VILLAGE OF WILMETTE

PROPOSAL FOR

ENGINEERING SERVICES: CENTRAL AVENUE - PHASE ONE

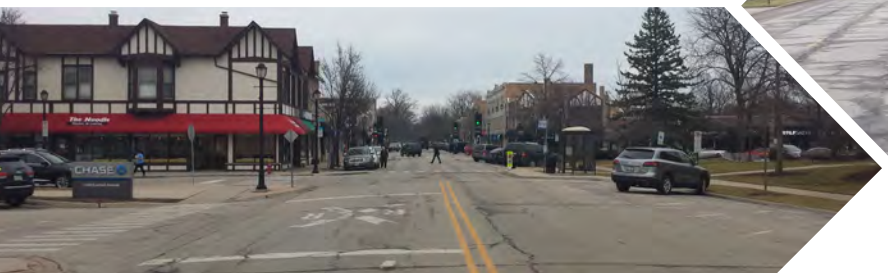
RFP NO. 16-M-0001

March 24, 2016

Prepared By

TranSystems

EXPERIENCE | Transportation



TranSystems

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www.transystems.com

March 22, 2016

Mr. Stephen Lazarus
Procurement Specialist
Village of Wilmette
1200 Wilmette Ave
Wilmette, IL 60091

Reference: Engineering Design Services for Central Avenue – Phase One – RFP No. 16-M-0001

Dear Mr. Lazarus,

TranSystems is pleased to submit our proposal to furnish Professional Engineering Services for the Central Avenue Phase I Study. We are very familiar with the Central Avenue and Sheridan Road corridors. We prepared the STP funding application for Central Avenue and designed the Award-Winning Sheridan Road project. Our team understands the challenges, issues and more importantly opportunities that exist along this important corridor.

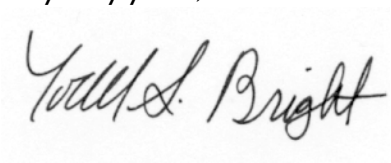
TranSystems has an outstanding reputation and extensive experience in providing Phase I engineering services for roadway projects. We are well known at the Illinois Department of Transportation (IDOT) Bureau of Local Roads and Streets (BLRS) for our roadway planning and design capabilities. Our expertise allows us to deliver quality projects on time and within budget. We are uniquely qualified for Central Avenue Phase I assignment since:

- We are prequalified by IDOT in all areas needed for this project and possess a thorough understanding of the Federal Aid approval process. In the past 10 years we have completed over 30 similar Phase I projects. Our staff has developed trusted relationships with IDOT, FHWA, NSCM, and CMAP staff. These agencies oversee Phase I & 2 projects through the federal process. We will use our relationships to ensure that the Village's desired outcome for Central Avenue is achieved;
- Our team has planned, designed and implemented many "Complete Street" improvements. The Approach Section conveys our vision for incorporating bike lanes, traffic calming and safety, business accessibility and transit into the Central Avenue project. We have reviewed the feasibility of adding bike facilities within the corridor and determined that there is an opportunity to provide on-street bike lanes;
- Our approach identifies several opportunities to incorporate green infrastructure into the proposed improvements. Sustainable elements include permeable pavements, rain gardens, trees and recycled materials. Educating the public and students regarding efforts to protect the environment is also a priority;
- We understand the importance of maintaining the character of the corridor and are committed to protecting the many majestic mature trees along the route;

- We are a consultant Team that will provide added value to the Village by developing innovative engineering solutions, exploring cost-effective construction alternatives, and focusing on minimizing access interruptions, utility impacts, and right-of-way acquisition;
- We understand the importance of the schedule and will use a "Correspondence Log" to track IDOT submittals. This log will be submitted monthly to the Village and will allow us to expedite IDOT reviews and approvals, while keeping you informed along the way;
- Our Project Manager, Mr. David Block and his team have the capacity to complete this project. Ms. Megan McDonald will be the Project Engineer solely focused on preparing the project development report. She will be lead by Phase I expert Ms. Grace Dysico (Environmental Studies) to ensure that we maintain the Phase I schedule and construction letting;
- We are a Consultant Team of TranSystems, Huff & Huff, and Jorgensen & Associates; who have successfully worked together on Award-Winning Projects. Huff & Huff and Jorgensen were involved with the Sheridan Road project. This group is IDOT's go-to team when environmental, public support and right-of-way acquisition are the critical path;
- We have extensive experience communicating with the public. Including neighborhood residents, schools, and businesses such as those found along the Central Avenue Corridor. Their input will be welcomed and considered when developing consensus for the preferred design alternative; and
- We understand how to accomplish a project of this magnitude with minimal disruptions to residents and businesses. We have reconstructed major roadways involving full sewer and water main replacement within Central Business Districts and residential neighborhoods. These communities include: The City of Crystal Lake, City of Elgin, City of Elmhurst, City of Geneva, Village of Schaumburg, Village of Skokie and Village of Wilmette.

Thank you for the opportunity to submit our proposal to service the Village. We look forward to the opportunity to work with you and your staff on this important project. I am personally committed to overseeing the successful completion of this project.

Very truly yours,



Todd S. Bright, PE
Vice President

Through our past involvement with this project, we want to see it through implementation. We view ourselves as the Village's partners and will continue our focus to leverage the Village's funds with other agencies (NSCM, ITEP, and CMAQ). Our goal is to limit the overall financial commitment by the Village throughout all phases of the project

ENGINEER ACKNOWLEDGMENT AND SIGNATURE

BY SUBMITTING THIS PROPOSAL, ENGINEER AFFIRMS THAT IT:

1. has carefully examined the RFP and all other documents referred to or mentioned therein, including Addenda Nos. NONE (if none, write "NONE") and accepts the terms and conditions therein; and, has considered and evaluated the factors which may affect cost, progress, performance and completion of the Project or any aspect of the means, methods, techniques, sequences and procedures to be employed and safety precautions incident thereto;

2. is familiar with the federal, state and local laws, standards and regulations that may affect cost, progress, performance and completion of the Project;

4. has studied all reports and drawings, if any, of the physical conditions in or relating to the Village locations; acknowledges that such reports and drawings, if any, are not Contract Documents and may not be complete for purposes of submitting this Proposal; and, acknowledges that the Village does not assume responsibility for the accuracy or completeness of the information and data; or, for Engineer's interpretation thereof and reliance thereon; and,

5. is aware of the general nature of work, if any, to be performed by the Village, or others that may relate to Work for which this Proposal is submitted.

Signed and sworn this 21st day of March, 2016, by a duly authorized agent of the Engineer.

By: _____
(Signature)

Todd S. Bright
(Print Name)

Vice President
(Title or Position)

Business address: 1475 East Woodfield Road, Suite 600
Schaumburg, IL 60173

Business Phone #: (847) 605-9600

Cell Phone #: (847) 401-6999

E-Mail Address: tsbright@transystems.com

Subscribed and sworn to before me
this 21st day of March, 2016

_____
Notary Public

ROBYN MARKLEY
OFFICIAL SEAL
Notary Public, State of Illinois
My Commission Expires
November 09, 2019

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PROJECT UNDERSTANDING AND APPROACH

PROJECT SCOPE & OPPORTUNITIES

The Village desires to reconstruct Central Avenue between Green Bay Road and Sheridan Road.

Through our intimate knowledge of Central Avenue and our previous experience with the Village, we understand that there are several goals/opportunities that present themselves along the corridor. We will work with the Village to accomplish these goals, develop a vision and make this an Award Winning Project!

Central Avenue Opportunities:

- **New "Complete Street/Green" Roadway**
- **Bike Lanes**
- **Water & Sewer Upgrades**
- **Beautification Enhancements**

Our Vision is to bring the best elements of our Award-Winning Sheridan Road improvements to the Central Avenue corridor!

This corridor is critical as it connects the Village's Central Business District (CBD) to the Lakefront, Gillson Park, Wilmette Harbor and the Baha'i Temple. ***More importantly Central Avenue is residential serving adjacent homes and a school!***

The site map and approach on the following pages detail what TranSystems envisions as key project scope elements along the Central Avenue Corridor.

Based on the scope of the project, our knowledge of the community, and our experience in completing similar projects, we feel that the following areas are critical in the development of this improvement:

Key Project Scope Elements:

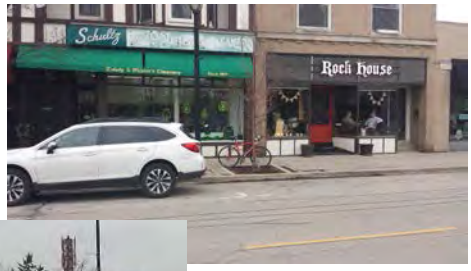
- **Complete Street**
- **Green/Sustainable Infrastructure**
- **Beautification Enhancements**
- **Schedule**

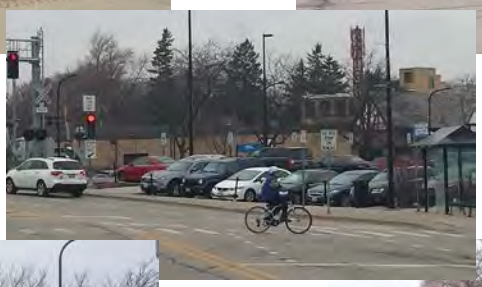

Central Business District
Lake Ave
Green Bay Trail
2nd St
Wilmette Ave
11th St
10th St
9th St
Fuel
Washington Ct
12th St
Depot Nuevo
Starbucks
Metra Station
Green Bay Rd
Bicentennial Pl
Wilmette
Central Elementary School
The Noodle Cafe
Rock House
The Wilmette Theatre
Central Ave
Village Hall
Big Tomato Pizza
Wilmette Pet Center
Jos. A. Bank
US Post Office
Panera Bread
Pooler Dr
Greenleaf Ave
Backyard Barbecue Store
Wilmette Public Library
John Millen Hardware
Google
Sign in
Legend
1 Driveway Access (throughout)
2 Parking (throughout)
3 Pedestrian Accommodations
4 Bicycle Lanes
5 Transit Coordination
6 Utility Coordination
7 Tree Protection (throughout)


Lake Ave
Noonmark Foundation
9th St
8th St
7th St
6th St
5th St
4th St
Washington Ave
Central Ave
Greenleaf Ave
First Presbyterian Church
Wilmette Lutheran Church
RESIDENTIAL
STOP
Legend
1 Driveway Access (throughout)
2 Parking (throughout)
3 Pedestrian Accommodations
4 Bicycle Lanes
5 Transit Coordination
6 Utility Coordination
7 Tree Protection (throughout)
Google
Imagery ©2016 Google, Map data ©2016 Google


Gillson Park
Lake Ave
Sheridan Rd
4th St
Michigan Ave
Washington Ave
3rd St
Scandinavian American Trading
US Coast Guard
Sheridan Shore Yacht Club
Sheridan Shore Sailing School
Wilmette Harbor
STOP
Central Ave
Greenleaf Ave
Map
Google
Imagery ©2016 Google, Map data ©2016 Google
Legend
1 Driveway Access (throughout)
2 Parking (throughout)
3 Pedestrian Accommodations
4 Bicycle Lanes
5 Transit Coordination
6 Utility Coordination
7 Tree Protection (throughout)

COMPLETE STREET OPPORTUNITIES

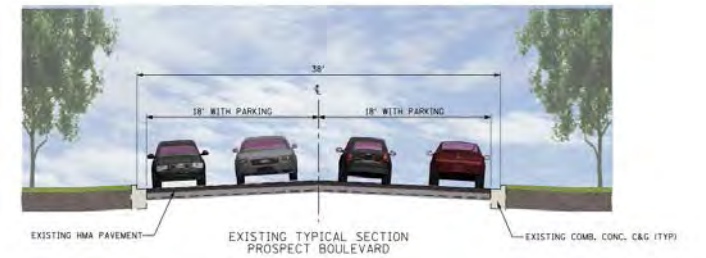


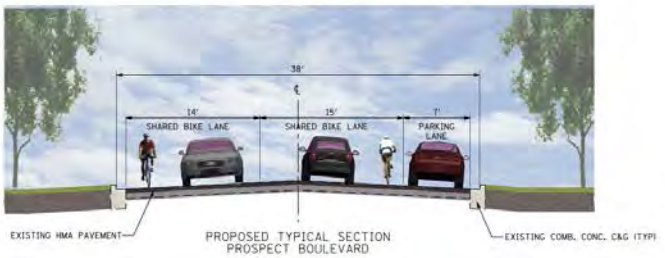


Bicycle Improvements

The Village's bikeway plan shows a route along Greenleaf Avenue and north along 4th Street to Sheridan Road. TranSystems has reviewed the existing conditions along Central Avenue. Our findings have determined that Central Avenue could replace or complement the Greenleaf Bicycle Route.

The Bicycle Cross Section Options and On-Street Design Criteria shown on the following page indicate that separate bike lanes could be provided along Central Avenue from the CBD limits at 11th Street to Sheridan Road. Adding these lanes would truly complete Central Avenue, just as the bike lanes along Sheridan Road completed that street. The bike lanes would be approximately 5 feet wide and run along the north and south sides of the roadway. In order to maintain federal funding, parking would likely need to be removed along one side of Central Avenue to meet the federal design criteria. Shared lanes could be used in lieu of separate striped bike lanes to preserve parking between 11th Street and 8th Street and between 4th Street and Sheridan Road. However, striped lanes have added safety and traffic calming benefits. We recently removed parking from one side of the street to accommodate separate on-street bike lanes for a project in the City of Elgin (See Existing and Proposed Cross Sections below).





We worked with the City of Elgin to add On-Street Bicycle Facilities within a residential neighborhood by restricting parking to one side of the street.

CENTRAL AVENUE BICYCLE CROSS SECTION OPTIONS

11th Street to 8th Street (Existing face to face 40')

- **Findings: Separate bike lanes can be provided**
- Cross Section: (Proposed face to face 40') 1' gutter flag – 4' bike lane – 11' lane – 11' lane – 5' bike lane – 7' parking lane – 1' gutter flag
- Notes:
  - If existing parking is removed along one side, separate bike lanes could be provided (Park One Side #2, see criteria below)
  - If parking remains on both sides, shared bike lanes could be provided, if the roadway is widened 1' on each side (Park Two Sides #1)

8th Street to 4th Street (Existing face to face 36')

- **Findings: Separate bike lanes can be provided**
- Cross Section: (Proposed face to face 36.5') 1' gutter flag – 3.5' bike lane – 10' lane – 10' lane – 5' bike lane – *6' parking lane – 1' gutter flag
- Notes:
  - If existing parking is removed along one side, separate bike lanes could be provided, if the roadway is widened 3 inches (unnoticeable) on each side (Park One Side #2)

4th Street to Sheridan Road (Existing face to face 30')

- **Findings: Separate bike lanes can be provided**
- Cross Section: (Proposed face to face 30') 1' gutter flag – 4' bike lane – 10' lane – 10' lane – 4' bike lane – 1' gutter flag
- Notes:
  - If existing parking is removed along the south side, separate bike lanes could be used (No Park #2)

FHWA ON-STREET BICYCLE DESIGN CRITERIA

Parking on one side of the street

1. Shared bike lanes – **36'** min (38' preferred) face to face
   [1' gutter flag – 13' lane (14' preferred) – 14' lane (15' preferred) – 7' parking lane – 1' gutter flag]
2. Separate bike lanes – **36.5'** min (42' preferred)
   [1' gutter flag – 3.5' bike lane – 10' lane – 10' lane – 5' bike lane – *6' parking lane – 1' gutter flag]
3. Separate bike lanes – **42'** preferred
   [1' gutter flag – 4' bike lane – 12' lane – 12' lane – 5' bike lane – 7' parking lane – 1' gutter flag]

Parking on both sides of the street

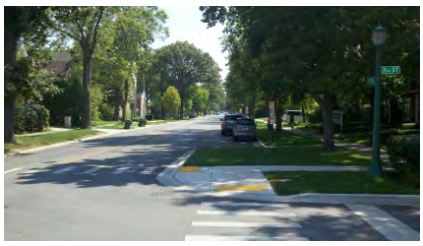
1. Shared bike lanes – **42'** min (46' preferred) face to face
   [1' gutter – *6' parking – 14' lane (15' pref.) – 14' lane (15' pref.) – *6' parking – 1' gutter]
2. Shared bike lanes – **44'** min (46' preferred) face to face
   [1' gutter – 7' parking – 14' lane (15' pref.) – 14' lane (15' pref.) – 7' parking – 1' gutter]
3. Separate bike lanes – **50'**
   [1' gutter flag – 7' parking lane - 5' bike lane – 12' lane – 12' lane – 5' bike lane – 7' parking lane – 1' gutter flag]

No parking

1. Shared bike lanes – **28'** min (30' preferred) face to face
   [1' gutter flag – 13' lane (14' preferred) – 13' lane (14' preferred) – 1' gutter flag]
2. Separate bike lanes – **30'**
   [1' gutter flag – 4' bike lane – 10' lane – 10' lane – 4' bike lane – 1' gutter flag]

design variance required

Traffic Calming & Safety Improvements



The study area involves a portion of Wilmette's Central Business District, Central Elementary School, an established residential neighborhood, as well as the many attractions along Sheridan Road and Lake Michigan. Many types of users have been observed along the project corridor. Unfortunately, vehicles have also been observed speeding along Central Avenue. This is a safety concern for the students, residents, visitors, pedestrians, cyclists, and shoppers. To better protect these users our Phase I studies will identify locations for enhanced crosswalks, bumpouts, and edge line parking and/or bike lane striping.

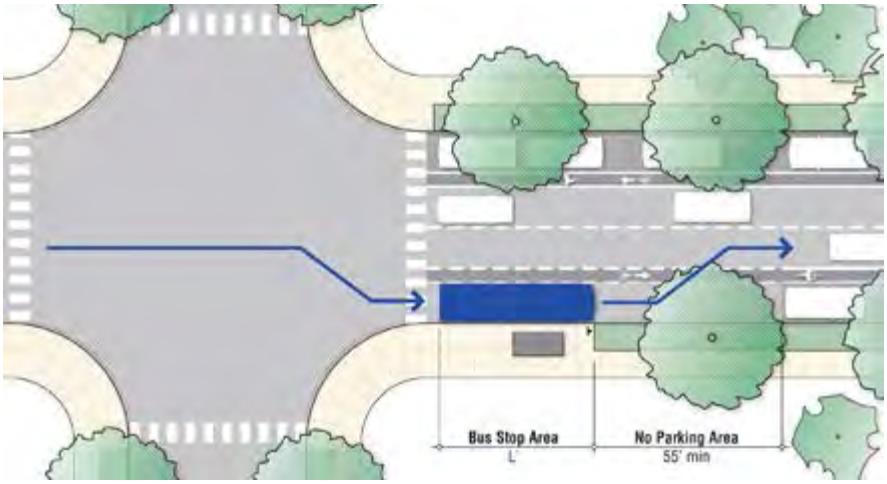
We have recently used rapid flashing beacons at critical pedestrian locations to improve awareness and safety. These projects include South Main Street in Crystal Lake and York Street in Elmhurst. Lastly, all sidewalks within the project limits will be analyzed and reconstructed as necessary to meet ADA design guidelines. TranSystems oversees the City of Chicago's ADA program and has great experience with ADA policies.

