lake and McHenry County Certified Wetland Specialist, a Kane County Wetland Review Specialist, and a Lake County Designated Erosion Control Inspector.

Relevant Project Experience:

NEPA Documentation and Analysis

- **IL Intercity High Speed Rail, Will, Grundy, and Livingston Counties, IL.** Completed multiple prairie characterization studies, point count surveys for state listed avian fauna, field surveys for the rusty patched bumble bee and various species of listed flora, as well as the rattlesnake master borer moth. Field monitoring of Hine's emerald dragonfly (HED) in areas of expected HED activity over or adjacent to rail lines. Determined dragonfly density and frequency, including primary (morning) and secondary (evening) activity periods. Summarized findings in the Environmental Impact Statement (EIS) and various Natural Resources technical memoranda (2011-2020).
- **IL 83/137 Study, Lake County, IL.** Completed field surveys to assess forest resources, completed Environmental Assessment (EA) document for Wetlands, Forest Resources, and Threatened and Endangered Species (2018-2020).
- **Tri-County Access, Cook, Lake, and McHenry Counties, IL.** Prepared draft methodology for the assessment of Natural Resources and Threatened and Endangered Species (2018).
- **Illiana Expressway, IL and Indiana.** Completed surveys for listed fauna as well as habitat surveys for the federally threatened northern long-eared bat prepared the EIS for Natural Resources and Threatened and Endangered Species. Prepared Biological Assessment and conducted intensive coordination with the FWS for potential impacts to federal threatened and endangered species (2013-2014).
- **U.S. Route 51 EIS, South Central IL.** Natural Resources and Agricultural technical memorandum (2011-2012).
- **Prairie Parkway, Kane and Will Counties, IL.** Agricultural Technical Memo and EIS for agricultural impacts (2010).
- **Churchill Woods Dam Removal, DuPage County, IL.** DuPage County Forest Preserve District, Churchill Woods Forest Preserve. Completed delineations and permitting for proposed project and prepared EA for wetlands (2010).
- **Interstate 55 at Lorenzo Road and IL 129, Will County, IL.** Prepared EA for agricultural impacts (2009).

Wetland Delineations and Permitting

- **IDOT District 1 Blanket Contract, Chicago Area, IL.** Lead field delineator and lead arborist for IDOT District 1 within Cook, DuPage, Kane, Lake, McHenry, and Will Counties for various roadway improvement projects. Wetland and waterway delineations and associated reporting, tree surveys and tree impacts assessments, as well as eastern prairie fringed orchid surveys completed as part of these contracts on an on-call basis. Many delineations included work within sensitive properties such as forest preserves, IL Natural Areas Inventory (INAI) sites, and nature preserves (2008-present).
- **RFD II, LLC. Mitigation Bank Design, Burlington, Racine County, WI.** Development of Compensation Site Plan and Mitigation Bank Instrument, management, and monitoring of a wetland mitigation bank on a 33 acre parcel (2018-present).

3. Qualifications of Project Team

SHANE A. CUPLIN, P.G.
Geologist PM
Huff & Huff, Inc. – 2007 to Present
Years with Other Firms – 6 years



Expertise: Phase I and II Environmental Site Assessments (PESA and PSI Projects)
Subsurface Investigations
Voluntary Remediation Projects
Soil and Groundwater Remediation, CCDD

Experience:

Mr. Cuplin joined the Huff & Huff team in October 2007 after working with an environmental consulting firms in the Chicagoland Area since 2001 and currently has over 19 years of experience as an environmental consultant. Experience includes risk assessment, Phase I and II environmental site assessments, subsurface investigation and remediation including voluntary and sites involving petro and agri-chemicals, RCRA, and chlorinated solvent sites. In addition, Mr. Cuplin has transportation project experience related to municipal, local highway, interstate, and railroad projects including special and hazardous waste screening and direction of soils to clean construction and demolition debris (CCDD) landfills; Preliminary Environmental Site Assessments (PESA) and Preliminary Site Investigations (PSI). Mr. Cuplin began conducting PESA and PSI projects, in 2007 and has since worked on a variety of transportation projects involving management of special waste.

Special Waste:

- Manages various Illinois Department of Transportation PSI activities as part of PTB 178-008 contract (2016-present)
- Ongoing direction of soils for final disposition at CCDD and/or soil only sites for various environmental design clients confronted with new Illinois EPA regulatory requirements (2010-present)
- Completed Special Waste Screening and sampling for identifying CCDD soils for Park-n-Ride Randal Road and Barrington Road facilities along the Illinois State Toll Highway Authority Route 90 Toll Road (2015-2016)
- Performed water quality sampling of fore bay and pool as part of interchange improvements at interchange of Illinois 47 and Illinois State Toll Highway Authority Route 90 Toll Road (2014-2015)
- Completed Special Waste Screening and sampling activities for various segments for improvements to the Illinois State Toll Highway Authority Route 90 Toll Road. Provided review and comments for additional special waste reports completed for the roadway (2012-present)
- Completed Special Waste Screening and sampling activities for water reclamation district improvements along various stream areas including along Tinley Creek and the Illinois and Michigan Canal, Tributary D (2012-2013)
- Completed PESA and special waste sampling for Elgin Bike Trail in Elgin, IL (2013)
- Conducted PESA for roadway reconstruction in Burlington, IL (2011)
- Conducted PESA for Monee-Manhattan Road improvements in Monee, IL (2010)
- Performed oversight activities during installation of subsurface utilities in area nearby gas station with leaking underground storage tanks in DeKalb, IL (2009)
- Conducted PSI soil borings along Union Pacific Railroad right-of-way in Elmhurst, Illinois (2009)
- Conducted PSI soil borings adjacent to multiple facilities along 1.25 miles of proposed improvements in Hampshire, Illinois (2009)
- Conducted PSI soil borings for body shop facility in Montgomery, Illinois for proposed road realignment (2009)
- Conducted PSI soil borings along select portions of 2.25 miles of proposed bike trail improvements in Gary, Indiana (2009)
- Conducted a PESA with soil borings for proposed improvements in Crystal Lake, Illinois involving Union Pacific Railroad right-of-way access (2008)
- Conducted a PESA database review with soil borings for the Alden Road Reconstruction Project (Alden Road and Route 173) (2008)
- Conducted PSI soil borings for two facilities in Forest Park, Illinois for proposed subsurface utility work (2008)
- Conducted a Phase I ISA and Red Flag Investigation for 2.25 miles of proposed bike trail improvements in Gary, Indiana (2008)
- Conducted PESA for proposed bike trail construction in Lisle, Illinois (2008)
- Conducted a PESA with soil borings for Chicago Department of Transportation project involving a proposed train station along Morgan Street (2007-2008)

3. Qualifications of Project Team



Craig L. Duy PLS
Plats & Legals

Mr. Duy brings 30+ years of experience to the wide range of large and complex projects undertaken by ASE.

Mr. Duy's expertise covers all phases of land surveying and mapping for transportation and land acquisition, and development projects. He is involved with the preparation of land acquisition documents and field surveys, along with coordination of land acquisition processes and procedures for various highway projects, as well. Craig also has extensive field and research experience in Kane, Kendall, DeKalb, DuPage, Cook and LaSalle Counties in Illinois for both private and public lands, as well as for retracement surveys of sectionalized lands.

Presently, Mr. Duy is the Land Acquisition Manager for two major highway projects. He monitors and provides direct coordination and leadership for various private consultants and public agencies throughout the projects within the land acquisition process.

Project Experience

Land Acquisition Manager - Elgin O'Hare Western Access (EOWA) Design Corridor Manager

Mr. Duy currently provides direct coordination, oversight and project management of processes and procedures associated with land acquisition for the Tollway's expansion of the Elgin-O'Hare Expressway as a sub-consultant to CH2M Hill. ASE was also responsible for establishing preliminary right-of-way requirements and associated cost analyses for the entire Expressway project. ASE performed an additional survey to mitigate GIS interpretation of parcels with the actual on-the-ground surveys. ASE managed other contracts associated with land acquisition (appraisers, relocation specialists, and the title company). ASE coordinated right-of-way requirements, including temporary and permanent easements, such that project schedules were maintained.

Also as part of this contract, ASE prepared a corridor wide land acquisition schedule for 300+ acquisition parcels, and coordinates preparation and submittal of plat of acquisition documents with the Tollway's Land Acquisition Department and also coordinates the reporting of the status of land acquisition with the Tollway. ASE is acting as the single point of contact with the Tollway Land Acquisition Department and facilitates regular coordination meetings with the Tollway Land Acquisition Department.

ASE conducted supplementary survey and right-of-way studies including parcel plats, legal descriptions, plat of highway, and GIS, as required for 200 parcels. Topographic surveys were conducted on Thorndale Road, Ketter Road, Pierce Road, N. Arlington Heights Road, and Prospect Ave. A detailed utility manhole (structures) investigation was done for over 200 structures.

REF: Jake Weaver, Jacobs, EOWA DCM PM, 517.488.6027. (ASE #211098)

3. Qualifications of Project Team



Jeffrey Jacobson MAI, SRA
Appraiser

Mr. Jacobson is a Certified General Appraiser and is on the IDOT list of Certified Commercial and Residential Appraisers

Appraisal Services on IL 251, Compton, R-92-002-19

ASE performed two appraisals as a subconsultant to Davidson & Associates on IL 215 in Compton, IL for IDOT D2. ASE performed appraisals on parcels 2021906 and 2021907 that were compliant with the IDOT Land Acquisition, Policies and Procedures Manual (LAPPM), Section 3. Appraisals were performed under the direction of Jeff Jacobson with assistance from Jen Fidis-Storey. (2020: \$4,250).

REF: Charles Davidson, Davidson & Associates, 815.231.7084. (ASE #120029.1).

Appraisal Services on Route 173 Culvert, Boone County, R-92-002-19

ASE performed three appraisals as a subconsultant to Davidson & Associates on IL 173 in Boone County, IDOT D2. ASE performed appraisals on parcels 001-5A, 002/5A and 003/5A in the project limits that were compliant with the IDOT Land Acquisition, Policies and Procedures Manual (LAPPM), Section 3. Appraisals were performed under the direction of Jeff Jacobson with assistance from Jen Fidis-Storey. (2021: \$7,100). **REF: Charles**

Davidson, Davidson & Associates, 815.231.7084.