Business Friendly


The Central Business District contains Village Hall, Wilmette's Metra Train Station and several blocks of storefronts. The proposed improvements are supported by the Wilmette/Kenilworth Chamber of Commerce. TranSystems will involve the business community to ensure that their voice is heard and that they remain informed. Project schedule, access during construction and parking will be major concerns for this group. IDOT/FHWA will challenge maintaining the existing angle parking. TranSystems has successfully worked on behalf of businesses to keep angle parking within a CBD environment. We will use our experience to obtain this "must have" Phase I design variance for the Village.

Transit Accommodations

Pace bus routes 421 and 422 run the length of Central Avenue. Route 423 operates between 3rd and 4th Streets. Bumpout and intersection geometrics would be designed to accommodate bus and pedestrian movements. Moving the stops to the far side of intersections will be analyzed and coordinated with PACE. Far side stops improve intersection efficiency and are generally the location preferred by PACE.



Pace – Transit Supportive Guidelines

Sidewalks are currently provided on both sides of the project corridor. Improving sidewalks to ensure they meet ADA design guidelines will help ensure that pedestrians and people with disabilities can safely get to and from the various bus routes and their final destinations. All bus shelters and stops along the project corridor will also be verified for safe, ADA-compliant design.

GREEN/SUSTAINABLE INFRASTRUCTURE OPPORTUNITIES

Sustainable Pavements

There is an opportunity to incorporate sustainable pavements along the Central Avenue corridor. Permeable systems can function as sidewalk, parking lanes, and driveways while providing stormwater infiltration, groundwater recharging, contaminant removal, and flood management. We recommend the Village consider using permeable concrete and/or pavers at the following locations:

Permeable Pavement Locations

- Parking Lanes (Pavers or Concrete)
- Driveways & Alleys (Pavers or Concrete)
- Carriage & Service Walks (Pavers)

Parking Lane and Carrage Walk Permable Pavers

Parking Lane, Driveway and Alley Permeable Concrete (Precast Panel and Cast-in-Place Options)

Education

Wilmette Public School District 39 has already taken steps to educate students regarding sustainability. It is fantastic that there is an "Anti-Idling" sign in front of Central Elementary School. We would like to take an additional sustainable step with the school by planting a rain garden with educational signage. The garden would be placed in the parkway in front of the school. TranSystems employees and their families planted a rain garden in front of the Crystal Lake Municipal Center. The garden collects and treats water from the building downspouts.

Central Elementary School

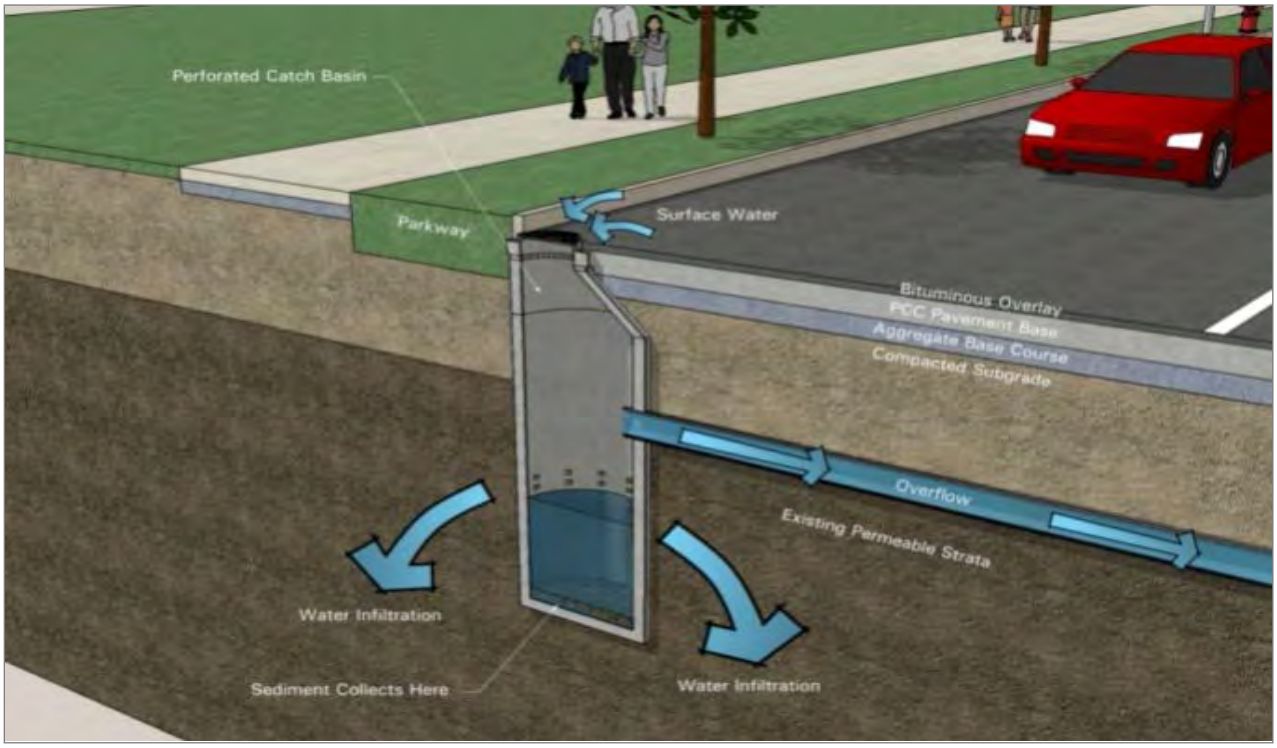
Planting Crystal Lake Rain Garden

Sustainable Utility Improvements

Sewer Design | We anticipate using the same sewer design approach that was done for Sheridan Road. Spot repairs and replacement of the existing combined sewer would be performed after evaluating the sewer inspection video. New sanitary services would be provided and the existing combined sewer would become the post construction sanitary sewer.

A new storm sewer system would be installed to collect runoff and divert storm water from entering the sanitary system. Sheridan Road had sump pumps, downspouts, and private drainage systems connected directly to the existing combined sewer. New storm sewer services were provided for each property to eliminate these connections. The storm services would connect to the new storm sewer and have cleanouts within the parkway at the property line.

If the existing subgrade is conducive to infiltration, we recommend using perforated catch basins and drywells. These structures would complement the proposed storm sewer system and laterals, adding an additional level of sustainability.



Perforated Catch Basins & Drywells

Water Main | As was done on the Sheridan Road project, new water main is proposed. The new water main is a sustainable improvement. By reducing the amount of water loss from breaks and leaks, associated with the old main, we are protecting one of our planets greatest resources - Water! Proposed services will be augured to protect our second greatest resource - Trees.

Tree Protection

Many of the trees along the Central Avenue corridor predate our great grandparents. These mature and healthy trees truly are one of Wilmette's finest assets. The Phase I Document will have a Phase II project commitment to protect all trees.

As was successfully done for Sheridan Road, we will protect each tree from the often harsh construction environment. The contract documents will include: special curb details, tree trunk protection, root and canopy pruning, and temporary fencing around the perimeter of each tree's drip line. Special provisions will require utility services to be tunneled, versus open trenched. It is critical that tree root disturbance be minimized, to protect the tree's health and promote its sustainability. There will be severe penalties for noncompliance with the tree protection requirements.

Use permeable pavers to replace concrete service walks, protect trees and promote stormwater infiltration.

Use special (Sheridan Road) curb detail to protect mature trees

Planting Trees

While visiting the site, we observed several areas where additional trees could be planted. One location is along the north parkway east of 9th Street. Our Phase I report will identify where additional trees can be planted as part of the overall corridor improvements.

Recycled Materials

The use of recycled materials is good for the environment and provides additional cost savings. We recommend working within the IDOT "shell" of HMA material selection. However, for a project of this magnitude it would be prudent to entertain increased recycling opportunities such as HMA (RAP), HMA (Recycled Rubber Tires and Shingles), Concrete Curb and Gutter (Fly Ash), Sub-base, Type B (Crushed Concrete), Trench Backfill (Construction and demolition debris sand as a fine aggregate for trench backfill), etc.

BEAUTIFICATION ENHANCEMENT OPPORTUNITIES

Within Section 5 the Fee Structure we have included an optional scope if the Village desires to engage Hitchcock Design Group (HDG). TranSystems has successfully teamed with HDG on several award winning streetscape projects for the City of Elgin and City of Geneva. They would be used to engage the public and establish consensus of the preliminary streetscape elements that could be incorporated along the corridor and within the Central Business District. This work could be completed as part of the Phase I engineering or included during Phase II, as was done for Sheridan Road. This work would be eligible to receive ITEP funds.

Existing Conditions

- Two distinct areas - downtown and residential neighborhood
- Streetscape in downtown
- Traditional parkway/sidewalk in residential neighborhood
- No dedicated accommodations for bicycle traffic
- Materials in need of improvement
- Preserve large trees
- Iconic pedestrian light fixtures

Potential Improvements

- Sidewalk configurations and materials
- Crosswalk configurations and materials
- Bicycle accommodations such as shared and dedicated bike lanes
- Traffic calming components such as corner bump-outs, speed tables and pedestrian warning devices
- Green infrastructure components such as permeable paving, infiltration planters, bioswales and native plantings
- Furnishings such as benches, litter and recycling receptacles, bike racks and planters
- Lighting including roadway, pedestrian and accent lighting
- Community gateways, wayfinding and regulatory signage
- Landscape components including preservation of existing trees, new street trees, shrubs, perennials and ornamental plantings

Public Input and Consensus

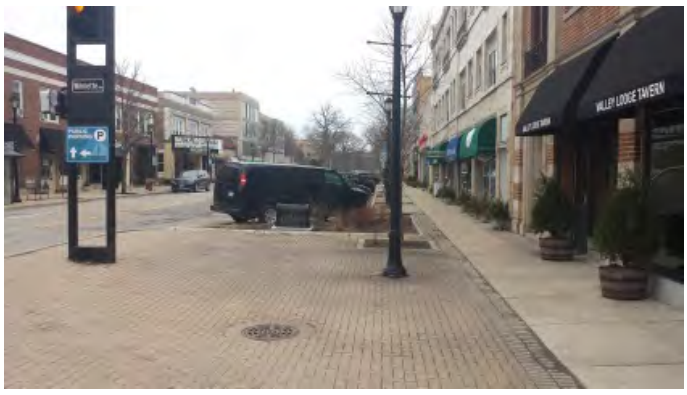
- One-on-one interviews
- Visioning workshop
- Public open house
- Village Board approval

SAMPLE BEAUTIFICATION ELEMENTS

Ornamental Traffic Signals

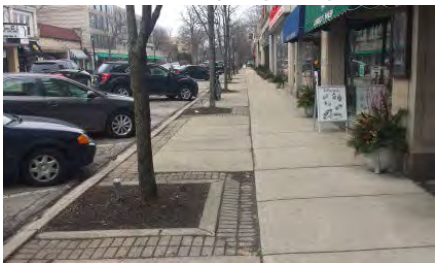
Landscape Hard Surfaces

Iconic/Historic Lighting Rewiring & Sign Clutter Removal



Wayfinding & Parking Signage

Benches, Litter & Recycling Receptacles, Bike Racks & Planters



Brick or Brick Banded Crosswalks

SCHEDULE

We take schedule management seriously. Per the Village's CIP, we understand the need to have this important project let in 2019. We are committed to meeting and/or exceeding this deadline. Our goal is a June 2018 letting. This allows for more competitive bids by contractors looking to build backlog over the winter. This also enables residents to start enjoying the improvements sooner. Underground work would take place over the winter and the final roadway construction would be completed in late summer 2019. Our goal is to have an early fall ribbon cutting with the autumn colors and beautiful improvements as our backdrop.

Our staff has the capacity to execute this assignment based on our familiarity with the project, experience, and relationships with IDOT BLRS. We understand the controlling items needed for design approval and agreement processing. The environmental survey request (ESR) and intersection design study (IDS) are two of these items. The ESR will be submitted within 2 weeks of being given notice to proceed. The IDS will be submitted within 2 weeks of completing the traffic capacity analysis.

Our Project Manager, Dave Block, will track the various milestone submittals and reviews to ensure adherence to the schedule during the Phase I process. Through our experience in working with municipalities on federally funded projects, we have developed a "Correspondence Log" procedure to track our coordination with IDOT. We will use this tool for the Central Avenue project assuring that the schedule is met and more importantly to get the Village involved when needed. The log will be submitted to the Village monthly.

Our familiarity with the project, relationship with the key stakeholders, understanding of the FHWA/IDOT process makes the TranSystems team best suited for this assignment. The detailed project milestone schedule can be found on the following page.

PROJECT SCHEDULE

PROJECT MILESTONE SCHEDULE

Municipality:	Village of Wilmette
Project:	Central Avenue
Scope of Work:	Roadway and Pedestrian Improvements and Utilities
TIP #:	TBD
TIP Years (Ph II / Const):	TBD
Section #:	TBD
Last Constr & E3 Cost	$ 5,015,000
Current Constr & E3 Cost	

Contact Information

Municipality	Village of Wilmette
Council/Liaison	NWCM / Brian Pigeon
Consultant	TranSystems Dave Block (847) 407-5313
IDOT	Alex Househ (847) 705-4410

Date Prepared: 3/17/2016 Date Revised: _____

	Projected Dates			
	Initial Est.	Kick-Off	Revised/Actual	Notes
1. Project Scoping	Mar-16			
2. IDOT Phase I Kick-off Meeting	Apr-16			Engineering Contract Awarded April 12, 2016
3. 1st State/Federal Coordination Meeting	Jun-16			2 months from kickoff meeting
4. Categorical Exclusion Concurrence	Jun-16			
5. Design Variance Concurrence	Aug-16			
6. Submit Draft Phase I Report (PDR) to IDOT (a)	Aug-16			4 months from kickoff meeting
7. Public Hearing/Meeting (or N/A)	Oct-16			6 months from kickoff meeting
8. Submit Final Phase I Report (PDR) to IDOT (b)	Dec-16			8 months from kickoff meeting
9. Submit Phase II Engr. Agreem't to IDOT (or N/A)	N/A			
10. Phase I Design Approval	Feb-17			10 months from kickoff meeting
11. ROW Acquisition Initiation (or N/A) (c)	N/A			
12. Phase II Engr. Agreement Approval (or N/A)	May-17			
13. Submit Pre-Final Plans and Estimates (d)	Jan-18			8 months from agreement approval
14. Submit Phase III Engr. Agreement to IDOT	Mar-18			
15. Submit Final Plans, Specs & Estimates (PS&E) (e)	Mar-18			10 months from agreement approval
16. ROW Acquisition Complete	N/A			
17. Construction Letting	Jun-18			13 months from agreement approval

Notes:

(a) 3 to 6 month review required per complexity and submittal quality
(b) 1 to 3 month review
(c) Minimum 9 to 18 months required from plats to acquisition
(d) 1 to 4 month review
(e) 7 to 10 days before Springfield BLR due date

See IDOT Local Roads' **Mechanics of Project Management** "Federal Aid Project Initiation to Completion" Flow Chart for sequence of events and estimated review times.

SCOPE OF SERVICES

Phase I Engineering (Revised 4/27/16)

1. Project Coordination and Data Collection

a. Obtain the following information from the appropriate agencies: existing roadway plans, bikeway plans, right-of-way data, pavement flooding history, drainage atlases, FIRM and FIS maps, National Wetland Inventory Maps, crash reports (for the 5 most recent years), bus routes, emergency response routes, public and private utility atlases, bench mark and other survey datum information.

b. Obtain aerial photography at 1"=50' scale from Village/County for use in the preliminary design studies, environmental survey request, and public meetings.

c. Summarize data collection elements in tables, exhibits, maps, and/or aerial photos for use throughout the duration of the project including, Project Location Map and Existing Roadway Typical Sections.

d. Conduct site visit, sign inventory, and take pictures of project features. Prepare photographs for use by project team during engineering phases.

e. Provide project administration, prepare monthly invoicing and project status reports. Assume 12 month duration.

2. Field Surveys

The limits of the survey will typically be along the project corridor and up to 50 feet along each leg of the cross street intersections along the corridor. The total survey distance for Central Avenue is approximately 5,800 feet.

a. Conduct topographic design survey based on the English system including the establishment of horizontal and vertical controls based on the Village's published benchmarks (datum: NAV83 horizontal and NAVD88 vertical). The survey will include topography, cross sections (at 50-foot increments), culvert, utility, drainage, and trees. Additional cross sections will be conducted (as needed) at critical locations, i.e. driveway, cross streets. **(Jorgensen)**

b. Verify existing ROW. Boundary lines will be shown per existing records and ROW markers found in the field. **(Jorgensen)**

c. Conduct a utility survey to obtain drainage and sanitary invert elevations, direction of flow, outfalls, pipe sizes, top of water main elevations, and condition of the structures. **(Jorgensen)**

d. Download topographic survey and cross sections for use in the preliminary design studies. **(Jorgensen)**

e. Create project base files, digital terrain model, project design files, and project centerline and stationing for use in cross section, alignment, and profile studies. Preliminary plan and profile sheets will be prepared at a scale of 1"=50'.

f. Prepare base map to be used in all phases of the study indicating right-of-way and property lines, street names, and individual house addresses.

g. Based on utility information collected from the survey and from outside sources, develop line work for existing utilities. The Village will be contacted to locate their facilities.

3. Traffic and Crash Analysis

Since Central Avenue is an urban collector roadway in an established neighborhood, and no major redevelopment of adjacent property is planned or likely, it assumed that Average Daily Traffic (ADT) on Central Avenue will likely remain the same between existing conditions and future (2040) conditions.

a. Fully classified intersection turning movement traffic counts will be conducted at the intersections of Central Avenue/Green Bay Road and Central Avenue/Wilmette Avenue during weekday peak periods using Quality Counts to perform the counts. It is recommended that two-hour morning and evening weekday peak periods be counted. The traffic count data, as well as video of the intersection during the traffic count collection periods, will be provided to the Village. Analyze traffic data to determine A.M. and P.M. peak hours and peak hour usage.

b. Estimate existing Average Daily Traffic (ADT) on Central Avenue from the turning movement traffic count data using standard traffic engineering procedures.

c. Coordinate with CMAP to obtain concurrence and approval of the existing and projected 2040 ADT volumes.

d. Complete intersection capacity analysis (existing traffic) for the Central Avenue/Green Bay Road and Central Avenue/Wilmette Avenue intersections using HCS 2010 and calculate storage bay requirements using 95th percentile data and IDOT's Red-Time Formula, to verify that no geometric improvements are required. Evaluate existing levels of service.

e. Evaluate confirmation of traffic signal warrants. Prepare an Intersection Design Study at the intersections of Central Avenue/Green Bay Road and Central Avenue/Wilmette Avenue to address the signal phasing, timing and any proposed geometric improvements.

f. Prepare crash summary tables, collision diagrams, and identify crash patterns for the most recent available five-year study period. Perform accident and wet pavement accident analyses. All crash reports needed for analysis under this item will be provided by the Village and IDOT.

g. Perform 4-way stop warrant for Central Avenue and 11th Street

4. Preliminary Design Studies

a. Establish design criteria for the roadway horizontal and vertical geometrics and develop a typical roadway section based on vehicular traffic, bicycle and pedestrian needs.

b. Review existing roadway geometrics to identify possible geometric and safety improvements.

c. Conduct a cross section analysis along the roadway to verify the right-of-way needs, and impacts to the adjacent area including driveways, trees, and utilities.

d. Investigate sidewalk and bicycle route improvements. Perform any required additional work that would support Central Avenue as a "Complete Street" including, potential for pedestrian and bicycling corridors.

e. Perform a pedestrian safety analysis to determine the levels of safety for the exiting school crossings and recommend additional measures to increase safety.

f. Prepare preliminary plans, profile, and working cross sections (50-foot intervals plus driveways and cross streets) to identify roadway geometrics, preferred centerline alignment, and verify right-of-way needs. Estimated at six (6) plan sheets.

g. Develop options to incorporate the use of "green infrastructure" in the overall design.

h. Identify Streetscaping Concepts Alternatives compatible with available funding. Anticipated to be stamped concrete, hanging baskets, decorative traffic signals, plantings, signage, etc.

i. Perform parking analysis and provide alternate parking schemes to fit the preferred improvement

j. Collect data at Central Elementary School for vehicle pick-up and drop-off

5. Drainage and Utilities Studies

A formal Location Drainage Study (LDS) will not be prepared as the proposed improvements are not anticipated to increase impervious areas. The proposed roadway footprint will remain relatively the same, and as a result, no requirement for storm water detention is anticipated.

a. Prepare existing and proposed drainage and utilities plan concepts including trunk main storm sewer, combination sewer, and water main. The preliminary drainage and utilities concepts will be shown on the Preferred Improvement Plan. No hydraulic capacity calculations will be performed in Phase I for sizing of the new trunk main storm. Include concept plan for a new water main location.

b. Conduct a drainage analysis to identify and evaluate the exiting drainage conditions and assess physical deficiencies.

c. Investigate identified drainage problems and identify possible solutions. These solutions will be further analyzed and detailed in Phase II to determine whether they will be incorporated.

d. Identify permit needs. Pre-application meetings and permit applications will be prepared in Phase II. It is anticipated that a Metropolitan Water Reclamation District of Greater Chicago watershed management permit will be required. Although a water management permit is anticipated, the site runoff/volume/detention requirements as stated in the newly enacted ordinance will not need to be met as it is anticipated that the total new impervious area will be less than the ordinance threshold of 1 acre for developments within the right-of-way based on the proposed improvements identified in the scope.

e. Identify potential green infrastructure improvements, such as use of permeable pavers, bioswales, and rain gardens. Further development and design of such features will be done in Phase 2.

6. Environmental Studies

a. Prepare an Environmental Survey Request Form to obtain biological resource and cultural resource reviews and signoffs of the project study limits.

b. The project is not expected to involve noise concerns because the edge of travel way is not being significantly altered. Therefore, a noise analysis is not anticipated for the project.

c. Prepare a Preliminary Environmental Site Assessment (PESA) report to identify any potential Hazardous/Special Waste locations near the site. (Prepared by subconsultant: Huff & Huff, Inc.)

d. Summarize the environmental studies and incorporate into the Project Report.

7. Preferred Improvement Plan

a. Based on design studies, environmental studies, and public input, prepare Preferred Improvement Plan for the project which meets Village and IDOT requirements. Develop the Preferred Improvement Plan on topographic survey mapping. Estimated as six (6) plan sheets.

b. Prepare typical sections for the proposed improvements.

c. Analyze construction staging schemes. Detailed plans will be prepared in Phase 2.

8. Village, IDOT, and Public Meetings

a. Conduct a Kick-Off Meeting with both the Village and IDOT to discuss goals and objectives of the project. (1 meeting)

b. Attend FHWA/IDOT Coordination meeting to present the Preferred Improvement Plan and obtain approval of proposed design and any variances. It is anticipated the Village would be in attendance at the meeting. (2 meetings)

c. Conduct stakeholders meetings with Village throughout project duration to present design studies, obtain environmental and design approvals, and review project schedule. (5 meetings)

- Wilmette Public School District 39 Central Elementary School

- Wilmette Park District
- Wilmette/Kenilworth Chamber of Commerce
- Wilmette Citizens for Active Transportation (WCAT)
- Residential Stakeholders

d. Prepare for and host three Public Information Meetings. The meetings will be conducted in an open house format. Coordinate with the Village to prepare all notifications, handouts, presentation text, exhibits, and minutes. The Village will be responsible for publication notices and postings. The first meeting will be conducted to introduce the project to the stakeholders and obtain feedback on project goals from the community. The second meeting will present the finalized improvements, allowing for final input as Preliminary Engineering Studies are concluded and the project moves into Design.

9. Project Development Report

a. Prepare a Draft Project Report using IDOT Project Development Report (PDR) for a Categorical Exclusion Group I (BLR Form 22211) summarizing the preliminary engineering efforts including data collection, coordination documentation, and Preferred Improvement Plan.

b. Prepare a preliminary estimate of cost based on the Preferred Improvement Plan.

c. Submit the Draft Project Report for Village, IDOT, and FHWA for concurrent reviews. (4 copies: Village 2, IDOT BLR 2)

d. Revise and submit the Final PDR based on review comments and public comments at informational meeting.

e. Submit the Final Project Report to the Village and IDOT for Design Approval. (4 copies as noted above)

10. QA/QC Plan & Reviews

a. Develop Project Quality Assurance Plan.

b. Develop Project Work Plan.

c. Set up project control files and document data control.

d. Provide project QA/QC for all major submittals.

Assumptions

- No COSIM (Air Quality) analysis is required for this project since the scope of proposed improvements does not include adding through lanes or auxiliary turn lanes.

- A Location Drainage Study will not be prepared for this project since the existing drainage system will not be significantly affected, no floodplain impacts are anticipated, no storm water detention will be required based on the proposed improvements identified in the scope, and the project is not on or adjacent to any IDOT routes.

PROJECT TEAM

PROJECT TEAM

Our Team is comprised of professionals experienced in every aspect of this project. We believe that the proper coordination of the project by our staff with the Village of Wilmette, IDOT, NWMC, CMAP, resource and permitting agencies, driving public, area businesses, residents, and other stakeholders will ascertain the timely and successful completion of the proposed improvements. We will ensure the necessary project coordination. Our team will also conduct and assist the Village with all coordination meetings, outreach campaigns, news media contacts, newsletters, project website, and other methods of a fully comprehensive public involvement plan.

The success of the project is dependent on the individuals performing the work. The TranSystems team has very strong professionals assigned to this project. Our current staffing assures experienced personnel will be assigned to the project in order to meet the completion schedule. We have included brief descriptions of our key personnel below and have included an organizational chart and resumes at the end of this section.

KEY PERSONNEL

Todd S. Bright, PE | Project Director
Todd has over 28 years of transportation planning and design experience. He is responsible for the management of highway, bikeway, bridge, and railroad improvements for municipal, State, County and Federal agencies. He also has extensive experience in project funding, multiple agency coordination and public involvement. Todd has served as the senior project manager for roadway improvements in Wilmette including Sheridan Road.

Grace L. Dysico, PE | QA/QC
Grace has 31 years of experience in management of projects and preparation of Project Development Reports, Environmental Assessments, and Environmental Class of Action Determination documents. She offers extensive knowledge and experience in roadways, bikeways and pedestrian facilities, NEPA processing, capacity analysis and intersection design studies, accident analysis, wetland mitigation review, traffic studies, signal warrants, and public coordination and involvement.

David W. Block, PE | Project Manager
David has over 24 years of experience as a Design Engineer, Project Engineer and Project Manager. He has extensive experience in design and management of roadway projects through IDOT's Bureau of Local Roads and Streets such as the improvements to Woodfield Road, State Parkway, Skokie Boulevard and Old Orchard Road Intersection, Old Orchard Road Corridor, Golf Road and Skokie Boulevard Intersection, South Main Street, Spring Road and Vallette Street, US Route 41, and York Road/Brush Hill/IL 38.

Megan A. McDonald, PE, LEED AP | Project Engineer
Megan has nine years of experience in design engineering. She has been responsible for the development of highway and intersection geometry, traffic control and staging plans, and development of special provisions. She has been involved with numerous Phase I & II projects throughout her career.

Christopher E. Comin, PE | Design Engineer
Chris has 17 years of experience in transportation design and construction engineering. Chris's strengths include design of horizontal and vertical alignments and analyzing right-of-way impacts from cross sections. He has served as the design engineer on multiple phase I & II projects including Woodfield Road, Skokie

Boulevard and Old Orchard Road intersection, Old Orchard Road Corridor, Golf Road and Skokie Boulevard intersection, South Main Street, U.S Route 30, McCormick Boulevard, Spring Road and Vallette Street.

Ryan P. Jacox, PE, PTOE | Traffic Analysis
Ryan has 15 years of experience with traffic signal design, traffic capacity analysis, roadway lighting photometrics and design, and preliminary engineering studies. He is a specialist in traffic signal system design, traffic signal timing modeling and optimization, and traffic signal programming. Ryan previously worked as a review consultant in the Geometrics Unit of the Bureau of Programming at IDOT District 1. Prior to TranSystems, he was also employed at IDOT District 1 in both the Bureau of Local Roads as a Federal Aid Review Engineer and the Bureau of Traffic as a Signal Operations Engineer.

Jesse L. Vuorenmaa, PE | Drainage Engineer
Jesse has 11 years of experience in highway design. He has been responsible for the development of highway and intersection geometry, traffic control and staging plans, and development of special provisions. He specializes in the preparation of drainage plans, Location Drainage Studies and Hydraulic Reports. Jesse also presented at the 2014 ACEC-Illinois/IDOT Drainage Seminar. Jesse has served as the drainage engineer on many projects including York Street at Brush Hill Road in Elmhurst, Skokie Boulevard in Wilmette, and US Route 45, IL 60 to IL 21, in Lake County, which included a Location Drainage Study and four Hydraulic Reports.

Brian L. Fairwood | Funding
Brian has 22 years of experience with planning reports, contract plan preparation, and coordination for municipal projects including roadway and intersection geometrics, bikeway and pedestrian facilities, streetscape design, capacity analysis, traffic and accident studies, signal warrants, right-of-way requirements, funding analysis, and public coordination and involvement. He works with local agencies to complete the necessary agreements to maintain federal funding and the schedule.

SUBCONSULTANTS

TranSystems has assembled our Project Team with who we consider "partner" firms based on our extensive past experience with each of these firms on local roadway projects utilizing federal funding. The following identifies the role of each firm:

- Huff & Huff, Inc. — Environmental Reporting
- Jorgensen & Associates, Inc. — Topographic Survey

Huff & Huff, Inc.
Huff & Huff, Inc. (H&H) is a multi-disciplined firm providing environmental and civil engineering services as well as natural resource assessments. Founded in 1979, the firm size has increased to 30 professionals and four support staff; this size guarantees personal involvement and supervision on all projects. The diversity of the firm's expertise allows effective solutions for clients. Wastewater, water quality, wetlands, groundwater remediation, air pollution, water pollution, hazardous waste, waste management, noise & vibration, NEPA documents, environmental site assessments, underground storage tanks, and risk assessments are all areas where H&H routinely provides engineering services. For over 30 years H&H has maintained this diversity in environmental experience.

Their work has been recognized with five Engineering Excellence awards for noise, remediation, wastewater, and water quality projects. H&H has provided solutions to environmental issues for public and private sector clients. They utilize their experience and innovative approaches to "make a difference" for their clients.

Jorgensen & Associates, Inc.

Jorgensen & Associates was founded in 1990 to provide surveying services to the general public. Jorgensen & Associates is incorporated in the State of Illinois. The firm is prequalified by the Illinois Department of Transportation to perform route and land surveying services. Their experience includes topographic, construction, and land surveying of local and regional urban transportation facilities.

Jorgensen & Associates is currently providing surveying services for both governmental and private sector clients, as well as acting as a subconsultant to other engineering companies. Members of this firm have performed surveys in urban and rural areas, through forest preserves and over major rivers. Jorgensen & Associates firmly believes in providing their clientele with a quality product,. Jorgensen & Associates believes in a "whatever it takes" attitude for every project in order to meet the client's needs, schedule, budget and most of all to provide a quality product.

Project Team

Project Director

Todd S. Bright, PE

QA/QC

Grace L. Dysico, PE

Phase I

David W. Block, PE
Project Manager

Megan A. McDonald, PE
Project Engineer

Christopher E. Comin, PE
Design Engineer

Ryan P. Jacox, PE, PTOE
Traffic Analysis

Jesse L. Vuorenmaa, PE
Drainage Engineer

Brian L. Fairwood
Funding

Environmental Services

Huff & Huff, Inc.

Topographic Survey

Jorgensen & Associates, Inc.

Todd S. Bright, PE
Project Director

Todd has extensive experience with planning reports, contract plan preparation, and coordination for municipal projects including roadway and intersection geometrics, drainage and hydraulic studies, storm sewer design, bikeway and pedestrian facilities, streetscape design, capacity analysis, traffic and accident studies, signal warrants, right-of-way requirements, environmental studies, funding analysis, and public coordination and involvement. Todd has also worked with our clients within the Chicago region in utilizing Federal and State funding sources for transportation improvements.

REGISTRATIONS
Professional Engineer: IL, 1995

EDUCATION
B.S., Civil Engineering
Marquette University, 1989

AFFILIATIONS & MEMBERSHIPS
American Council of Engineering Companies
American Public Works Association

YEARS OF EXPERIENCE
28 (26 with firm)

Sheridan Road Improvements, Wilmette, IL
Project manager for the reconstruction of 2.16 miles of Sheridan Road. The project was processed as a Jurisdictional Transfer utilizing Surface Transportation Program (STP) federal funds. Intersection and signalized improvements occurred at the Sheridan Road intersections with Westerfield Avenue, Lake Avenue, and Isabella Street. Sheridan Road was reconstructed to provide two 11-foot wide through lanes, a 10-foot wide bi-directional center turn lane, and two 4.5-foot bike lanes including the gutter section. Scope of work included pavement reconstruction, storm sewers, watermain, sanitary sewer, lighting, signals, streetscaping and retaining wall. This project won the APWA Project of the Year Award and ACEC - Illinois Special Achievement Award.

South Main Street, Crystal Lake, IL
Senior project manager for the preparation of final contract plans and documents for the widening South Main Street between US Route 14 and Rakow Road from a three lane cross section to a five lane section. Responsibilities included design of three traffic signals, interconnect system, lighting, drainage, detention, drywells for water quality, water main, and construction staging. The project followed the full federal right-of-way acquisition process including plats and legals, and negotiations for 16 properties. Subsurface Underground Engineering (SUE) was used during the design to avoid utility delays during construction.

Elmhurst Memorial Hospital Roadway Improvements, Elmhurst, IL
Senior project manager for the York Street at Brush Hill Road interchange improvements and Butterfield Road at Commonwealth Lane intersection improvements. Responsibilities included traffic studies, environmental analyses, drainage system and detention design, geometric realignment, traffic signal and interconnect design, plat of highway preparation, extensive coordination with Elmhurst Memorial Hospital, and federal funding processing through IDOT BLRS.

North York Street Improvement, Elmhurst, IL

Project manager for planning, design, and construction services for the reconstruction of 0.53 miles of North York Road from Illinois Route 64 (North Avenue) to U.S. Route 20 (Lake Street). A center bi-directional turn lane was added to provide safer travel along York Road and improve accessibility to the adjacent businesses. The project also included new storm and sanitary sewer, watermain, sidewalks, roadway and pedestrian ornamental lighting, traffic signals, and pavement markings.

IL 59 from IL 52 to Caton Farm Road, Will County, IL

QC/QA engineer for the preparation of contract plans and documents for the widening and reconstruction of 3.0 miles of arterial highway to provide two 12-foot wide lanes in each direction with curb and gutter separated by a 16-foot mountable median transitioning to an 18-foot wide landscaped median. The project also includes drainage and storm water detention design, traffic signal modernization and inter-connection plans, field survey, structure borings and analysis, box culvert design, retaining wall designs, and traffic staging plans.

Barrington Road at Higgins Road, Hoffman Estates, IL

Project manager for the preparation a Project Development Report and contract plans and documents for widening and reconstruction of the at-grade intersections of Barrington Road with Illinois Route 72 and Hassell Road. Responsibilities included traffic studies, environmental analyses, drainage system and detention design, geometric realignment, traffic signal and interconnect design, structural borings and retaining wall design, plat of highway preparation, lighting design, and construction staging plans.

Randall Road Corridor, McHenry County, IL

Project director to complete controversial Phase I design (by others) and prepare Phase II contract plans. The new design improves the corridor by widening and reconstructing this vital arterial to provide three (3) through lanes in each direction, a fourth outside auxiliary lane within critical segments, improved access, and dual left turn lanes with exclusive right turn lanes at the major signalized intersections. Triple left turn lanes will be used along Algonquin Road to accommodate access to the major shopping centers on all four corners.

U.S. Route 45 Improvements, Lake County, IL

Project Manager for the preparation of contract plans and documents for the widening and reconstruction of 6 miles of arterial highway to provide two 12-foot wide lanes in each direction with curb and gutter separated by an 18-foot wide landscaped median. Engineering services included local and utility coordination, permitting, drainage and detention, box culverts, traffic signals, survey, lightweight fill, retaining walls, and traffic staging plans.

Lake County Program Management, Lake County, IL

Project Manager the high priority Challenge Bond Program Washington Street project. The roadway was widened to five lanes and replaced the existing at-grade highway-railroad crossing with grade separated crossing by means of new bridge carrying the CN tracks over the roadway. Duties included local and utility coordination, preparing and negotiating the Construction, Maintenance and Ownership Agreement with the CN Railroad. An ICC Petition was also filed for the project.