(ASE #120029.2).

Forest Preserves of Cook County – Appraisal Services – 4700 159th St. Oak Forest, IL PIN:28-15-304-005-0000

Mr. Jacobson directed the preparation of an appraisal report of Fee Simple Market Valuation to determine the fair market value for the possible acquisition of the parcel by FPCC. The appraisal valued the subject property on an “as-is” basis. The value was subjected to any extraordinary assumptions, hypothetical conditions, limiting conditions, and scope of work. In addition, the value assumed no liens or encumbrances other than normal covenants and restrictions of record. Furthermore, the appraisal was completed in accordance with the Code of Professional Ethics and Standards of Professional Appraisal Practice and supplemental standards of the Appraisal Institute. Also, it was prepared in accordance with the Uniform Standards of Professional Appraisal Practice (USPAP). (2018: \$1,990) **Christopher Adas, FPCC, 312.603.0027** (ASE No. 218033.1)

Forest Preserves of Cook County – Appraisal Services – FPCC Surplus Parcel A, IL PIN:12-10-303-046-0000

Mr. Jacobson directed the preparation of an appraisal report of Fee Simple Market Valuation to determine the fair market value for the possible disposition of the parcel by FPCC. The appraisal valued the subject property on an “as-is” basis. The value was subjected to any extraordinary assumptions, hypothetical conditions, limiting conditions, and scope of work. In addition, the value assumed no liens or encumbrances other than normal covenants and restrictions of record. Furthermore, the appraisal was completed in accordance with the Code of Professional Ethics and Standards of Professional Appraisal Practice and supplemental standards of the Appraisal Institute. Also, it was prepared in accordance with the Uniform Standards of Professional Appraisal Practice (USPAP). (2018: \$989) **Christopher Adas, FPCC, 312.603.0027** (ASE No. 218033.2)

3. Qualifications of Project Team



Roger Nelsen
Negotiator

Mr. Nelsen is a certified Land Acquisition Negotiator for the Illinois Department of Transportation. Mr. Nelsen has four decades of experience working in financial services, banking, and consulting. His knowledge of the Financial Industry will allow him to understand all the different types of legal holdings including Trusts. Mr. Nelsen is a student of Eminent Domain process. He has completed all the requirements for Illinois Certified Associate Real Estate Trainee Appraiser License and is currently working under the direction of a Relocation Specialist to be a Certified Relocation Agent. This experience means that he will be able to more effectively complete and proposed work that will be assigned to him.

Project Experience

Negotiation Services, Cook County Department of Transportation and Highways, Land Acquisition Services Upon Request

American Surveying & Engineering, P.C. (ASE) entered into a subconsultant agreement with HNTB to perform various professional land acquisition services on an as-needed basis, throughout Cook County under various task orders. Land acquisition services included surveying to reference highway centerlines to public landlines; preparation of legal descriptions; land surveying to locate boundaries; staking of proposed right of way; preparation of a statutory plat of highways (including the cover sheet); preparation and recording of monument record documents for all U.S. public land survey monuments referred to in the legal descriptions; preparation and review of appraisals; and negotiation work for highway projects.

Joe Orr Road Extension

Mr. Nelsen performed negotiation of 30 parcels from Torrence Avenue to Burnham Avenue in Lynwood, Illinois. Nelsen reviewed the parcels to determine if they were total takes (relocations), partial takes, presence of mortgage and overall complexity anticipated in completing purchase of the property.

135th Street Widening

The second task order under this contract was for the widening of 135th Street requiring the acquisition of approximately 10 parcels. ASE's IDOT-certified Negotiators is performing these services according to schedule and without undue delay. ASE, in conjunction with the Cook County Department of Transportation and Highways, re-wrote the standard Negotiation Letter to reflect the specific details of this project (2019: \$93,500).

REF: John Lukowski, HNTB, 312.930.9119. (ASE #214051)

Negotiation Services along North Main Street for Sycamore Park District

ASE provided negotiation services for a fee-simple property along North Main Street in Sycamore as a subconsultant to Engineer Resources Associates, Inc. ASE's Jay Howell performed Project Management duties for ASE and Roger Nelsen was the lead negotiator (2021: \$9,000).

REF: John Mayer, ERA, Inc. 630.393.3060. (ASE #120024).

Land Acquisition Negotiation Services in District 2, DOT21-LAC-D2-01

ASE was awarded a three-year contract in 2021 to provide Land Acquisition Negotiation services for IDOT D2 for various roadway projects. ASE provided two negotiators, Robert Dempsey and Roger Nelson, full-time to this contract, and the project was managed by ASE Land Acquisition Services Manager Jay Howell. As of May of 2021, ASE had performed seven work orders consisting of negotiation services on fifty-nine parcels (2021-2024: \$418,000).