Grace L. Dysico, PE
QA/QC

Grace has 31 years of experience in management of projects and preparations of Project Development Reports, Environmental Assessments, and Environmental Class of Action Determination documents. She offers extensive knowledge and experience in transportation, rail, roadway, bikeway and pedestrian facilities, NEPA processing, design studies, crash analysis, wetland mitigation review, traffic studies, signal warrants, and public coordination and outreach.

Sheridan Road Improvements Phase I, City of Evanston, IL
Senior Project Manager for a Phase I engineering study of Sheridan Road from South Boulevard to the village limit of Wilmette, to determine the scope and staging of the proposed improvements. TranSystems used the "Vision" of the Lakefront Corridor Master Plan as a guide. Enhancing pedestrian and bicycle safety and access to Northwestern University was a key consideration of this project. Synchro traffic modeling was utilized to study lane utilization in conjunction with the interconnection of traffic signals along Sheridan Road.

Willow Road Improvements, Northfield, IL
Senior project manager/Environmental lead for Phase I services for the improvements of 1.75 miles of Willow Road from IL 43 to I-94. The proposed improvement addresses geometric modifications through either widening/resurfacing or reconstruction to accommodate existing and projected travel demands. TranSystems also conducted an extensive public involvement program based upon the principles of Context Sensitive Solutions.

Golf Road and Skokie Boulevard Intersection Improvements, Skokie, IL
Senior project manager for project development report and contract plans and documents, and construction engineering for the rehabilitation and resurfacing of the intersection of Golf Road and Skokie Boulevard in the Village of Skokie. The project includes additional auxiliary lanes, channelization improvements, sidewalks, roadway lighting, traffic signals, and pavement markings. These improvements are necessary to improve operating capacity and safety of this intersection.

REGISTRATIONS
Professional Engineer: IL, 1991

EDUCATION
B.S., Civil Engineering
University of Illinois, 1985

CERTIFICATIONS
The Institute of Cultural Affairs, Technology of Participation, Group Facilitation Methods, 2008

AFFILIATIONS & MEMBERSHIPS
American Council of Engineering Companies
American Public Works Association

YEARS OF EXPERIENCE
31 (20 with firm)

Old Orchard Road and Skokie Boulevard Intersection Improvements, Skokie, IL
Senior project manager for project development report, contract plans and documents, and construction engineering for the rehabilitation and resurfacing of the intersection of Old Orchard Road and Skokie Boulevard in the Village of Skokie. The project includes additional channelization improvements, sidewalks, roadway lighting, traffic signals, drainage, and pavement markings. These improvements are necessary to improve operations, capacity and safety of this intersection.

Old Orchard Road Corridor Study, Skokie, IL
Senior project manager for the preparation of a feasibility study of the Old Orchard Road Corridor. The study includes land use studies, trip generation calculations, roadway network modeling, review of travel lane needs, Cross Section analyses, interchange configurations studies at the I-94 (Edens) interchange, determination of right-of-way requirements, reviewed intersection improvements at seven intersections, and preparation of traffic impact studies.

Woodfield Road, Schaumburg, IL
Phase I work for the reconstruction of Woodfield Road between Meacham Road and IL Route 53. The project includes additional channelization improvements, sidewalk/bike path, traffic signals, lighting, drainage, landscaping and pavement markings. These requirements are needed to improve operations, capacity and safety of the corridor.

Arsenal/Manhattan Road from Baseline Road to Brandon Road, Will County, IL
Environmental Lead for the preparation of Phase I Engineering services for Arsenal/Manhattan Road from Baseline Road to Brandon Road. The project is funded with federal funds and will comply with FHWA requirements. The project involves preparing a Phase I project report, environmental resource reviews, drainage designs, cross section analysis, ROW determination, and improvements at the Brandon Road intersection. The Brandon Road intersection will require preparation of an Intersection Design Study, traffic volume projections, capacity analysis, geometric designs, and accident analysis.

Quentin Road, Palatine, IL
Senior project manager for the preparation of an Environmental Class of Action Determination (ECAD) Document and Project Development Report to increase capacity on Quentin Road. The project included widening Quentin Road, currently a rural two-lane roadway, to an urban four-lane roadway with a left-turn lane at several locations. The project is flanked by the Deer Grove Forest Preserve. A Programmatic 4(f) and coordination with the Forest Preserve District of Cook County was required. As part of this project, the following improvements will be included: bridge replacement, new drainage system, and grade-separated crossings for the existing equestrian and bicycle trails.

North Aurora Road / EJ&E Underpass, Naperville, IL
Environmental Lead for phase I engineering studies and a project development report for necessary North Aurora Road/EJ&E and BNSF railroad grade separation improvements. Design plans addressed widening the vehicular underpass and increasing its substandard vertical clearance to alleviate a bottleneck. Also developed extensive project coordination protocols for creating two continuous median-separated through-lines both east and west.

David W. Block, PE
Project Manager

David is a civil engineering professional with over 24 years of private consulting experience as a Project Manager, Project Engineer, Design Engineer, and Construction Resident Engineer. He is a clear and direct communicator with versatile and logical problem-solving skills.

Old Orchard Road and Phase I and II, Skokie, IL
Project manager for the preparation of a feasibility study and subsequent Phase I and II for the Old Orchard Road Corridor between Harms Road and Skokie Boulevard. The purpose of the project is to address congestion on the Interstate 94 ramp intersections with Old Orchard Road and along the corridor. The study included land use studies, trip generation calculations, roadway network modeling, review of travel lane needs, cross section analyses, intersection analyses, interchange configuration studies at the Interstate 94 interchange, determination of right-of-way requirements, and preparation of a summary report. The project was split into two segments: West (Harms Road to the Interstate 94 southbound ramps) and East (Interstate 94 northbound ramps to Skokie Boulevard). Federal funding was secured for each segment.

Meacham and IL 62 (Algonquin Road) Intersection, Schaumburg, IL
Project manager for the current Phase I project to update the original Meacham Road Phase I project, including additional intersection turn lanes, additional third eastbound lane on IL 62, updated crash reports, noise analysis study, location drainage study, intersection design studies, and preferred improvement plan.

Woodfield Road, Schaumburg, IL
Project manager for the Phase I work for the reconstruction of Woodfield Road between Meacham Road and IL Route 53. The project includes additional channelization improvements, sidewalk/bike path, traffic signals, lighting, drainage, landscaping and pavement markings. These requirements are needed to improve operations, capacity and safety of the corridor.

State Parkway, Schaumburg, IL
Project manager for design engineering services for the resurfacing of State Parkway between Roselle Road and Plum

REGISTRATIONS
Professional Engineer: IL, 1996

EDUCATION
B.S., Civil Engineering
Valparaiso University, 1991

AFFILIATIONS & MEMBERSHIPS
American Public Works Association
American Society of Civil Engineers

YEARS OF EXPERIENCE
24 (8 with firm)

Grove Road. Associated improvements included drainage structure replacements, intermittent curb and gutter replacement, and driveway and sidewalk ramp replacement.

Skokie Boulevard at Old Orchard Road, Skokie, IL
Project manager for the preparation of contract plans and documents for the resurfacing, rehabilitation, and reconstruction of the intersection of Old Orchard Road and Skokie Boulevard in the Village of Skokie. The project includes additional auxiliary lanes, channelization improvements, sidewalks, roadway lighting, traffic signals, drainage detention, and pavement markings. These improvements are necessary to improve operations, capacity and safety of this intersection.

Golf Road and Skokie Boulevard Intersection Improvements, Skokie, IL
Project manager for the preparation of contract plans and documents for the rehabilitation and reconstruction of the intersection of Golf Road and Skokie Boulevard in the Village of Skokie. The project includes additional auxiliary lanes, channelization improvements, sidewalks, roadway lighting, traffic signals, drainage detention, and pavement markings. These improvements are necessary to improve operating capacity and safety of this intersection.

South Main Street Improvements, Crystal Lake, IL
Project manager for the improvement of South Main Street. The scope of work includes the widening of South Main to provide a five-lane cross section to match the existing cross sections to the north and south of the project. Additional channelization and signal modernization will occur at the intersection of South Main Street/Berkshire Lane and South Main Street/Pyott Road/Virginia Road. The scope of work also includes pedestrian accommodations, drainage and utility improvements, and intersection roadway lighting.

US Route 41 Reconstruction, Chicago, IL
QC/QA engineer for the planning, environmental documentation, design and right-of-way services for the relocation of U.S. Route 41 for the City of Chicago. This major roadway accommodated the redevelopment of a 500 acre site along the Lake Michigan lakefront. The development included residential, commercial, retail and institutional development. The project involved traffic analysis, environmental assessments, roadway design, drainage and hydraulic analysis, streetscape concepts and public involvement. Specific tasks included QC/QA on intersection design studies and traffic signal design plans.

York Road/Brush Hill/Illinois Route 38 Ramps Intersection, Elmhurst, IL
QC/QA engineer for this project which includes improvements on York Street in the City of Elmhurst which include the reconfiguration of the York Street/Brush Hill/Illinois Route 38 Ramps intersection to provide southbound York Street access to westbound Illinois Route 38. These improvements accommodate future traffic from the construction of the Elmhurst Memorial Hospital. The project includes the addition of auxiliary turn lanes at the Brush Hill intersection, reconfiguration of the existing northbound York Street to westbound Illinois Route 38 ramp and traffic signal modernization.

Spring Road and Vallette Street Improvements, Elmhurst, IL
Project manager for the preparation construction plans and specifications for the Local Agency Pavement Preservation (LAPP) project along Spring Road and Vallette Street in the City of Elmhurst, a total distance of approximately 2.5 miles. The scope of work included a 3" mill and overlay of this roadway section. It also involved removing and replacing deteriorated portions of curb and gutter and sidewalks. Areas of extensive deteriorated pavement were patched after the milling and before the overlay was constructed. Structure adjustments and reconstruction as well as parkway restoration was also performed.

Megan A. McDonald, PE, LEED AP
Project Engineer

Megan has nine years of experience in highway design. She has been responsible for the development of highway and intersection geometry, traffic control and staging plans, and development of special provisions. She is proficient in the following software programs: Microstation (V8, V8i, Civil Suite), Geopak, AutoCAD, Microsoft Office, HCS+, HCS 2010, AutoTURN, AutoCAD.

First Street LAFO, Elmhurst, IL
Project engineer. LAFO improvements along First Street from West Avenue to Willow Road. These improvements will include mill and overlay of the roadway section. It will also involve removing and replacing deteriorated portions of the curb and gutter and sidewalks. Areas of extensive deteriorated pavement will be patched after the milling and before the overlay is constructed. Structure adjustments or reconstruction as well as parkway restoration will be performed.

Kirk Rd and Fabyan Pkwy Intersection Improvement, Kane County DOT
Developed exhibits and attended the Public Informational Meeting and Public Hearing to garner comments and input for the proposed improvement. Scope included safety, capacity and feasibility studies, an intersection design study, alternative analyses, concept staging and maintenance of traffic. The proposed improvements will alleviate future congestion and provide a safer and more efficient operation for vehicles, pedestrians, and bicycles through the intersection while maintaining economic growth opportunities. Project construction cost estimated at $9M.

IL 56 (Butterfield Road) Reconstruction, IDOT
Assisted with compiling the final ECAD document for a 6.2 mile section of add-lanes reconstruction from Illinois Route 59 to Naperville Road. Developed and modified exhibits and brochures for the public hearing. Categorized public comments from FHWA/BDE and IDOT to review and distribute a newsletter to the public. Using traffic counts and project traffic volumes, updated HCS+ analysis to improve level of service (LOS) along Illinois Route 56 and the cross streets. Reviewed two years of data to update the crash analysis for the corridor.

Longmeadow Parkway Corridor, Section A, Kane County DOT
Provided recommendations based on the value engineering study for Phase I addendum and Phase II contract plans. Developed geometric alternatives to satisfy the value engineering study and provide an optimized design for the new corridor and intersections within Section A.

REGISTRATIONS
Professional Engineer: IL, 2010

EDUCATION
B.S., Civil Engineering
Arizona State University, 2006

AFFILIATIONS & MEMBERSHIPS
American Society of Civil Engineers (ASCE) – IL Section
o Past Chair Younger Members Group
o Communications Chair & Newsletter Editor
o Director to 2016
IRTBA Green Council Technology and Regulatory Subcommittee Member
ACEC Past Public Transportation Committee Member; Current Environmental Committee Member
Active Transportation Alliance Member

YEARS OF EXPERIENCE
9 (1 with firm)

IL 43/Archer Avenue & IL 43/Cermak Road, IDOT

Project Engineer for all Phase I tasks including initial data gathering, traffic data collection management and HCS analysis, various agencies to complete the Phase I Project Report (CE Group II) for both intersection locations. Pedestrian safety was considered as part of this project with the addition of pedestrian signals and ADA compliant ramps at all four corners. Completed an Intersection Design Study (IDS) for the IL 43/Harlem Avenue intersection for geometrics approval. Provided a mentor-protégé relationship for crash analysis of the 5% accident location and traffic management analysis for resurfacing and median construction.

IL 176 (Deerpass Road to Dean Street), IDOT

Responsible for Phase I tasks including initial data gathering, environmental survey requests, and all geometric related tasks for this Highway Safety Improvement Program (HSIP) project. This project includes adding left turn lanes at all minor leg stop controlled intersections as well as updated guardrail throughout the entire 7.2 mile corridor, shoulder improvements, and rumble strips.

87th Street and Woodward Avenue, DuPage County DOT

Performed initial data gathering, environmental survey requests, capacity and crash analyses, and the Phase I Project Development Report. Project included Phase I engineering services, environmental survey, and limited public involvement to identify capacity and safety improvements for the major arterial intersection. Project construction is estimated at $3.2M.

Swift Road Multi-Use Trail, DuPage County DOT

Responsible for developing the Feasibility Report and the Phase I Report for the design of a 0.75 mile multi-use trail. Evaluated multiple geometries to determine the most cost effective design while minimizing right-of-way and environmental impacts. Led preparation of all public involvement activities including formal public meeting at which public comment was received for final location of the multi-use trail, and received design approval for the Phase I Report.

Weber Road Reconstruction (135th St to Normantown Rd), IDOT

Provided a maintenance of traffic concept plan for the staging along Weber Road and the two side roads. Prepared the Section 404 Permit Application for wetland and Waters of the U.S. impacts along Weber Road and the anti-degradation report for 401 Water Quality Certification. Aided in generating the plans, specifications, and estimate for IDOT submittal. Project includes the preparation of plans, special provisions, and estimates for the widening and reconstruction of Weber Road from south of 135th Street/Romeo Road to south of Normantown Road and the addition of a multi-use path and sidewalk along the corridor. The segment of roadway is located adjacent to the Interstate 55 interchange with Weber Road which is being reconstructed into a diverging diamond interchange.

Lincoln Avenue Median Improvement, Chicago DOT

Using existing traffic counts and ADT, completed turn bay analysis along Lincoln Avenue to determine necessary storage in the new medians. Conducted crash and capacity analyses and study of side street traffic patterns to improve access management and determine Lincoln Avenue median designs. Helped in developing the final plan. Developed innovative roadside solutions and compliant ADA Ramps to minimize localized construction limits. Responsible for submitting final plan preparation of construction documents and bid services, and developing innovative ADA solutions.

Christopher E. Comin, PE
Design Engineer

Chris has experience in transportation design and construction engineering. Chris's strengths include design of horizontal and vertical alignments and analyzing right-of-way impacts from cross sections. He also has significant experience in construction surveying and using the Global Positioning System (GPS).

Old Orchard Road Corridor Study, Phase I and II, Skokie, IL

Design engineer for the preparation of a feasibility study and subsequent Phase I and II for the Old Orchard Road Corridor between Harms Road and Skokie Boulevard. The purpose of the project is to address congestion on the Interstate 94 ramp intersections with Old Orchard Road and along the corridor. The study included land use studies, trip generation calculations, roadway network modeling, review of travel lane needs, cross section analyses, intersection analyses, interchange configuration studies at the Interstate 94 interchange, determination of right-of-way requirements, and preparation of a summary report. The project was split into two segments: West (Harms Road to the Interstate 94 southbound ramps) and East (Interstate 94 northbound ramps to Skokie Boulevard). Federal funding was secured for each segment.

Meacham and Algonquin Road Intersection, Schaumburg, IL

Design and drainage engineer for the current Phase I project to update the original Meacham Road Phase I project, including additional intersection turn lanes, additional third eastbound lane on IL 62, updated crash reports, location drainage study, intersection design studies, and preferred improvement plans.

Woodfield Road, Schaumburg, IL

Design engineer for the Phase I work for the reconstruction of Woodfield Road between Meacham Road and IL Route 53 East Frontage Road. The project includes additional channelization improvements, sidewalk/bike path, traffic signals, lighting, drainage, landscaping and pavement markings. These requirements are needed to improve operations, capacity and safety of the corridor.

REGISTRATIONS
Professional Engineer: IL, 2003

EDUCATION
B.S., Civil Engineering
University of Wisconsin, Platteville, 1997

YEARS OF EXPERIENCE
17 (15 with firm)

Old Orchard Road and Skokie Boulevard Intersection Improvements, Skokie, IL
Design engineer for the preparation of contract plans and documents for the resurfacing, rehabilitation, and reconstructionof the intersection of Old Orchard Road and Skokie Boulevard in the Village of Skokie. The project includes additional auxiliary lanes, channelization improvements, sidewalks, roadway lighting, traffic signals, drainage detention, and pavement markings. These improvements are necessary to improve operations, capacity and safety of this intersection.

Golf Road and Skokie Boulevard Intersection Improvements, Skokie, IL
Design engineer for and the preparation of contract plans and documents for the rehabilitation and reconstruction of the intersection of Golf Road and Skokie Boulevard in the Village of Skokie. The project includes additional auxiliary lanes, channelization improvements, sidewalks, roadway lighting, traffic signals, drainage detention, and pavement markings. These improvements are necessary to improve operating capacity and safety of this intersection.

South Main Street, McHenry County, IL
Project engineer for the improvement of South Main Street. The scope of work includes the widening of South Main to provide a five-lane cross section to match the existing cross sections to the north and south of the project. Additional channelization and signal modernization will occur at the intersection of South Main Street/Berkshire Lane and South Main Street/Pyott Road/Virginia Road. The scope of work also includes pedestrian accommodations, drainage and utility improvements, and intersection roadway lighting.

US Route 30, Frankfort, IL
Design engineer for alternatives analysis, typical sections, horizontal and vertical geometrics, noise analysis, right-of-way impacts, cross sections, traffic projections, and public coordination for the reconstruction of eight miles of rural highway to provide a four-lane urban cross section with a 22-foot median. The project includes improvements at 10 signalized intersections, right-of-way identification, alternative alignment analysis, wetland analysis, coordination for threatened and endangered species, enclosed drainage system, detention, and reconstruction of two culverts and two bridges.

McCormick Boulevard, Evanston, IL
Design engineer for the reconstruction of McCormick Boulevard from Emerson Street to Green Bay Road, approximately 0.9 miles. The project consists of supplemental topographic survey and subsurface investigations including borings and soil profiles, contract documents and detailed plans, special provisions, cost estimates, right-of-way acquisition for 4 parcels, and traffic signal modernization. The roadway profile will be studied in detail to limit impacts to adjacent trees within LADD Arboretum. Project coordination includes the Metropolitan Water Reclamation District of Greater Chicago for permit processing.

Spring Road and Vallette Street Improvements, Elmhurst, IL
Design engineer for the preparation of construction plans and specifications for the Local Agency Pavement Preservation (LAPP) project along Spring Road and Vallette Street in the City of Elmhurst, a total distance of approximately 2.5 miles. The scope of work includes a 3" mill and overlay of this roadway section. It also involved removing and replacing deteriorated portions of curb and gutter and sidewalks. Areas of extensive deteriorated pavement will be patched after the milling and before the overlay was constructed. Structure adjustments and reconstruction as well as parkway restoration was also performed.

Ryan P. Jacox, PE, PTOE
Traffic Signals / Lighting

Ryan has a wealth of knowledge in several areas, including phase I project studies, feasibility studies, traffic impact studies, traffic capacity analysis, Intersection Design Studies, traffic signal system modeling, preparation of contract plans and documents, lighting photometrics and design, land acquisition engineering, construction cost estimation, value engineering, private equity due diligence, and engineering project development. He is well versed in engineering programs such as HCS, Synchro/SimTraffic, Microstation, AGI32, and VISSIM.

Meacham and Algonquin Road Intersection, Schaumburg, IL
Traffic engineer for the current Phase I project to update the original Meacham Road Phase I project, including additional intersection turn lanes, additional third eastbound lane on IL 62, updated crash reports, noise analysis study, location drainage study, intersection design studies, and preferred improvement plan.

Woodfield Road, Schaumburg, IL
Traffic engineer for the Phase I work for the reconstruction of Woodfield Road between Meacham Road and IL Route 53. The project includes additional channelization improvements, sidewalk/bike path, traffic signals, lighting, drainage, landscaping and pavement markings. These requirements are needed to improve operations, capacity and safety of the corridor.

REGISTRATIONS
Professional Engineer: IL, 2006
Professional Traffic Operations Engineer: 2008

EDUCATION
M.B.A., Finance
Washington University,
Olin School of Business, 2002

B.S., Civil Engineering
Washington University, 2001

AFFILIATIONS & MEMBERSHIPS
Institute of Transportation Engineers

YEARS OF EXPERIENCE
15 (9 with firm)

York Road/Brush Hill/IL Route 38 Ramps Intersection, Elmhurst, IL
Traffic engineer for this federally-funded project, which included improvements on York Street in the City of Elmhurst and involved the reconfiguration of the York Street/Brush Hill/IL Route 38 Ramps intersection to provide southbound York Street access to westbound IL Route 38. These improvements accommodate traffic from the recent construction of the Elmhurst Memorial Hospital. The project included the addition of auxiliary turn lanes at the Brush Hill intersection, reconfiguration of the existing northbound York Street to westbound IL Route 38 ramp and traffic signal modernization. TranSystems completed the field survey, traffic and accident analyses, design studies, drainage studies, and environmental studies. The project was processed as a Categorical Exclusion, Type 1. The Wetland Delineations and Preliminary Environmental Site Assessment were performed by a subconsultant.

Butterfield Road/Commonwealth Lane Intersection, Elmhurst, IL
Project manager for this federally-funded project, which included intersection improvements to accommodate future traffic from the construction of Elmhurst Memorial Hospital. Improvements included the addition of a northbound left turn lane on Commonwealth Lane, providing dual left turn lanes onto

westbound Butterfield Road. In addition, a southbound left turn lane and shared through/right turn lane will be provided on the north approach of Commonwealth Lane. A new eastbound right turn lane will be constructed along Butterfield Road. The project included other minor widening and resurfacing within the improvement limits in addition to modernization of the traffic signal equipment and a new lighting system. The project tasks include geometric studies, traffic analysis, drainage, and pedestrian/bicyclist accommodations.

Traffic Signal Designs (US Route 34 at Fort Hill Drive, Hassert Boulevard at Chokeberry Drive), Naperville, IL

Project manager and traffic engineer for the design of a traffic signal installation at the intersection of Hassert Boulevard/111th Street and Chokeberry Drive. The design included a geometric plan, cable plan, phase designation diagram, an interconnect plan, detailed grading plan for sidewalk ramp alterations, a set of special provisions and specifications, and an engineer's estimate of cost. The traffic signal plans and specifications included the installation of emergency vehicle pre-emption and combination street lighting. The project also included design of pedestrian facilities to cross US Route 34/Ogden Avenue at Fort Hill Drive. Pedestrian signals to cross Fort Hill Drive exist but were retrofitted with countdown signals. These improvements included pedestrian signalization with countdown timers, crosswalks, sidewalk and curb ramps adjacent to the intersections where none currently exist. This design included a geometric plan, cable plan, phase designation diagram, and a detailed grading plan for the sidewalk installation and ramps.

Willow Road Improvements, Northfield, IL

Traffic and roadway lighting engineer for Phase I and II services for the improvements of 1.75 miles of Willow Road from IL 43 to I-94. The proposed improvement addresses geometric modifications through reconstruction to accommodate existing and projected travel demands. Intersection and segment photometrics were performed for the entire project corridor, and extensive coordination with a lighting manufacturer was performed, to provide a decorative lighting fixture and pole to match the character of the surrounding community.

Theodore Street/River Road Intersection, Joliet, IL

Project manager for Phase I and II services for the installation of a traffic signal at this previously unsignalized intersection. Capacity and AutoTurn analysis were completed, along with contract plan preparation for the traffic signals, including engineering specifications and an estimate of cost. The project was funded by MFT funding and processed through the IDOT Bureau of Local Roads and Streets.

IDOT Bureau of Programming Project Management, Statewide, IL

Assisted in the review of consultant submitted Traffic Impact Studies and Intersection Design Studies. Acted as a full time employee of the Bureau of Programming, providing support to the state staff and enabling the Bureau to reduce its backlog of submittals requiring review.

IDOT, Schaumburg, IL – (Bureaus of Land Acquisition, Traffic, and Local Roads)

Reviewed over $30 million in phase I project development reports for local road projects; Reviewed over 25 intersection design studies and turning radii plots, reporting necessary modifications to consultants Designed and updated signal coordination and timing plans for over 25 traffic signal systems; and Reviewed traffic signal construction plans.

Jesse L. Vuorenmaa, PE
Drainage Engineer

Jesse has experience in preparation of drainage plans and hydraulic reports. He is proficient in the following software programs: WSP-2, HEC-2, HEC-RAS, HEC-HMS, and Pond Pack. (Y-8, HYDRAFLOW)

Meacham and Algonquin Road Intersection, Schaumburg, IL
Drainage engineer for the current Phase I project to update the original Meacham Road Phase I project, including additional intersection turn lanes, additional third eastbound lane on IL 62, updated crash reports, noise analysis study, location drainage study, intersection design studies, and preferred improvement plan.

York Street at Brush Hill Road, Elmhurst, IL
Drainage engineer for the phase I engineering study for the improvement of York Street from Lexington Street to IL 38. Project scope includes geometric studies, traffic analyses, drainage studies, pedestrian/bicyclist accommodations and traffic signal modernization.

Washington Street, Lake County, IL
Drainage engineer for preliminary engineering and preparation of contract plans and documents for the reconstruction of Washington Street from Illinois Route 21 to U.S. Route 41 in the Village of Gurnee for the Lake County Division of Transportation. Project included work on O'Plaine Road from Elm Road to North Avenue. Project included local coordination, utility coordination, survey, right-of-way acquisition, wetland delineation, soil borings, watershed permits, intersection design studies, pavement design, compensatory storage, culvert design, maintenance of traffic, erosion control, landscape design, traffic signals, traffic signal interconnect, lighting design, and retaining walls.

US Route 45 Improvements, IL 60 to IL 22, Lake County, IL
Drainage engineer for the phase I engineering study for the improvement of US Route 45 from IL 60 to IL 22. The project scope included local coordination, aerial mosaics, field survey, environmental evaluation, environmental coordination, location drainage study, noise analysis, air quality analysis, environmental analysis, environmental

REGISTRATIONS
Professional Engineer: IL, 2009

EDUCATION
M.S., Civil Engineering
Michigan Technological University, 2010

B.S., Civil Engineering
Michigan Technical University, 2003

YEARS OF EXPERIENCE
11 (11 with firm)

commitments, alternative geometric study, accident analysis, traffic management analysis, intersection design studies, ECAD documents, combined design report, public involvement, preferred improvement plan, bridge condition report, wetland impact evaluation, Section 4(f) evaluation, administration, and QA/QC. The project is located within the Indian Creak floodway and floodplain. Four hydraulic reports were prepared for the project.

Wilson Road at Nippersink Road Roundabout, Lake County, IL
Design and drainage engineer for the preliminary engineering for a roundabout at the Wilson Road at Nippersink Road intersection. Scope of project included environmental studies, survey, drainage studies, design studies, public involvement, scoping report and plans.

Cedar Lake Road Extension, Lake County, IL
Drainage engineer and drainage lead for a new highway on new alignment. Work included traffic analysis, environmental coordination, drainage studies, detention calculations, water quality improvements, project development report, intersection design study, alignment, environmental impacts, cost estimates, accident analysis, drainage concepts, right-of-way impacts, and public coordination.

22nd Street, DuPage County, IL
Drainage engineer for the widening and reconstruction of 1.3 miles of 22nd Street from west of Illinois Route 56 (Butterfield Road) to just west of Illinois Route 83. The project provides three, 12-foot lanes in each direction separated by a 30-foot wide barrier median. Combination concrete curb and gutter with closed drainage systems, sidewalk, traffic signal modernization and interconnection are also required. Geotechnical roadway borings and analysis are required.

Quentin Road, Cook County, IL
Project engineer for the preparation of an Environmental Assessment (EA) and Combined Design Report to increase mobility along Quentin Road. The project included widening Quentin Road as well as the following improvements: bridge replacement, new drainage system, bike path, and potential grade-separated crossings for the existing equestrian and bicycle trails.

IL 59 from IL 52 to Caton Farm Road, Will County, IL
Design engineer for the preparation of contract plans and documents for the widening and reconstruction of 3.0 miles of arterial highway to provide two 12-foot wide lanes in each direction with curb and gutter separated by a 16-foot mountable median transitioning to an 18-foot wide landscaped median. The project also includes drainage and storm water detention design, traffic signal modernization and inter-connection plans, field survey, structure borings and analysis, box culvert design, retaining wall designs, and traffic staging plans.

North Aurora Road/EJ&E and BNSF Grade Separation, Naperville, IL
Drainage engineer for the Phase I engineering studies for the improvement of the North Aurora Road/EJ&E and the BNSF grade separation. The scope of the project includes major improvements of the EJ&E/BNSF bridge at North Aurora Road to accommodate the widening and reconstruction of the currently narrow vehicular underpass. Roadway designs will also address lowering the roadway and defining drainage and lighting improvements. Additionally, the designs will provide a dedicated passageway for pedestrian and bicycle traffic.

Brian L. Fairwood
Funding

Brian has 22 years of experience with planning reports, contract plan preparation, and coordination for municipal projects including roadway and intersection geometrics, bikeway and pedestrian facilities, streetscape design, capacity analysis, traffic and accident studies, signal warrants, right-of-way requirements, funding analysis, and public coordination and involvement. Brian has also worked with our clients within the Chicago region in utilizing more than 40 distinct funding sources for transportation improvements. He specializes in securing and processing "outside dollars" for our clients. His expertise in the area of funding has laid the foundation for accelerating projects through to the construction phase.

Meacham and Algonquin Road Intersection, Schaumburg, IL
Project director for the current Phase I project to update the original Meacham Road Phase I project, including additional intersection turn lanes, additional third eastbound lane on IL 62, updated crash reports, noise analysis study, location drainage study, intersection design studies, and preferred improvement plan.

Woodfield Road, Schaumburg, IL
Project director for the Phase I work for the reconstruction of Woodfield Road between Meacham Road and IL Route 53. The project includes additional channelization improvements, sidewalk/bike path, traffic signals, lighting, drainage, landscaping and pavement markings. These requirements are needed to improve operations, capacity and safety of the corridor.

State Parkway, Schaumburg, IL
Project director for design engineering services for the resurfacing of State Parkway between Roselle Road and Plum Grove Road. Improvements included drainage structure replacements, intermittent curb and gutter replacement, and driveway and sidewalk replacement.

Old Orchard Road and Skokie Boulevard Intersection Improvements, Skokie, IL
Project director for project development report, contract plans and documents, and construction engineering for the rehabilitation and resurfacing of the intersection of Old

EDUCATION
Certificate of Completion, Highway Program Financing-Certificate
National Highway Institute, 2001

B.S., Civil Engineering
Marquette University, 1993

AFFILIATIONS & MEMBERSHIPS
American Public Works Association
Chicago Metro Chapter – Fox Valley Branch

YEARS OF EXPERIENCE
22 (22 with firm)

Orchard Road and Skokie Boulevard in the Village of Skokie. The project includes additional channelization improvements, sidewalks, roadway lighting, traffic signals, drainage, and pavement markings. These improvements are necessary to improve operations, capacity and safety of this intersection.

Arsenal/Manhattan Road from Baseline Road to Brandon Road, Will County, IL
Project Director for the preparation of Phase I Engineering services for Arsenal/Manhattan Road from Baseline Road to Brandon Road. The project is funded with federal funds and will comply with FHWA requirements. The project involves preparing a Phase I project report, environmental resource reviews, drainage designs, cross section analysis, ROW determination, and improvements at the Brandon Road intersection. The Brandon Road intersection will require preparation of an Intersection Design Study, traffic volume projections, capacity analysis, geometric designs, and accident analysis.

Elgin Central Business District (CBD) Street Revitalization Program, Elgin, IL
Project director for design and construction engineering services for the Central Business District (CBD) Street Streetscape Program. The improvements include the replacement of sidewalks and curb and gutter, paver streetscape accents, planters with irrigation, decorative street lights, street furniture, additional street trees and repaving of the streets to accommodate parking and bike lanes. A substantial public relations/information effort is being performed during the course of the project.

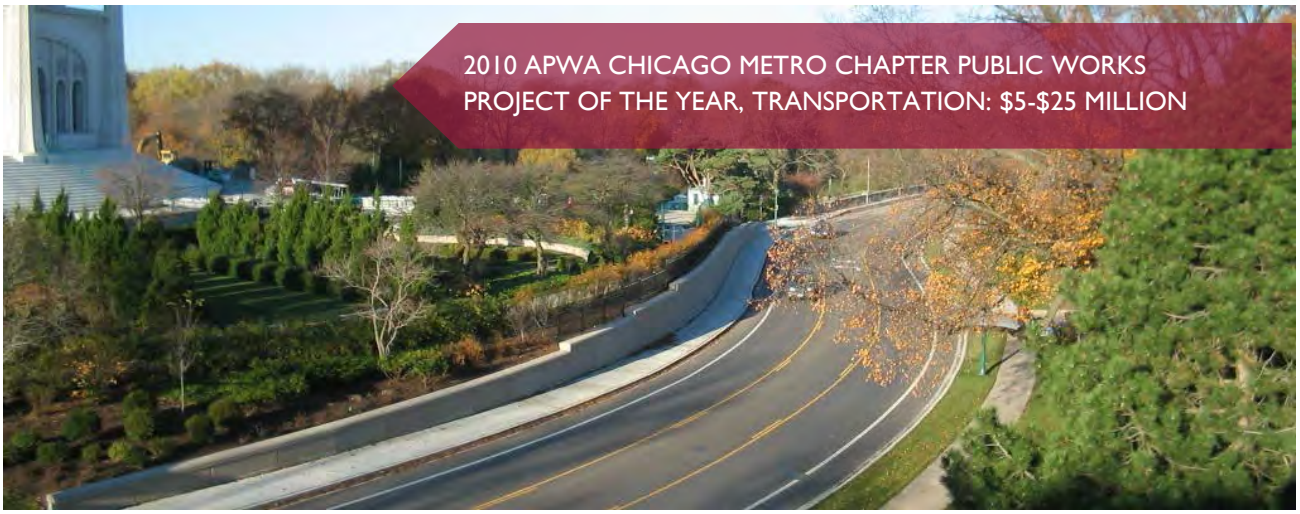
Martingale Road Improvement, Village of Schaumburg, IL
Project engineer for preparation of a Project Development Report, Contract Plans, and Contract Documents for reconstruction of 0.85 miles of roadway. The project included roadway reprofiling, curb and gutter, landscaped median with irrigation system, new street lighting, signal modernization, intersection improvements, and public coordination. Extensive coordination was performed with the adjacent property owners to provide compatibility of pedestrian spaces with the landscaping and streetscaping themes.

Woodfield Road/National Parkway, Schaumburg, IL
Design engineer for the preparation of Contract Plans and Documents for 2.5 miles of roadways reconstruction within the Village of Schaumburg. The project included new storm sewer and culvert design, roadway reprofiling, extensive streetscape work, bikeway design and pubic coordination. Extensive coordination was performed with the adjacent developers to provide compatibility of pedestrian spaces and landscaping themes.

Historic Third Street Improvements, Geneva, IL
Project engineer for seven blocks Third Street rehabilitation in Geneva's downtown historic business district. The project involved roadway and streetscape improvements. Roadway items include street paving, curb and gutter reconstruction, drainage design, roadway striping and lighting, and sanitary sewer and watermain reconstruction. The streetscape items include landscaping, decorative brick paver carriage walls and sidewalks, historic and informational kiosks, signage, site furnishings, and pedestrian walk lighting. Extensive public coordination was involved to reach a consensus with the stakeholders for the streetscape elements of the project. Public meetings, design charettes, newsletters, and a project website were all components of the public involvement plan.