REF: Mathew Dobie, IDOT D2, 815.284.5366. (ASE #120117)

3. Qualifications of Project Team



EDUCATION

Bachelor of Science in Civil Engineering
University of Iowa

PROFESSIONAL REGISTRATION

Professional Engineer
Illinois #062-056649

EXPERTISE

Expressways
Tollways
Highways
Municipal Streets

PROFESSIONAL AFFILIATIONS

American Public Works Association
American Society of Civil Engineers
ACEC – Illinois
SAVE International

Diana Decker, PE

Quality Manager

ABOUT DIANA

Ms. Decker has over 26 years of experience in project management and the design of transportation facilities. She has overseen the preparation of roadway geometric design, maintenance of traffic design, crash analysis, safety studies, value engineering and preparation of contract plans. Diana is also experienced in coordination with regional and local government agencies. Major projects included working for the Illinois Department of Transportation, Illinois State Toll Highway Authority, Chicago Department of Transportation, and numerous Chicago area Counties and Municipalities.

REPRESENTATIVE PROJECT EXPERIENCE

80th Avenue Reconstruction, Will County Division of Transportation.

QC/QA Engineer overseeing final design engineering for the reconstruction of 80th Avenue from 191st Street to 183rd Street. STP funding is being used for construction. The road will be widened from a two lane rural section to a four lane urban section. Improvements including new turn lanes will be made to the intersections with 189th Street, 186th Street, 185th Street, and 183rd Street. The existing two lane bridge carrying 80th Avenue over I-80 will be replaced with a new four lane structure. New structures were also designed for the 80th Avenue crossings over Union Ditch and a Union Ditch tributary. Other improvements included designing traffic signals, street lighting, water main, storm sewer system, a multi-use path, and landscaping along the corridor.

Clavey Road Reconstruction, City of Highland Park.

QC/QA Engineer overseeing final design for the reconstruction of Clavey Road from US 41 to Green Bay Road. STP funding is being used for construction. The pavement will be reconstructed due to its poor condition but will remain a two lane urban collector street. The roadway alignment will be shifted two feet to the north to accommodate a new multi-use path within the south side parkway for the entire length of the project. The path will be designed to minimize tree removal while meeting ADA and AASHTO standards for horizontal alignment. A new roadway bridge with pedestrian facilities will be constructed to replace the existing roadway and pedestrian structures over the Skokie River. Other improvements include a new traffic signal at Green Bay Road, a new storm sewer system and a new water main the length of the project.

Washington Street over West Branch of DuPage River, City of Naperville.

Project Manager for the final design engineering services required to replace the three-span Washington Street Bridge over West Branch of the DuPage River with a two-span wider bridge with a post-tensioned concrete superstructure. The profile will be adjusted to improve hydraulics. Roadway improvements will consist of widening from 51 ft south of Aurora Avenue to Chicago Avenue with left turn lanes on the bridge. The project includes intersection improvements at Chicago Avenue and Aurora Avenue and design of the low flow walkway connection under the bridge. The contract includes relocation of various existing utilities are in conflict with the proposed bridge replacement and with the adjacent roadways which include sanitary sewer and siphon, water main and electric duct. All work is to be completed with staged construction. STP-BR funding will be used for construction.

Wadsworth Road Improvements, Lake County Division of Transportation.

Project Manager for preliminary and design engineering services for the roadway, drainage and structural improvements to Wadsworth Road between Green Bay Road and Sheridan Road in Waukegan and Beach Park, Illinois. The project will utilize 3R criteria to extend the service life of the existing pavement, enhance roadside safety and improve drainage and also includes the addition of bicycle and pedestrian facilities. Proposed roadway improvements are anticipated to be patching, milling, and resurfacing with other areas requiring full depth widening or reconstruction. Drainage improvements may consist of ditch regrading, new storm sewer and stormwater detention. The existing box culvert carrying Wadsworth Road over the North Branch of Bull Creek is anticipated to be extended due to proposed pavement widening. Several retaining walls may also be necessary due to pavement widening

4. Project Approach & Challenges

Introduction

Ciorba Group, Inc. understands the importance of the John Humphrey Drive at 143rd Street intersection improvement project as part of the Village of Orland Park's multi-year, multi-phase improvement of 143rd Street. As envisioned in the Phase I Project Development Report (PDR), improvements at the intersection will basically consist of pavement reconstruction and widening to provide additional turn lanes, extending and widening an existing dry land bridge, storm sewer system improvements and the installation of new traffic signals and intersection lighting. Construction of the project is currently included in the Southwest Conference of Mayors (SCM) STP unobligated contingency list. Starting the Phase II design services will demonstrate the Village's commitment to the project and improve the scoring when re-applying for STP funding with the SCM's January 2022 call for projects. Funding concerns may necessitate the project being completed incrementally with the intersection and dryland bridge improvements constructed under separate contracts.



JDH / 143rd St Intersection, looking South from JDH

Ciorba is capable of covering all the major disciplines involved in the project and is IDOT prequalified in the categories of *Highways - Roads and Streets*, *Special Plans - Traffic Signals*, *Special Plans - Lighting* and *Structures - Highway: Simple through Major River Bridges*. Team members have worked closely together on past STP funded projects and with the Illinois Department of Transportation's Bureau of Local Roads and Streets (IDOT BLR&S) personnel responsible for overseeing a consultant's preparation of plans, specifications, and cost estimates. Our proposed Project Team will be ready to begin work as soon as Notice to Proceed is received from the Village.