Funding Assistance, Various Communities, IL
Project manager for funding management assistance for various transportation improvements within a number of communities as part of their annual capital improvements program. Prepared funding applications for State and Federal funding programs such as STP, CMAQ, ITEP, IDNR, and Illinois FIRST

SIMILAR EXPERIENCE



Sheridan Road Improvements | Wilmette, IL

The Sheridan Road project is located in a largely residential area between 10th Street in the Village of Wilmette and Isabella Street in the City of Evanston, IL, a total distance of 2.16 miles. Over 17,000 motorists annually travel this scenic corridor that offers views of Lake Michigan and access to the Baha'i House of Worship, Gillson Park and Wilmette Harbor.

Roadway reconstruction served as an opportunity to visit every aspect of corridor improvement. The project was processed as a Jurisdiction Transfer, utilizing Surface Transportation Program federal funds. At the outset, stakeholders and residents identified the following eight goals for the project:

- Reduce accidents and improve safety
- Improve roadway quality
- Replace utilities
- Separate drainage system
- Improve pedestrian friendliness
- Add bicycle facilities
- Build streetscape enhancements
- Save trees and preserve the beauty of Sheridan

The existing roadway consisted of four 10-foot lanes and lacked channelization at the signalized intersections. The reconstruction provides two through lanes, a bi-directional center turn lane, and two bike lanes. The addition of dedicated left turn lanes at the intersections has effectively

CLIENT
Village of Wilmette, IL

CLIENT CONTACT
Brigitte Berger
Engineering and Public Works Director
(847) 853-7627

IDOT BLRS CONTACT
Alex Househ
Program and Office Engineer
(847) 705-4410

CONSTRUCTION COST
$20,000,000

COMPLETION DATE
2009

reduced accidents. The center turn lane improves safety for users accessing the 135 driveways and 22 side streets.

Most of the existing utilities were original and more than 100 years old. The combined sewer system had a history of surcharging and backups. A separate storm sewer with new outfalls to the North Shore Channel was built to accommodate surface drainage and the existing combined sewer was replaced. These upgrades have dramatically improved drainage and sewer conditions on Sheridan Road and for the upstream system. Similarly, the existing water main was a century old and plagued with breaks. Replacing the entire water main infrastructure ensured the integrity of the new pavement by minimizing future utility cuts and damage from breaks.

Bike lanes were added to accommodate the many commuter, recreational and competitive bicyclists who routinely travel on Sheridan Road. Protecting trees was paramount for the area's residents. The new roadway is one foot narrower than the existing 4-lane section, accommodating hundreds of mature parkway trees. Horizontal and profile changes were carefully designed to minimize disruption to the parkways.

Sheridan Road is also a popular destination for local and visiting pedestrians. A beautification grant (ITEP) was used to improve pedestrian friendliness and streetscape. An existing timber retaining wall was removed and replaced with a precast exposed aggregate finish soldier pile retaining wall along the Baha'i House Worship frontage. The wall was relocated to allow a safe pedestrian path. The project also incorporated roadway enhancements including brick paver crosswalks, new entrance signs for Gillson Park, and ornamental traffic signals and street lighting.

The project provides a safe, efficient, smooth-riding facility which complements the adjacent residences, businesses, and parks. As a result of the cost saving efforts of all parties involved, the as-built project was approximately $1.5 million under the awarded contract value.

IDOT Willow Road Corridor | Northfield, IL

Phase I and Phase II engineering services for the improvement of Willow Road from IL 43 to I-94 (approximately 1.75 miles). The existing roadway was one (1) lane in each direction (undivided) with shoulders. The proposed improvement addressed project needs and deficiencies through widening/resurfacing to accommodate existing and projected travel demands.

TranSystems investigated a variety of viable alternatives as well as an extensive evaluation of bicycle and pedestrian accommodations. Phase I work included performing all work associated with the preparation of a preliminary engineering report (Combined Design Report) and environmental studies for an Environmental Assessment.

The Phase I work tasks involved data collection including traffic counts, preparation of base maps and mosaics, ground survey, crash analysis, traffic studies including traffic flow simulations, geometric studies, traffic management analysis, drainage studies, cost estimates, complete bridge inspections, preparation of a Bridge Condition Report and all other work necessary to complete the Phase I studies.

A key planning tool included a public involvement program based upon the principles of Context Sensitive Solutions (CSS). The CSS tasks involve website development, stakeholder involvement plan, newsletters, and Community Advisory Group coordination.

The recommended plan for Willow Road improved safety and mobility while minimizing environmental impacts, avoiding land acquisition, and enhancing community character. No permanent right-of-way acquisition was required for the project.

CLIENT
Illinois DOT

CLIENT CONTACT
John Fortmann
Deputy Director/Region 1 Engineer
(847) 705-4118

Long Tran
Consultant Project Engineer
(747) 705-4232

CONSTRUCTION COST
$25,000,000

COMPLETION DATE
2013

Skokie Boulevard Improvements | Skokie, IL

Old Orchard Shopping Center, by far the largest commercial business in the Village of Skokie, years ago began outgrowing its ability to efficiently access its surrounding roadway network. Left unattended, the congestion on Skokie Boulevard, Golf Road, and Old Orchard Road would become unmanageable. Understanding the significance of the problem, the Village selected TranSystems to provide solutions to improve the capacity and safety of the corridor and divide it into two phases to make it fiscally feasible.

Golf Road and Skokie Boulevard Intersection Improvements
The Village of Skokie received STP funding for the much needed improvements for the intersection of Golf Road (IL Rt. 58) and Skokie Boulevard (US 41). The Village selected TranSystems to provide engineering services for all three phases of the project.

The intersection improvements include reconstruction and widening, channelization improvements, patching, resurfacing, modular block retaining wall construction, traffic signals, lighting, signing/striping, and landscaping. Prior to the improvement, the intersection was susceptible to frequent flooding. The newly constructed roadway and intersection now provide a well-drained roadway.

Communication with the adjacent property managers, completing utility relocations during construction, and opening all lanes to traffic before the Holiday shopping season was a vital part of the success of this project. The economic stability of this commercial corridor is the lifeblood of the Village of Skokie.

CLIENT
Village of Skokie, IL

CLIENT CONTACT
Erik Cook
Village Engineer
(847) 933-8231

IDOT BLRS CONTACT
Alex Househ
North Division Field Engineer
(847) 705-4410

CONSTRUCTION COST
$4,900,000 – Golf at Skokie
$6,100,000 – Old Orchard at Skokie

COMPLETION DATE
2011 – Golf at Skokie
2013 – Old Orchard at Skokie

Old Orchard Road at Skokie Boulevard Intersection Improvements
This project provided the second phase of improvements to Skokie Boulevard along Old Orchard Shopping Center, building on the Golf Road and Skokie Boulevard Intersection Improvements project. The Village of Skokie selected TranSystems to continue both design and construction engineering services.

The project included reconstruction, rehabilitation, and resurfacing, additional channelization improvements, sidewalks, roadway lighting, traffic signals, drainage, pavement markings, and landscaping. These improvements were much needed to improve capacity and safety of this corridor.

Extensive coordination with adjacent property owners and IDOT was required to maintain access for local businesses along Skokie Boulevard.

Project Coordination
- *Illinois DOT*, *FHWA*, and *North Shore Council of Mayors* for STP funding.
- *Illinois DOT* for Golf Road and Skokie Boulevard (US Route 41) Traffic Signal Systems.
- *Cook County Department of Transportation and Highways* for Old Orchard Road (County Route) and funding participation.
- *Old Orchard Mall* for driveway locations and maintenance of traffic.
- *Local Businesses* and residents for right-of-way acquisition.
- *Cemetery* for drainage conditions

Old Orchard Road Corridor | Skokie, IL

Old Orchard Road (County Route A83) in the Village of Skokie is home to significant existing development between Harms Road and Skokie Boulevard (US 41), including the Old Orchard Mall and the Cook County Circuit Courthouse. Recent developments have been constructed including three, 20-story condominium towers, various office buildings and the National Holocaust Museum. An interchange with I-94 (Edens Expressway) is located at the center of the corridor, experiencing significant backups from the mall during the busy holiday shopping season.

The Village of Skokie has commissioned TranSystems to conduct three progressive engineering assignments: 1) Corridor Feasibility Study, 2) Phase I Preliminary Engineering, and 3) Phase II Design Engineering.

The first assignment was the preparation of a comprehensive Corridor Feasibility Study. It was used as a planning tool and closely coordinated with the Cook County Division of Transportation and Highways and property owners within the 1.2 mile segment. The study involved system-level traffic and operational analysis to identify effective roadway improvements along the corridor and its intersections, as well as assessment of several I-94 interchange improvement scenarios. TranSystems performed land use studies and extensive traffic studies to quantify existing and projected travel behavior and patterns. The goal was to assess existing conditions and recommend improvement priorities which incorporated various stakeholder interests, such as

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Village of Skokie, IL

CLIENT CONTACT
Erik Cook
Village Engineer
(847) 933-8231

IDOT BLRS CONTACT
Fawad Aqueel
Federal Aid Program Engineer
(847) 705-4021

CONSTRUCTION COST
$11,000,000

COMPLETION DATE
2016

Skokie's desire to incorporate aesthetic elements including landscaped medians suitable for a major Village entryway and a separate bike path.

TranSystems' tools included an Origin-Destination Study that analyzed northbound to eastbound ramp traffic as well as 12-hour and 16-hour traffic counts for five existing and two proposed signalized intersections. Field observations were conducted on "Black Friday" to document peak mall traffic issues. Trip generation calculations for developments were prepared for the design years 2015, 2030, and 2040. The project team did roadway network modeling, performed reconfiguration studies for the I-94 interchange, reviewed intersection improvements for the seven intersections and determined right-of-way requirements. SYNCHRO software was used to analyze arterial traffic flow through the signalized intersections. As geometric improvements were developed, competing stakeholder interests, such as minimization of right-of-way needs, were kept in mind.

TranSystems' recommendations ranged from improvements that could be effected without new construction to a 30-year plan for interchange reconfiguration. The plan included optimization of the traffic signal interconnect system, widening the northbound interchange exit ramp from one to two lanes, adding a third eastbound lane on Old Orchard Road, and providing better access control by closing some side street entrances and moving them to more appropriate locations.

Shortly after the study was completed, TranSystems was retained to move forward with Phase I engineering, the second assignment. The Project Development Report received design approval in December 2014. During Phase I TranSystems proactively held meetings with mall officials, developers and property owners to coordinate the improvements while maintaining important access for local businesses and residents along the corridor. Coordination also occurred with Cook County Department of Transportation and Highways as well as the Illinois Department of Transportation. Funding and construction staging and phasing were discussed. IDOT agreed to proceed with the reconstruction of the bridge carrying Old Orchard Road over I-94. CCDOTH agreed to participate in the local funding match. The Village of Skokie will continue to be the lead agency.

For Phase II implementation, the Corridor has been divided into three parts: 1) the West Section (Woods Drive to the Edens Expressway); 2) the bridge over the Edens (IDOT project); and 3) the East Section (Edens Expressway to Skokie Boulevard). TranSystems is beginning Phase II contract plans and documents preparation for the East Section, the third assignment. The project is scheduled for a 2016 construction letting. It will be coordinated with the IDOT bridge project and subsequently followed-up by the Phase II of the West Section.

South Main Street: Rakow Rd - Route14 | Crystal Lake, IL

The City of Crystal Lake requested Phase II professional design engineering services for the improvement of South Main Street. The project limits are Rakow Road to US 14 with the actual construction limits being north and south of these roadways, respectively.

South Main Street north of Virginia Road is under the jurisdiction of the City of Crystal Lake. Virginia Road and Pyott Road are both under the jurisdiction of the McHenry County Division of Transportation (MCDOT). The lead agency for the project will be the City of Crystal Lake with MCDOT participating in reviews and decisions as well as participating financially for the roadways owned by MCDOT.

The scope of work includes the widening of South Main to provide a five-lane cross section to match the existing cross sections to the north and south of the project. Additional channelization and signal modernization will occur at the intersection of South Main Street/Berkshire Lane and South Main Street/Pyott Road/Virginia Road. The scope of work also includes pedestrian, drainage and utility improvements.

Project Work Tasks

- Project coordination and/or public involvement
- Additional field survey
- Additional pavement and soils investigation
- Utility coordination
- Obtain all permits for construction
- Perform a special waste preliminary site investigation
- Prepare all right-of-way plats, legal descriptions and easement documents
- Conduct appraisals and negotiations per IDOT requirements
- Prepare construction plans and specifications

CLIENT
City of Crystal Lake, IL

CLIENT CONTACT
Abigail Wilgreen
City Engineer
(815) 356-3605

IDOT BLRS CONTACT
Fawad Aqueel
Federal Aid Program Engineer
(847) 705-4021

CONSTRUCTION COST
$6,000,000

COMPLETION DATE
2014

York Street at Brush Hill Road Intersection Improvements | Elmhurst, IL

The project included improvements on York Street in the City of Elmhurst from Lexington Street to IL Route 38, including the reconfiguration of the Brush Hill intersection to provide southbound York Street access to westbound IL Route 38. The project included the addition of auxiliary turn lanes at the Brush Hill intersection, reconfiguration of the existing northbound York Street to westbound IL Route 38 ramp and traffic signal modernization. TranSystems completed the field survey, traffic and accident analyses, design studies, drainage studies, environmental studies and the Project Development Report. TranSystems subsequently was retained by the City of Elmhurst to complete Phase II Design engineering and Phase III Construction Engineering for the project.

CLIENT
City of Elmhurst, IL

CLIENT CONTACT
Cori Tiberi
Assistant Public Works Director
(630) 530-3777

CONSTRUCTION COST
$2,500,000

COMPLETION DATE
2011

Elmhurst Hospital Signal Improvements | Elmhurst, IL

Five major signalized intersections along the York Street and Butterfield Road (IL Route 56) Corridors were improved to accommodate future traffic generated from the new Elmhurst Memorial Hospital that opened in 2011. TranSystems assisted the City in securing Federal STP & CMAQ funds for these improvements. During the project, additional CMAQ funds were requested and approved to cover increased ROW and construction costs. IDOT BLRS processing took place due to jurisdiction and funding.

Phase I, II, and III engineering services were provided. Specific tasks included traffic studies; roadway design; geometrics (channelization and a new interchange ramp); traffic signal and interconnect design; pedestrian/bicyclist accommodations; right-of-way acquisition; permitting; and extensive coordination with Elmhurst Memorial Hospital, office/medical buildings, local businesses, an assisted living center, and fire station.

The extensive coordination effort was focused on maintaining and improving safe access to all properties along the corridor. IDOT initially wanted to restrict access at many locations. TranSystems led high level meetings with IDOT's District Engineer and key staff, ensuring the City of Elmhurst's business community was not negatively impacted by the improvements. A direct result of these meetings was IDOT allowing: a new interchange ramp, full access entrances, additional driveways, relocated driveways, and median openings. Listening and working directly with the property owners, during all phases of the project, ensured that there were no surprises and the project was successful.

CLIENT
City of Elmhurst, IL

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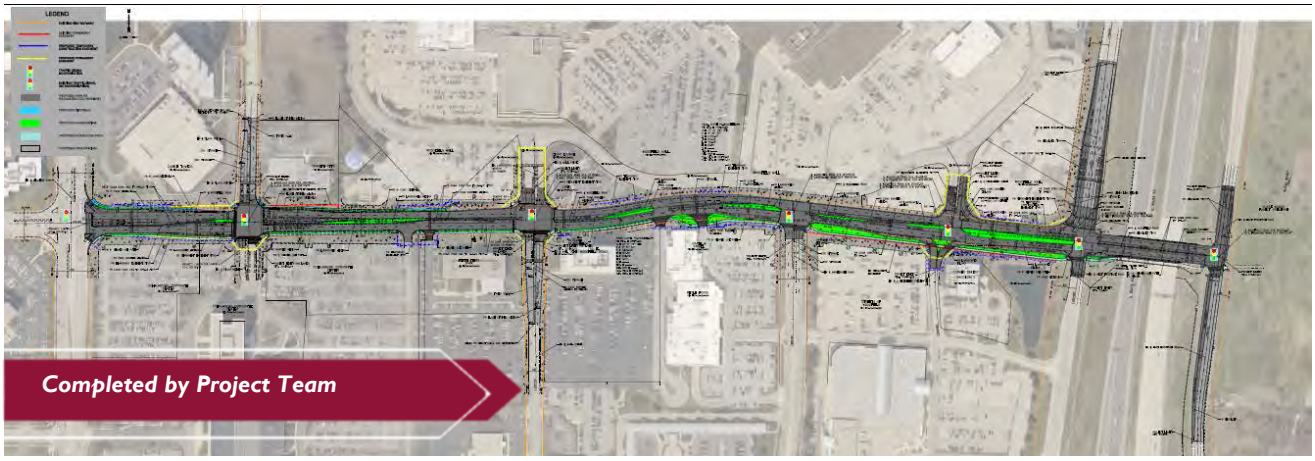
IDOT BLRS CONTACT
Marilin Solomon
Program and Office Engineer
(847) 705-4407

CONSTRUCTION COST
$5,000,000

COMPLETION DATE
2013



Woodfield Roadway Improvements | Schaumburg, IL

The Village of Schaumburg selected TranSystems to provide Phase I preliminary engineering services for Woodfield Road between Meacham Road and the IL Route 53 East Frontage Road. Woodfield Road is a major collector route within Schaumburg's corporate and shopping district, providing access to Woodfield Mall, Streets of Woodfield, and multiple corporate centers including Schaumburg Corporate Center, home to TranSystems. Woodfield Road connects Meacham Road on the west end, a north-south arterial route, to the IL 53/290 interstate system on the east end. Woodfield Road has two lanes in each direction with auxiliary turn lanes and traffic signals at seven intersections. The proposed improvements include reconstructing the pavement, modernizing the traffic signals, and constructing additional auxiliary turn lanes as demanded by 2040 traffic.

TranSystems managed this project with STP funding through IDOT's Bureau of Local Road and Streets, regularly coordinating with staff for environmental processing and project program information.

TranSystems employed Synchro, a dynamic traffic modeling program, to evaluate complicated existing traffic patterns and propose a traffic network that meets the needs for projected 2040 traffic. The traffic analysis was coordinated and approved through IDOT's Bureau of Programming and Traffic.

CLIENT
Village of Schaumburg, IL

CLIENT CONTACT
Kristin Mehl
Senior Civil Engineer
(847) 923-6618

IDOT BLRS CONTACT
Alex Household
North Division Field Engineer
(847) 705-4410

CONSTRUCTION COST
$10,300,000

COMPLETION DATE
2016 – Phase I Approval

Elgin Bikeway-Route 1-Master Plan Northeast Quadrant | Elgin, IL

In order to promote bicycle use, the City of Elgin put together a Bicycle Master Plan. This plan shows major routes to the far reaches of the community and smaller branches once the major corridors are established. Bikeway Route 1 is one of these corridors through the Northeast Quadrant of the City, designed to link Downtown Elgin with an existing trail in the northeast corner that extends into neighboring Hoffman Estates.

This project entailed Preliminary design (Phase I) for the bikeway route. At the onset of the project, the entire route was to be on-street utilizing shared lanes however, though community meetings, it was determined that an off-street portion near the northeast limit would be necessary due to parking restrictions.

Project tasks included field surveys, exploration of alternatives, community involvement, IDOT/FHWA coordination, and preparation of a project report.

CLIENT
City of Elgin, IL

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IDOT BLRS CONTACT
Marilin Solomon (Phase 1)
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Fawad Aqueel (Phase II)
(847) 705-4021

COMPLETION DATE
2012

Virginia Street Corridor | Crystal Lake, IL

The Virginia Street Corridor from Crystal Lake Avenue to Teckler Boulevard is an important portion of roadway along US 14 within the City of Crystal Lake. The Streetscape portion of the Corridor accommodates 33,000 vehicles per day and is home to over 50 businesses, including 10 restaurants, four gas stations, two motels, and a grocery store. Not only does this section of US 14 serve as a vital commercial corridor for the City of Crystal Lake, but it also serves commuters as a major arterial roadway linking numerous communities within the region. Virginia Street provides access to the two nearby Metra Stations within the City. Visitors also use the roadway when traveling to Crystal Lake Main Beach and the newly constructed Three Oaks Recreational Area.

The City of Crystal Lake recognized the economic significance and potential for this roadway corridor, and included the project in the City's long range Redevelopment Plan. This effort is indicative of the strong commitment and desire on the part of the City to revitalize the Project Area as an essential part of Crystal Lake's economic development and fiscal health. The goal of the Redevelopment Plan is to strengthen the employment, office, and commercial components within the Project Area. This was done through the maintenance and

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City of Crystal Lake, IL

CLIENT CONTACT
Abigail Wilgreen
City Engineer
(815) 356-3605

CONSTRUCTION COST
$4,200,000

COMPLETION DATE
2011

improvement of existing facilities, and redevelopment of existing obsolete and blighted buildings or vacant land for new and expanded uses. The Project Area falls within the boundaries of a TIF district and the Redevelopment Plan intended to provide the framework for improvements within the district over the 23-year life of the TIF. Funding for the roadway and streetscape project utilized TIF, State and MFT funds.

The improvements to Virginia Street were much needed and warranted as detailed below:

- Poor, deteriorated, and rutted roadway surface conditions.
- Inadequate drainage.
- Numerous settled manhole frames and lids.
- Substandard curb and gutters, sidewalks, parking, and lighting.
- Pedestrian ways that were not clearly designated or inviting.
- Overall condition of corridor was outdated, non-inviting, and in need of replacement.
- The City entered an agreement with Curran Contracting Company to construct the roadway and streetscape improvements. TranSystems was selected to perform construction engineering services.

The completed project provides a safe, efficient, smooth riding, properly drained road surface, improved roadway and pedestrian lighting, and protected parking adjacent to businesses. The eye catching attractive streetscaping elements consist of brick pavers, decorative crosswalks, ornamental lighting, stone gateway monuments, benches, bike racks, and planters with decorative railing to enhance the adjacent commercial properties and McCormick Park.

Elgin CBD Infrastructure Improvements and Streetscape | Elgin, IL

Elgin was experiencing considerable redevelopment of its older downtown Central Business District (CBD). The anticipated increase in traffic demanded that the streets and sidewalks be repaired and enhanced. This included replacement of sidewalks and curb and gutter with new paver streetscape accents, planters with irrigation, decorative street lights, street furniture, parkway trees and repaving of the roadways. TranSystems directed a substantial public relations/information effort, including public meetings, newsletters, and project updates via a Website, handouts and mailings.

In addition to the above work, the underground utilities also needed to be reconditioned. The water main and water services in the CBD were old, buried deeper than necessary due to street grade changes over the years and not easily repairable. The storm and sanitary sewers have been inspected and repaired in the past but also need to be evaluated and any recommended repairs addressed.

To oversee the CBD Improvement Project, the City of Elgin engaged the services of TranSystems to provide design and construction services for water main and water service replacement, streetscape amenities, and street resurfacing. The design team engaged the public in a year-long planning process to develop a master plan document for the five-year program. This effort included numerous public meetings, design charettes, newsletters, and a project website. As a result of the project's success, three more phases were added.

Both the surface and underground work had a high impact on the residents and businesses in the area. For this reason, construction needed to be well planned and executed in order to maintain reasonable access during construction. The general plan for the program was for the utility work to occur the year before the surface improvements. The project was laid out such that surface improvements began in 2007 and will be concluded in 2015. In order to maintain this proposed schedule, the underground utility work for the first year of the surface improvements was initiated in 2006.

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Joseph Evers
City Engineer
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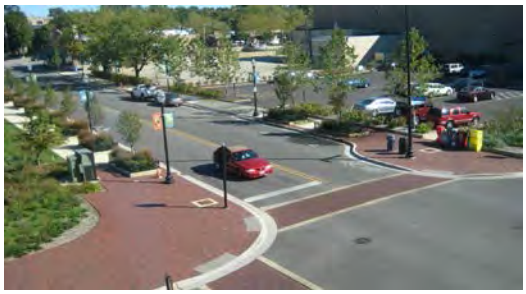
CONSTRUCTION COST
$35,000,000 (est.)

COMPLETION DATE
2016



REFERENCES

CLIENT REFERENCES

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Wayne Township Road District
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FEE STRUCTURE

Fee Structure

Fee

TranSystems proposes a not to exceed fee of $178,556.41 for the Phase I base scope of work identified in Section 1.

Cost Savings

Easements

The need for easements adds cost and can delay a project. As was done for Sheridan Road, we will avoid the need for right-of-way by engineering a roadway profile that would not require driveway easements.

Funding

TranSystems previously assisted the Village in securing STP funding for the Central Avenue project. Consequently, we have a thorough understanding of this project and have already had a part in performing the initial analyses required for the funding application. We would like to take the next step and move that initial analysis into formal Preliminary Engineering Studies. TranSystems will continue to work with the Village and IDOT to identify additional funding sources. Since the project involves pedestrian and bicycle improvements, CMAQ and ITEP funding sources are likely candidates that could potentially be secured.

ITEP is scheduled to have a call for projects in 2016. On-road bicycle facilities are eligible. Streetscape projects are eligible if part of a roadway project. Community improvements to address storm water management, control, and water pollution prevention or abatement related to highway runoff are also eligible. We will seek ITEP funds for bike, streetscape and combined sewer separation improvements.

Recycled Materials

The use of recycled materials is good for the environment and provides additional cost savings. We recommend working within the IDOT "shell" of HMA material selection. However, for a project of this magnitude it would be prudent to entertain increased recycling opportunities such as HMA (RAP), HMA (Recycled Rubber Tires and Shingles), Concrete Curb and Gutter (Fly Ash), Sub-base, Type B (Crushed

Concrete), Trench Backfill (Construction and demolition debris sand as a fine aggregate for trench backfill), etc.

Optional Services

Streetscaping & Beautification Enhancements

At the end of this section we have included an optional scope and fee of $29,240 if the Village desires to engage Hitchcock Design Group (HDG). They would be used to engage the public and establish consensus of the preliminary streetscape elements that could be incorporated along the corridor and within the Central Business District. This work could be completed as part of the Phase I engineering or included during Phase II, as was done for Sheridan Road. This work would be eligible to receive ITEP funds.

COST PLUS FIXED FEE
COST ESTIMATE OF CONSULTANT SERVICES

FIRM	**TranSystems**			**DATE**	**04/22/16**
PSB	**Central Avenue**	**OVERHEAD RATE**	**1.539**		
PRIME/SUPPLEMENT	**Prime**	**COMPLEXITY FACTOR**	**0**		

ITEM	MANHOURS (A)	PAYROLL (B)	OVERHEAD & FRINGE BENF (C)	IN-HOUSE DIRECT COSTS (D)	FIXED FEE (E)	Outside Direct Costs (F)	SERVICES BY OTHERS (G)	TOTAL (B-G)	% OF GRAND TOTAL
Project Coordination	38	1,618.95	2,491.57	28.00	600.09			4,738.61	2.65%
Field Surveys	32	1,293.21	1,990.25		476.10		40,498.36	44,257.92	24.79%
Traffic and Crash Analysis	88	3,647.42	5,613.38		1,342.82	1,000.00		11,603.61	6.50%
Preliminary Design Studies	272	11,216.22	17,261.76		4,129.31			32,607.28	18.26%
Drainage and Utilities Studies	84	3,553.34	5,468.59		1,308.18	81.00		10,411.11	5.83%
Environmental Studies	36	1,523.80	2,345.13		561.00		5,000.63	9,430.56	5.28%
Preferred Improvement Plans	112	4,642.54	7,144.88		1,709.18	215.00		13,711.60	7.68%
Village, IDOT, Public Meetings	256	10,799.76	16,620.83	168.00	4,000.34	660.00		32,248.93	18.06%
Project Development Report	112	4,766.00	7,334.88		1,754.63	719.00		14,574.51	8.16%
QA/QC Plan & Reviews	32	1,710.36	2,632.25		629.68			4,972.29	2.78%
TOTALS	1062	44,771.61	68,903.50	196.00	16,511.31	2,675.00	45,498.99	**178,556.41**	100.00%

AVERAGE HOURLY PROJECT RATES

FIRM TranSystems
PSB Central Avenue
PRIME/SUPPLEMENT Prime

DATE 04/22/16

SHEET 1 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES			Project Coordination			Field Surveys			Traffic and Crash Analysis			Preliminary Design Studies			Drainage and Utilities Studies		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Engineer 5 (E5)	70.00	0																	
Engineer 4 (E4)	70.00	50	4.71%	3.30				2	6.25%	4.38	2	2.27%	1.59	8	2.94%	2.06	4	4.76%	3.33
Engineer 3 (E3)	54.41	232	21.85%	11.89	10	26.32%	14.32	0			24	27.27%	14.84	56	20.59%	11.20	20	23.81%	12.96
Engineer 2 (E2)	41.97	312	29.38%	12.33	18	47.37%	19.88	14	43.75%	18.36	18	20.45%	8.59	80	29.41%	12.34	20	23.81%	9.99
Engineer 1 (E1)	31.93	290	27.31%	8.72	10	26.32%	8.40				32	36.36%	11.61	80	29.41%	9.39	20	23.81%	7.60
Planner 5 (P5)	70.00	0																	
Planner 4 (P4)	70.00	0																	
Planner 3 (P3)	47.66	0																	
Architect 4 (AR4)	70.00	0																	
Architect 3 (AR3)	60.00	0																	
Architect 2 (AR2)	37.39	0																	
Architect 1 (AR1)	28.33	0																	
Environmental Scient	60.00	0																	
Industry Specialist 3 (	51.14	0																	
Surveyor 3 (S3)	35.33	0																	
Surveyor 1 (S1)	20.91	0																	
Technician 3 (T3)	35.35	178	16.76%	5.92				16	50.00%	17.67	12	13.64%	4.82	48	17.65%	6.24	20	23.81%	8.42
Technician 1 (T1)	18.72	0																	
Administrative 3 (A3)	41.11	0																	
Administrative 2 (A2)	33.18	0																	
Administrative 1 (A1)	22.48	0																	
		0																	
		0																	
		0																	
		0																	
TOTALS		1062	100%	$42.16	38	100.00%	$42.60	32	100%	$40.41	88	100%	$41.45	272	100%	$41.24	84	100%	$42.30

AVERAGE HOURLY PROJECT RATES

FIRM TranSystems
PSB Central Avenue
PRIME/SUPPLEMENT Prime

DATE 04/22/16

SHEET 2 **OF** 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Environmental Studies			Preferred Improvement Plans			Village, IDOT, Public Meetings			Project Development Report			QA/QC Plan & Reviews					
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Engineer 5 (E5)	70.00																		
Engineer 4 (E4)	70.00				4	3.57%	2.50	18	7.03%	4.92	6	5.36%	3.75	6	18.75%	13.13			
Engineer 3 (E3)	54.41	8	22.22%	12.09	26	23.21%	12.63	48	18.75%	10.20	24	21.43%	11.66	16	50.00%	27.21			
Engineer 2 (E2)	41.97	18	50.00%	20.99	26	23.21%	9.74	66	25.78%	10.82	42	37.50%	15.74	10	31.25%	13.12			
Engineer 1 (E1)	31.93	6	16.67%	5.32	36	32.14%	10.26	66	25.78%	8.23	40	35.71%	11.40						
Planner 5 (P5)	70.00																		
Planner 4 (P4)	70.00																		
Planner 3 (P3)	47.66																		
Architect 4 (AR4)	70.00																		
Architect 3 (AR3)	60.00																		
Architect 2 (AR2)	37.39																		
Architect 1 (AR1)	28.33																		
Environmental Scien	60.00																		
Industry Specialist 3	51.14																		
Surveyor 3 (S3)	35.33																		
Surveyor 1 (S1)	20.91																		
Technician 3 (T3)	35.35	4	11.11%	3.93	20	17.86%	6.31	58	22.66%	8.01									
Technician 1 (T1)	18.72																		
Administrative 3 (A3)	41.11																		
Administrative 2 (A2)	33.18																		
Administrative 1 (A1)	22.48																		
TOTALS		36	100%	$42.33	112	100%	$41.45	256	100%	$42.19	112	100%	$42.55	32	100%	$53.45	0	0%	$0.00

Central Avenue
Village of Wilmette
Direct Cost Summary

					Outside	In-House
1	Project Coordination & Data Collection					
	Vehicle Days	0 vehicle @	0 days @ $ 45.00 per day			$ -
	Mileage	1 trips @	50 miles @ $ 0.54 per mile			28
	Letter Size Copies	0 sheets @	0 copies @ $ 0.10 per sheet	0 submittals	$ -	
	Color Copies	0 sheets @	0 copies @ $ 1.00 per sheet	0 submittals	$ -	
	Full Size Copies	0 sheets @	0 copies @ $ 0.80 per sheet	0 submittals	$ -	
	Mylar	0 sheets @	0 copies @ $ 9.00 per sheet	0 submittals	$ -	
	FedEx / Messenger		0 deliveries @ $ 25.00 per delivery		$ -	
	Legal Notices & Advertising					
				Subtotals	$ -	$ 28.00
2	Field Surveys					
	Vehicle Days	0 vehicle @	0 days @ $ 45.00 per day			$ -
	Mileage	0 trips @	0 miles @ $ 0.54 per mile		$ -	
	Letter Size Copies	0 sheets @	0 copies @ $ 0.10 per sheet	0 submittals	$ -	
	Color Copies	0 sheets @	0 copies @ $ 1.00 per sheet	0 submittals	$ -	
	Full Size Copies	0 sheets @	0 copies @ $ 0.80 per sheet	0 submittals	$ -	
	Mylar	0 sheets @	0 copies @ $ 9.00 per sheet	0 submittals	$ -	
	FedEx / Messenger		0 deliveries @ $ 25.00 per delivery		$ -	
	Legal Notices & Advertising					
				Subtotals	$ -	$ -
3	Traffic and Crash Analysis					
	Vehicle Days	0 vehicle @	0 days @ $ 45.00 per day			$ -
	Mileage	0 trips @	0 miles @ $ 0.54 per mile		$ -	
	Letter Size Copies	0 sheets @	0 copies @ $ 0.10 per sheet	0 submittals	$ -	
	Color Copies	0 sheets @	0 copies @ $ 1.00 per sheet	0 submittals	$ -	
	Full Size Copies	0 sheets @	0 copies @ $ 0.80 per sheet	0 submittals	$ -	
	Mylar	0 sheets @	0 copies @ $ 9.00 per sheet	0 submittals	$ -	
	FedEx / Messenger		0 deliveries @ $ 25.00 per delivery		$ -	
	Legal Notices & Advertising				$ -	
	Quality Counts				$ 1,000.00	
				Subtotals	$ 1,000.00	$ -
4	Preliminary Design Studies					
	Vehicle Days	0 vehicle @	0 days @ $ 45.00 per day			$ -
	Mileage	0 trips @	0 miles @ $ 0.54 per mile		$ -	
	Letter Size Copies	0 sheets @	0 copies @ $ 0.10 per sheet	0 submittals	$ -	
	Color Copies	0 sheets @	0 copies @ $ 1.00 per sheet	0 submittals	$ -	
	Full Size Copies	0 sheets @	0 copies @ $ 0.80 per sheet	0 submittals	$ -	
	Mylar	0 sheets @	0 copies @ $ 9.00 per sheet	0 submittals	$ -	
	FedEx / Messenger		0 deliveries @ $ 25.00 per delivery		$ -	
	Legal Notices & Advertising					
				Subtotals	$ -	$ -
5	Drainage Studies					
	Vehicle Days	0 vehicle @	0 days @ $ 45.00 per day			$ -
	Mileage	0 trips @	0 miles @ $ 0.54 per mile		$ -	
	Letter Size Copies	20 sheets @	3 copies @ $ 0.10 per sheet	2 submittals	$ 12.00	
	Color Copies	0 sheets @	0 copies @ $ 1.00 per sheet	0 submittals	$ -	
	Full Size Copies	4 sheets @	3 copies @ $ 0.80 per sheet	2 submittals	$ 19.00	
	Mylar	0 sheets @	0 copies @ $ 9.00 per sheet	0 submittals	$ -	
	FedEx / Messenger		2 deliveries @ $ 25.00 per delivery		$ 50.00	
	Legal Notices & Advertising					
				Subtotals	$ 81.00	$ -