The Ciorba team will be complemented by a strong and highly qualified roster of subconsultants that will assist in delivering superior plan documents. **Huff & Huff, Inc. (H&H)** will prepare a Preliminary Site Investigation based on the Preliminary Environmental Site Assessment prepared in Phase I engineering. **American Surveying and Engineering, PC (ASE)** will provide survey/plats and legal descriptions for right of way and temporary easement acquisition as well as conduct appraisals and negotiations with property owners. **Wang Engineering (Wang)** will provide geotechnical engineering services for the improvements. Ciorba Group has long term professional relationships with all three firms (20 to 35 years) so we are able to act as one unit when completing the Phase II design services.

Approach to Services

Ciorba Group's Project Team will apply an approach that has been learned from experience and successfully used on similar STP funded improvements for other municipalities and counties. The Phase I preliminary engineering has identified the major components of the project, but we strongly believe that the Village will benefit from receiving input from another experienced team that will be looking into this project with "fresh eyes".

4. Project Approach & Challenges

After selection by the Village, all Project Team leaders will thoroughly review the Phase I PDR and other documents to have a better understanding not only of their own design tasks but of the entire project. These key team personnel will then develop the staff hours to design the project for submittal to the Village for review and approval. When Notice to Proceed is received from the Village, an in-house kick-off meeting will immediately be held with all Project Team members, including subconsultants before initiating work on the design. At this meeting, a Work Plan assembled by the Project Manager will be distributed that includes the scope of the major work tasks and the established QA/QC procedures. The details of the plan will be discussed and reviewed so that all members are aware of their responsibilities. Meetings will be held, when necessary, with all team members to discuss the progress of the work.

Ciorba Group uses Bluebeam Revu to provide real-time collaboration with team members regardless of their location. Microsoft Teams can be utilized for fast and efficient meetings between Team members as well as with the Village staff. This virtual collaborative process is especially relevant with today's continuing Covid-19 restrictions that can limit in-person work efforts. Plans will be developed using 3D modeling, so we can evaluate the effects of any small adjustments to the various design components in an effective and timely manner.

Beyond engineering expertise, Ciorba Group's staff also understands the importance of having the skills needed for the non-engineering responsibilities to the Village. This is reflected in our staff not only demonstrating sound engineering judgment but maintaining open communication with the Village and being aware of public perceptions of the project. We know the need to provide timely responses to any concerns or questions raised by public officials, residents and businesses in the area, and other stakeholders for a project. Ciorba's team will tackle the design tasks with close coordination between the various disciplines to produce a consistent set of design plans and specifications.

The Village has indicated the potential need for multiple contract packages (entire improvement, dryland bridge only and intersection only) based on available funding. The Project Team will work closely with the Village as the design proceeds to develop the necessary contract packaging. Key elements to be considered in developing the contract packaging are constructability issues, maintenance of traffic, and construction cost. Ciorba's recent experience in developing multiple contract packages for a project include Clavey Road reconstruction in Highland Park (2 contract packages) and the Edens Spur reconstruction for the Illinois Tollway (4 contract packages).

Preliminary plans and cost estimates will be submitted to the Village for review and comment at the 60% level of completion. Pre-final (90%) and final (100%) plans, specifications and cost estimates will first be submitted to the Village for review and comment. After revisions are made per Village comments, these pre-final and final plan documents will be submitted to IDOT BLR&S review and approval.

The Scope of Services for the project will follow the detailed outline included in the Village's RFQ. Critical and challenging design elements for the project will include:

Maintenance of Traffic Plan

A well thought out, detailed Maintenance of Traffic (MOT) plan that creates a safe environment for motorists, pedestrians/bicyclists, and workers is one of the most important considerations on all roadway construction projects. The MOT plan must take into consideration that John Humphrey Drive provides large residential areas with access to 143rd Street while 143rd Street provides access to numerous retail and commercial businesses. Businesses will rely on traffic control to provide clearly identifiable, acceptable access points for their employees and customers. Additionally, construction

4. Project Approach & Challenges

workers must feel safe within the work zone throughout the duration of the project. The Project Team will use their recent experience on other STP reconstruction projects to develop a detailed MOT plan.

Potential features that could be incorporated into the MOT plans to meet traffic and safety challenges include:

- Provide milestone deadlines for each construction stage to minimize construction time and public inconvenience.
- For businesses with multiple entrances, the MOT plans will indicate only one entrance at a time to be removed and replaced. Businesses with single entrances will have to be “gap” constructed to maintain access to the property.
- Construction substages at intersections may be designed to allow for safe truck turning movements.

The MOT plans will include notes for each construction stage on how traffic will be maintained along with the work to be accomplished; plan sheets for each stage showing all traffic control devices, signing, and striping; and the appropriate IDOT traffic control standards.

Utility Coordination

Utility coordination conducted in Phase I was limited to obtaining both public and private utility atlases with no evaluation of potential conflicts. Early in the Phase II design, the Ciorba Project Team will begin identifying potential conflicts with the private utilities, forwarding this information to the appropriate utility company for comment/resolution and, if needed, scheduling with these companies the necessary relocations or adjustments.

For our recent 80th Avenue project, Ciorba facilitated and attended regular utility coordination meetings. Using CAD drawings overlayed on Google Earth, the respective utilities were able to see existing and proposed conditions. This allowed the team to verify conflicts easily between the proposed design and the utilities. Our experience with private utility adjustments/relocations has been that if not carefully monitored this work will not progress as planned and delay the start of the intersection construction.

Public utility adjustments or relocations will be discussed with the Village and designed by our Project Team for inclusion in the plans and special provisions. We will also discuss with the Village the need to repair or replace any deteriorated or undersized water mains or sanitary sewers as part of the roadway improvement.

Right of Way/Easement Acquisition Documents, Appraisals and Negotiations

Per the Phase I PDR, 11 properties are impacted by the acquisition of needed additional right of way and temporary easements. An early work task to be performed by the Project Team is to confirm that the proposed right of way/easement limits identified in the Phase I studies are necessary or need to be revised based on the Phase II design. This work effort must be done quickly so that ASE can proceed with necessary survey, research, and preparation of acquisition documents as soon as possible. These documents must be approved by IDOT before conducting the appraisals and negotiations to acquire the new right of way and temporary properties.

Traffic Signal Design

Traffic signals will be designed per IDOT BLR&S, MUTCD and Village requirements. Temporary traffic signals will be installed prior to the start of construction while new equipment is manufactured. The design will include installation of up to date pedestrian signal heads. All new pedestrian signal

4. Project Approach & Challenges

equipment (push buttons, signage, etc.) will be located to meet ADA and PROWAG requirements. Installing emergency vehicle preemption for the traffic signal will also be discussed with the Village.

Although not addressed in the Phase I PDR, interconnection between the John Humphrey Drive/143rd Street and 95th Avenue/143rd Street intersections may maximize traffic operations and minimize delays for travelers along 143rd Street. Signal timing can be optimized by our traffic engineers using Synchro. Interconnect of the two signals will be reviewed with the Village at the start of the design engineering.

Structural Design

The Bridge Condition Report (BCR) documents deterioration of the roadway pavement west of the existing dryland bridge (eastbound lanes). This deterioration is related to the settlement and continuing decay of organic materials underneath the roadway section. A similar finding was noted in the adjacent westbound lanes where Expanded Polystyrene Foam (EPS) was previously installed to reduce the dead load of the pavement structure and limit future settlement. While the EPS has helped, pavement deterioration has continued. The BCR recommends extending the existing dry lane bridge to the west and widening to the north to support the new westbound and auxiliary turn lanes. ***See below under Project Challenges for an alternative approaches to the dryland bridge.***



Existing dryland bridge on 143rd St., looking West towards intersection

A critical component to determine a recommended improvement type will be preparing accurate construction cost estimates for each alternative. The BCR provided a construction cost estimate, however, it is not a detailed breakdown but only provides a square foot cost for the dryland bridge. This construction cost estimate can vary substantially based on the deep foundations needed and span lengths for the dryland bridge. For the dryland bridge alternative, we will work with our Project Team to optimize the span lengths and deep foundation type to provide a detailed cost estimate so that the Village can evaluate the various available improvement options.

Structural borings were obtained and a geotechnical report prepared for the dryland bridge during the Phase I engineering. However, given the sensitivity of the soils, Wang Engineering will provide a second opinion on the Phase I geotechnical findings as well as additional input on the deep foundations. Wang has extensive experience conducting geotechnical investigations for dryland bridges.

Drainage Design and Permitting

Ciorba's Water Resources Team will work in close coordination with the Roadway and Structural teams to design cost-effective drainage systems with feasible green infrastructure elements and erosion control measures. With extensive experience on all phases of infrastructure projects in the Chicagoland area, this team has the ability to identify potential optimization opportunities to the Phase I preliminary design and challenges faced during Phase III construction while developing Phase II final design elements.

A thorough review of the proposed Phase I Location Drainage Technical Memorandum (LDTM) reveals locations where the recommended solutions can be potentially enhanced to further optimize flood mitigation and reduce construction and long-term drainage system maintenance cost. Ciorba will also

4. Project Approach & Challenges

consult with the Village to assess if the drainage design computations should be updated with the recent Bulletin 75 rainfall intensities which will modify the final design of the proposed design of the stormwater collection and conveyance systems. All proposed pipe network systems will be evaluated for constructability, and wherever possible, pipes and structures will be designed at a shallower depth to reduce cost of construction.

Construction sequencing will be coordinated with the other teams so that sheet flow slopes from the pavement to either existing or proposed collection systems, and existing systems are kept unobstructed until proposed storm sewer networks are operational. Appropriate erosion control measures will be designed to prevent accumulation of construction generated debris and sediment within the existing or proposed conveyance systems.

There are no stream crossings within the proposed project limits, so a floodway permit will not be required from the IDNR-OWR. However, there is a small depressional storage area in the southeast quadrant of the intersection that will be affected, so Ciorba will coordinate with MWRD throughout the design process to facilitate a smooth and timely permit approval, including any required compensatory storage for fill in the depressional area. The proposed increase in impervious area described in the LDTM is below the threshold that requires stormwater detention per MWRD ordinance but Ciorba will review these calculations prior to beginning the final design.

Environmental Services

A Preliminary Environmental Site Assessment was completed in Phase I that identified 11 Potentially Impacted Properties with potential Recognized Environmental Conditions. The project corridor will be further evaluated for Special Waste by completing a Preliminary Site Investigation (PSI) with a series of soil borings and laboratory analysis of soil samples in support of identifying soil classifications per IDOT Article 669.05 for inclusion in bidding documents. The PSI will also include completion of LPC-663 Form documentation for consideration of off-site final disposition of clean spoils at a Clean Construction and Demolition Debris (CCDD) or Uncontaminated Soil Fill Operation (USFO) facility.

A review of the National Wetland Inventory map shows the presence of wetlands in the vicinity of the proposed project. In particular, the Humphrey Drive Wetlands is located on the east side of Humphrey Drive, south of 143rd Street. Wetlands were previously delineated in July of 2016. Therefore, new delineations will be required for permitting purposes as the delineation work is now over 5 years old. H&H will conduct a wetland and waterway delineation meeting the requirements of Executive Order 11990, "Protection of Wetlands;" Section 404 of the Federal Water Pollution Control Act as amended by the Clean Water Act, the Illinois Environmental Protection Agency regulations, and the Metropolitan Water Reclamation District of Greater Chicago (MWRD) Watershed Management Ordinance. Boundaries will be documented with use of a GPS (no flagging anticipated) and a wetland report generated which will include submittal of shapefiles of all delineated wetlands, waterways, and constructed stormwater features (ditches).

Any impacts to the existing wetlands will required a permit from either the USACE or MWRD, depending on jurisdiction. If the wetlands are determined to be hydrologically connected to Waters of the United States, the permitting will go through the USACE. If the wetland is considered isolated, permitting will be conducted through the MWRD. Prior to any permitting activities a jurisdictional determination request will be forwarded to the USACE, who has the final authority on the jurisdictional status of wetlands. It is expected that this project would qualify for a Regional 404 permit if a permit is required from the USACE.

4. Project Approach & Challenges

Funding Sources

Ciorba Group has a long history of assisting our municipal clients in their search for available funding sources. The first course of action will be to re-apply for STP-L funds through the SCM's next call for projects in January 2022 with the goal of moving the project from the contingency to the active list. Ciorba can prepare the application and also maximize points by having the Phase II engineering contract executed, incorporating green infrastructure in the design and highlighting the pedestrian safety improvements in the Complete Street category. If the Village hasn't already passed a Complete Streets Ordinance, Ciorba can assist the Village in preparing this document.

Other funding sources include the CMAQ program through CMAP. CMAP's next call for projects is anticipated to be in January 2023 for the FY 2024-2028 program. Ciorba can assist the Village in applying for their obligated funds from the ReBuild Illinois bonds to pay for a portion of the construction. Since the project does not have a regional impact, it will probably not be eligible for STP Shared funds. The intersection's history of lesser degree of crash severity will also not qualify the project for IDOT's HSIP funding. American Recovery Act funds distributed to the Village can be used for the stormwater management component of the project.

Potential funding source for the bridge improvements is described below under *Project Challenges*.

Public Involvement

The Scope of Services for public involvement in the Village's RFQ indicates the need for the Project Team to assist the Village in meeting with and addressing the concerns of project stakeholders. The level of effort for this work will be as directed by the Village. Ciorba Group has the capabilities and experience to prepare and conduct a wide range of public involvement activities. These could include public meetings, meetings with local groups, information for Village newsletters, or a project website.

Ciorba Group's Communication Team has the in-house capabilities to support the Project Team with:

- Digital Outreach - Project Website, Social Media Updates, Stakeholder Surveys
- Print Outreach - Graphic Flyers, Graphic Brochures, Mailers
- Face-to-Face Outreach - Graphic Exhibits, Presentations, User-Friendly Visualizations

We understand that in addition to quality engineering, successful projects require clearly communicating the Village's vision for the project to the public. The Ciorba Communications team is ready to assist the Project Team with any public outreach required for the project.



Duane O'Laughlin at a Public Involvement meeting for the Clavey Road Reconstruction Project

QC/QA Plan

A Quality Manager is assigned to the project and is an individual not associated with the daily work tasks of the project. QA/QC procedures are completed for all contract documents prior to their submittal to the Village and IDOT BLR&S for review. The QA/QC document describes the procedures to be utilized to verify, independently check, and review all design documents prepared by Ciorba and includes as a minimum:

- QA/QC responsibilities of all team members.
- Checking and reviewing procedures by assigned team members.
- Internal monitoring and audits of Project Team's activities.

4. Project Approach & Challenges

Project Challenges

Besides the project challenges identified above, the Village’s RFQ identified three project challenges that must be addressed by the Project Team.

1.

Challenges with the removal and replacement of existing Dryland Bridge and settlement from poor soils within the project limits. What are other feasible and economical options that may work

The Bridge Condition Report (BCR) evaluated two options for supporting the proposed pavement through the poor subgrade soil conditions along 143rd Street: a dryland bridge and using Expanded Polystyrene Foam (EPS). EPS has already been installed under the westbound 143rd Street lanes just east of John Humphrey Drive but has not performed well as noted in the BCR. Given the poor performance, we don’t recommend any further use of EPS to improve the roadway subgrade.

Another option to improve pavement performance that was not explored in the BCR is to utilize a load transfer platform. The platform consists of driven timber piles in a grid pattern with a concrete cap. On top of the piling, geotextile fabric and porous granular embankment is placed to reinforce the pavement section. Ciorba has recently utilized this design for the 80th Avenue reconstruction and widening project in an area of poor subgrade soils. For that project, we evaluated several options including a dryland bridge and EPS and the load transfer platform was the most cost efficient. We will evaluate this option for the Village for this corridor. A detail showing the system that was used on this project is shown below.

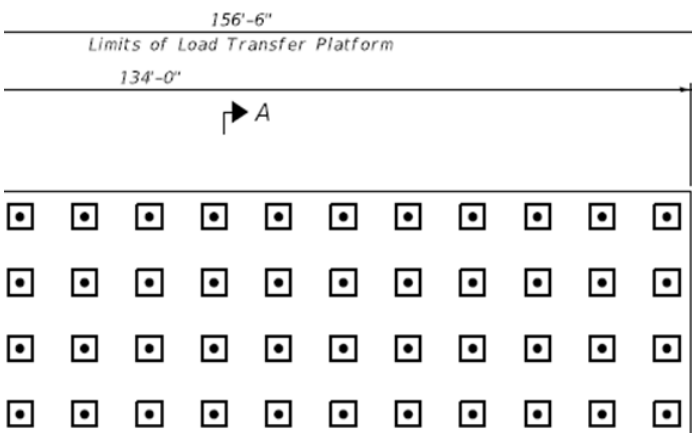


Figure 1- Plan view showing timber piles and caps in a grid pattern.

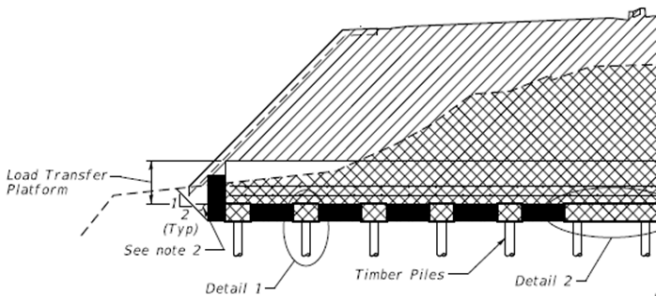


Figure 2- Cross Section showing load transfer platform

4. Project Approach & Challenges

2.

Design and coordination challenges with three different deliverables for intersection improvements and bridge removal and

Ciorba is aware of the challenges inherent in a project being completed in stages from our recent experience on the Clavey Road reconstruction project. With multiple construction contracts, the proposed drainage system associated with each of the improvements will need to be designed with temporary connections to existing drainage infrastructure remaining in place. Drainage design will be coordinated with roadway and structural design disciplines to modify the Phase I design, as required, and utilize existing systems as far as feasible to reduce the cost of construction while providing the level of service required for the project.

For the dryland bridge (or alternative option) only scenario, we recommend that the new structure be extended and widened to its ultimate dimensions (covering the proposed eastbound, westbound, and auxiliary turn lanes) for the future intersection improvement. Under this scenario, the pavement along the north side of 143rd Street will have to be widened on either side of the new structure to create a temporary transition from the existing to the future roadway width. For the intersection improvement only scenario, the challenge will be to determine what, if any, improvements are made to the existing pavement in the area of the poor soil conditions. This pavement area can be reconstructed and widened with the addition of some less expensive, short term subgrade repairs or simply rehabilitated and widened to wait for the construction of the dryland bridge (or alternative option) at some future date.

The Maintenance of Traffic plans will have to be modified depending on the chosen scenario (entire improvement, bridge only or intersection only). For the bridge only scenario, the storage of construction materials and equipment within the project limits will be limited. We will look at nearby locations where materials can be stored and work staged to give the contractor proper access in order to keep bid prices in line with “normal” pay item cost estimates.

3.

Challenges with availability of funds for bridge replacement and how they can assist the Village in securing funding.

Ciorba Group has extensive experience obtaining STP-Bridge funding for local agency bridge improvement projects. We contacted IDOT BLR&S about the availability of STP-Bridge funding for dryland bridges. The BLR&S discussed STP-Bridge funding with IDOT Bureau of Bridges and Structures (BBS) and unfortunately found that dryland bridges are not eligible for funding. While

the dryland bridges have a structure number, per BBS “they are not inventoried and submitted to the FHWA as a structure because they do not cross an obstruction or a depression as a bridge does and if one were to fail it will not cause a collapse. Also, the use of STP-Bridge funds is intended to be used to replace or rehabilitate bridges that are on the STP-Bridge eligibility list, requiring the existing structure to be structurally deficient and/or functionally obsolete per BLRS Manual.” The Village can obligate their MFT or ReBuild Illinois bond funds for the lengthening and widening of the dryland bridge.