Central Avenue
Village of Wilmette
Direct Cost Summary

					Outside	In-House
6	Environmental Studies					
	Vehicle Days	0 vehicle @	0 days @ $ 45.00 per day			$ -
	Mileage	0 trips @	0 miles @ $ 0.54 per mile		$ -	
	Letter Size Copies	0 sheets @	0 copies @ $ 0.10 per sheet	0 submittals	$ -	
	Color Copies	0 sheets @	0 copies @ $ 1.00 per sheet	0 submittals	$ -	
	Full Size Copies	0 sheets @	0 copies @ $ 0.80 per sheet	0 submittals	$ -	
	Mylar	0 sheets @	0 copies @ $ 9.00 per sheet	0 submittals	$ -	
	FedEx / Messenger		0 deliveries @ $ 25.00 per delivery		$ -	
	Legal Notices & Advertising					
			Subtotals		$ -	$ -
7	Preferred Improvement Plan					
	Vehicle Days	0 vehicle @	0 days @ $ 45.00 per day			$ -
	Mileage	0 trips @	0 miles @ $ 0.54 per mile		$ -	
	Letter Size Copies	36 sheets @	6 copies @ $ 0.10 per sheet	3 submittals	$ 65.00	
	Color Copies	0 sheets @	0 copies @ $ 1.00 per sheet	0 submittals	$ -	
	Full Size Copies	0 sheets @	0 copies @ $ 0.80 per sheet	0 submittals	$ -	
	Mylar	0 sheets @	0 copies @ $ 9.00 per sheet	0 submittals	$ -	
	FedEx / Messenger		6 deliveries @ $ 25.00 per delivery		$ 150.00	
	Legal Notices & Advertising					
			Subtotals		$ 215.00	$ -
8	Village, IDOT, and Public Meetings					
	Vehicle Days	0 vehicle @	0 days @ $ 45.00 per day			$ -
	Mileage	6 trips @	50 miles @ $ 0.54 per mile			168
	Letter Size Copies	300 sheets @	10 copies @ $ 0.10 per sheet	1 submittals	$ 300.00	
	Color Copies	20 sheets @	10 copies @ $ 1.00 per sheet	1 submittals	$ 200.00	
	Full Size Copies	20 sheets @	10 copies @ $ 0.80 per sheet	1 submittals	$ 160.00	
	Mylar	0 sheets @	0 copies @ $ 9.00 per sheet	0 submittals	$ -	
	FedEx / Messenger		0 deliveries @ $ 25.00 per delivery		$ -	
	Legal Notices & Advertising					
			Subtotals		$ 660.00	$ 168.00
9	Project Development Report					
	Vehicle Days	0 vehicle @	0 days @ $ 45.00 per day			$ -
	Mileage	0 trips @	0 miles @ $ 0.54 per mile		$ -	
	Letter Size Copies	200 sheets @	4 copies @ $ 0.10 per sheet	3 submittals	$ 240.00	
	Color Copies	25 sheets @	4 copies @ $ 1.00 per sheet	3 submittals	$ 300.00	
	Full Size Copies	4 sheets @	3 copies @ $ 0.80 per sheet	3 submittals	$ 29.00	
	Mylar	0 sheets @	0 copies @ $ 9.00 per sheet	0 submittals	$ -	
	FedEx / Messenger		6 deliveries @ $ 25.00 per delivery		$ 150.00	
	Legal Notices & Advertising					
			Subtotals		$ 719.00	$ -
10	QA/QC Plan & Reviews					
	Vehicle Days	0 vehicle @	0 days @ $ 45.00 per day			$ -
	Mileage	0 trips @	0 miles @ $ 0.54 per mile		$ -	
	Letter Size Copies	0 sheets @	0 copies @ $ 0.10 per sheet	0 submittals	$ -	
	Color Copies	0 sheets @	0 copies @ $ 1.00 per sheet	0 submittals	$ -	
	Full Size Copies	0 sheets @	0 copies @ $ 0.80 per sheet	0 submittals	$ -	
	Mylar	0 sheets @	0 copies @ $ 9.00 per sheet	0 submittals	$ -	
	FedEx / Messenger		0 deliveries @ $ 25.00 per delivery		$ -	
	Legal Notices & Advertising					
			Subtotals		$ -	$ -
			Totals		$ 2,675.00	$ 196.00

JORGENSEN & ASSOCIATES, INC.
LAND SURVEYORS
Est. 1990

April 22, 2016

Mr. David W. Block, P.E.
TranSystems Corporation
1475 East Woodfield Road
Suite 600
Schaumburg, Illinois 60173-5440

Re: Village of Wilmette – Central Avenue Survey Proposal

Dear Mr. Block:

Enclosed, please find our revised proposal to prepare a topographic survey along Central Avenue from the Green Bay Road to Sheridan Road, which does not include any locations beyond the existing right of way or alignment and ties. Our proposal is based on your email of April 18th and our telephone conversation.

I would like to thank you for considering Jorgensen & Associates for this project. We look forward to continuing our working relationship with your firm. Should you have any questions, comments or require any further information concerning our proposal, please feel free to call me at (847)356-3371.

Respectfully submitted,
Jorgensen & Associates, Inc.

Christian H. Jorgensen, P.L.S.
President

CHJ/pt

Enclosures

E:\TRANSYSTEMS\Willmette\Central Ave\LTR

Route: Central Avenue
Section: Green Bay Road to Sheridan Road
County: Cook
Job No.:

Exhibit "A"

Payroll Burden & Fringe Costs

	% of Direct Productive Payroll
Federal Insurance Contributions Act	11.44%
State Unemployment Compensation	3.31%
Federal Unemployment Compensation	0.12%
Workmen's Compensation Insurance	0.79%
Paid Holidays, Vacation, Sick Leave, Personal Leave	10.42%
Bonus	6.56%
Pension	0.86%
Group Insurance	36.40%
Total Payroll Burden & Fringe Costs	69.90%

Route: Central Avenue
Section: Green Bay Road to Sheridan Road
County: Cook
Job No.:

Exhibit "B"

Overhead and Indirect Costs

	% of Direct Productive Payroll
Business Insurance	5.22%
Depreciation	9.51%
Indirect wages and salaries	37.85%
Reproductive and printing costs	0.05%
Office Supplies	3.09%
Computer Costs	5.60%
Professional Fees	3.48%
Telephone	2.47%
Fees, license & dues	0.81%
Repairs and maintenance	0.87%
Business space rent	4.27%
Facilities - capital	0.48%
Travel - Meals	0.05%
Survey Supplies	1.32%
Automobile/travel expense	2.43%
Recruiting	0.37%
Miscellaneous Expense	0.54%
State Income Tax	0.66%
Postage	0.15%
Educational & Professional Registrations	0.29%
Total Overhead	79.51%

COST PLUS FIXED FEE
COST ESTIMATE OF CONSULTANT SERVICES

FIRM Jorgensen & Associates, Inc. **DATE** 04/22/16

PSB

PRIME/SUPPLEMENT Prime

OVERHEAD RATE 1.4941

COMPLEXITY FACTOR 0

DBE DROP BOX	ITEM	MANHOURS (A)	PAYROLL (B)	OVERHEAD & FRINGE BENF (C)	IN-HOUSE DIRECT COSTS (D)	FIXED FEE (E)	Outside Direct Costs (F)	SERVICES BY OTHERS (G)	DBE TOTAL (H)	TOTAL (B-G)	% OF GRAND TOTAL
	(1) Field-Topography Survey	346	7,958.00	11,890.05	769.50	2,765.57				23,383.12	57.74%
	(2) Office-Compile Field Data	55	2,106.00	3,146.57	770.00	814.00				6,836.58	16.88%
	(3) Office-Create Topography Base Sheets	99	3,210.00	4,796.06		1,070.54				9,076.60	22.41%
	(4) Office-Create T.I.N. & Contours	10	324.00	484.09		108.05				916.14	2.26%
	(5) Coordination Meetings	2	88.00	131.48	32.40	34.05				285.93	0.71%
	Subconsultant DL					0.00				0.00	0.00%
	TOTALS	512	13,686.00	20,448.25	1,571.90	4,792.21	0.00	0.00	0.00	**40,498.36**	100.00%

DBE 0.00%

AVERAGE HOURLY PROJECT RATES

FIRM Jorgensen & Associates, Inc.
PSB
PRIME/SUPPLEMENT Prime

DATE 04/22/16

SHEET 1 OF 1

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES			(1) Field-Topography Survey			(2) Office-Compile Field Data			(3) Office-Create Topography Base Sheets			(4) Office-Create T.I.N. & Contours			(5) Coordination Meetings		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal/Officer	44.00	2	0.39%	0.17													2	100.00%	44.00
Supervisor, P.L.S.	42.00	60	11.72%	4.92				38	69.09%	29.02	20	20.20%	8.48	2	20.00%	8.40			
Survey Party Chief, S.I.T.	25.75	173	33.79%	8.70	173	50.00%	12.88												
Instrument Operator	20.25	173	33.79%	6.84	173	50.00%	10.13												
Cadd Supervisor	30.00	104	20.31%	6.09				17	30.91%	9.27	79	79.80%	23.94	8	80.00%	24.00			
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TOTALS		512	100%	$26.73	346	100.00%	$23.00	55	100%	$38.29	99	100%	$32.42	10	100%	$32.40	2	100%	$44.00

Route: Central Avenue
Section: Green Bay Road to Sheridan Road
County: Cook
Job No.:

Manhour Breakdown
Topographic Survey Estimate

Side Streets	± 1,300' =	± 0.246 mile
Central Avenue	± 5,810' =	± 1.100 miles
Total Length	± 7,110' =	± 1.346 miles

1. Field – Topographic Survey

   a. Measure traverse, level circuit & G.P.S. survey
      17 hours x 2 men = 34 MH

   b. Locate existing R.O.W. & property line occupation
      42 hours x 2 men = 84 MH

   c. Locate existing topography
      114 hours x 2 men = 228 MH

   Sub-total Item #1 346 MH

2. Office - Compile Field Data

   a. Compute traverse, level circuit & G.P.S. survey
      6 hours x 1 man = 6 MH

   b. Compute existing R.O.W. lines
      32 hours x 1 man = 32 MH

   c. Edit & compile topographic survey
      17 hours x 1 man = 17 MH

   Sub-total Item #2 55 MH

3. Office - Create Existing Topography Base Sheets

    a. Layout and drafting existing topography
    79 hours x 1 man = 79 MH

    b. Check topographic survey
    20 hours x 1 man = 20 MH

Sub-total Item #3 99 MH

4. Office - Create T.I.N. & Contours

    a. Compute contours
    8 hours x 1 man = 8 MH

    b. Check contours
    2 hours x 1 man = 2 MH

Sub-total Item #4 10 MH

5. Coordination Meetings
    1 meeting @ 2 hours = 2 MH

Total All Items 512 MH

Route: Central Avenue
Section: Green Bay Road to Sheridan Road
County: Cook
Job No.:

Breakdown of
In House Direct Costs

Item		
1. Field - Topographic Survey		
a. Trips to project site - 19 ea. ± 75 miles/trip x 19 trips = ± 1,425 miles ± 1,425 miles @ $0.54/mile =		$ 769.50
2. Office – Compile Field Data		
a. Plats of Subdivision from Recorder's Office		$ 770.00
5. Coordination Meetings		
a. Meetings at TranSystems' office - 1 ea. ± 60 miles/trip x 1 trip = ± 60 miles ± 60 miles @ $0.54/mile =		$ 32.40
	Total All Items	$ 1,571.90

Huff & Huff incorporated
A Subsidiary of GZA

GEOTECHNICAL
ENVIRONMENTAL
ECOLOGICAL
WATER
CONSTRUCTION MANAGEMENT

915 Harger Road
Suite 330
Oak Brook, IL 60523
T: 630.684.9100
F: 630.684.9120
www.huffnhuff.com
www.gza.com

March 15, 2016

Mr. David W. Block, P.E.
TranSystems Corporation
1475 Woodfield Road, Suite 600
Schaumburg, Illinois 60173-5058

Re: Phase I Environmental Services - PESA
Central Avenue Improvements
Wilmette, Cook County, Illinois
Proposal No. 81.PT00004.17

Dear Mr. Block:

Huff & Huff, Inc., a subsidiary of GZA GeoEnvironmental, Inc. (Consultant) is pleased to submit this proposal to conduct a Preliminary Environmental Site Assessment (PESA) for the proposed Central Avenue project. The proposed project includes roadway pavement and curb & gutter replacement; ADA compliant sidewalk improvements; pedestrian improvements including crosswalks or bump-outs; bicyclist improvements including signage, striping, and shared lane markings; traffic calming measures near downtown and schools; possible addition of white edge lines between through lanes and parking lanes to better channelize traffic; and possible street lighting modifications along Central Avenue between Green Bay Road and Sheridan Road in Wilmette, Cook County, Illinois.

This proposal presents our project approach, the scope of services, cost, and schedule for completing the project.

1. SCOPE OF SERVICES

Task 1 – Preliminary Environmental Site Assessment (PESA)

The process will follow general protocols contained within:

- A Manual for Conducting Preliminary Environmental Site Assessments for Illinois Department of Transportation (IDOT) Highway Projects (Erdmann et al., 2012)
- ASTM International (ASTM) standard 1527-13
- The IDOTs Bureau of Design and Environment (BDE) Procedure Memorandum Number 10-07, *Special Waste Procedures*. This memo was incorporated into Chapter 27-3 of the IDOT BDE Manual in June 2012.
- IDOT Bureau of Local Roads and Streets (BLRS) Manual, Chapter 20-12, Special Waste, July 2013.
- Public Act 96-1416
- Clean Construction or Demolition Debris Fill Operations (CCDD) and Uncontaminated Soil Fill Operations: Amendments to 35 Illinois Administrative Code 1100. Effective on August 27, 2012.

A. Historical Research

The site's historical land use/ownership record will be developed from standard historical sources. Historic aerial photographs will be reviewed to identify land use over time and potential areas of environmental concern, such as areas of surface disturbance and outside storage.

B. Site Evaluation

Current environmental features and conditions of sites adjacent to the right-of-way/project area will be evaluated. A site walkover of potential right-of-way/project areas designated for excavation and/or acquisition will be conducted for first-hand evaluation of current environmental conditions within the project limits. All of the features and conditions listed above will be investigated and, as appropriate, documented in photographs. The land-use and housekeeping practices of adjacent properties also will be evaluated in accordance with ASTM protocols.

C. Records Review

A records review will be conducted to determine potential environmental concerns within the study area. It will include a search of standard state and federal environmental record databases in accordance with the specifications of ASTM standards. This search is based on the outline of the study area.

Specifically, Consultant will search each database to identify any potential sources requiring further investigation. As appropriate, Freedom of Information Act (FOIA) requests will be filed with the IEPA to obtain additional data pertaining to identified sites.

D. Report Preparation

One report summarizing the results of the evaluation will be prepared. The following information will be included in this report:

a) The project location and description
b) Historical uses of corridor.
c) The area geology and hydrology.
d) The environmental status of sites adjacent to the corridor regarding chemical use and storage, underground and aboveground storage tanks, solid waste, special waste, and hazardous waste, and PCBs.
e) An analysis of the site inspection.
f) A summary of the findings regarding any environmental concerns. This will include IDOT's per Memo 66-10 and identification of Potentially Impacted Properties (PIPs) per Subpart F, Section 1100, 35 IAC, related to Clean Construction Demolition Debris management.

Task 2 – <u>Project Management</u>

Time under this task includes project administration and management activities that include cost and schedule tracking, coordination with TranSystems Corporation on authorized activities, memo production and other in-house management activities, and project closeout.

Task 3 – QA/QC

Time under this task includes QA/QC time for the reports as described above.

2. LEVEL OF EFFORT AND SCHEDULE

PESA work will commence within 10 business days of project approval, with a target completion date of six weeks from the date of approval.

3. TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

TranSystems Corporation:
Proposal No 81.PT00004.17:
Site: Central Avenue, Wilmette, IL

These Terms and Conditions, together with Consultant's Proposal, make up the Agreement between with TranSystems Corporation named above.

1. Services. H&H will perform the services set forth in its Proposal and any amendments or change orders authorized by you. Any request or direction from you that would require extra work or additional time for performance or would result in an increase in H&H's costs will be the subject of a negotiated amendment or change order.

2. Standard of Care. H&H will perform the services with the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services at the same time under similar conditions in the same or similar locality. **NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING WARRANTY OF MARKETABILITY OR FITNESS FOR A PARTICULAR PURPOSE, IS MADE OR INTENDED BY H&H'S PROPOSAL OR BY ANY OF H&H'S ORAL OR WRITTEN REPORTS.**

3. Payment.

a. Except as otherwise stated in the Proposal, you will compensate H&H for the services at the rates set forth in the applicable Proposal, amendment or change order; reimburse its expenses, which will include a communication fee calculated as a percentage of labor invoiced; and pay any sales or similar taxes thereon.
b. Any retainer specified in H&H's Proposal shall be due prior to the start of services and will be applied to the final invoice for services.
c. H&H will submit invoices periodically, and payment will be due within 20 days from invoice date. Overdue payments will bear interest at 1½ percent per month or, if lower, the maximum lawful rate. H&H may terminate its services upon 10 days' written notice anytime your payment is overdue on this or any other project and you will pay for all services through termination, plus termination costs. You will reimburse H&H's costs of collecting overdue invoices, including reasonable attorneys' fees.

4. Your Responsibilities.

a. Except as otherwise agreed, you will secure the approvals, permits, licenses and consents necessary for performance of the services. If you are the owner or operator of the Site, you will provide H&H with all documents, plans, information concerning underground structures (including but not limited to utilities, conduits, pipes, and tanks), information related to hazardous materials or other environmental or geotechnical conditions at the site and other information that may be pertinent to the services or, if you are not the owner or operator of the Site, you agree to make reasonable efforts to obtain these same

documents and provide them to H&H. Unless otherwise indicated in writing, H&H will be entitled to rely on documents and information you provide.

b. If you use the services of a construction contractor at the Site, you agree to use best and reasonable efforts to include in your agreement(s) with the construction contractor provisions obligating the latter:

(i) to indemnify, defend and hold harmless, to the fullest extent permitted by law, you and H&H, its officers, employees and principals, for or on account of any claims, liabilities, costs and expenses, including attorneys' fees, arising out of or relating to the design or implementation of construction means, methods, procedures, techniques, and sequences of construction, including safety precautions or programs, of the contractor, or any of its subcontractors or any engineer engaged by it;

(ii) to name you and H&H as additional insureds under general liability and builder's risk insurance coverages maintained by the contractor, or any of its subcontractors; and

(iii) to require that all of its subcontractors agree and be bound to the obligations set forth in (i) and (ii) above.

c. In the event that you are unable to secure such provisions in the agreement(s) with the construction contractor, you shall promptly notify H&H and H&H shall have the opportunity to negotiate with you reasonable substitute risk allocation and insurance indemnities and protections.

5. Right of Entry. You grant H&H and its subcontractor(s) permission to enter the site to perform the services. If you do not own the site, you represent and warrant that the owner has granted permission for H&H to enter the site and perform the services; you will provide reasonable verification on request; and you will indemnify H&H for any claims by the site owner related to alleged trespass by H&H or its subcontractors.

6. Reliance. The services, information, and other data furnished by you shall be at your expense, and H&H may rely upon all information and data that you furnish, including the accuracy and completeness thereof. You acknowledge that the quality of the services provided by H&H is directly related to the accuracy and completeness of the information and data that you furnish to H&H**. H&H's REPORTS ARE PREPARED FOR AND MADE AVAILABLE FOR YOUR SOLE USE. YOU ACKNOWLEDGE AND AGREE THAT USE OF OR RELIANCE UPON THE REPORT OR THE FINDINGS IN THE REPORT BY ANY OTHER PARTY, OR FOR ANY OTHER PROJECT OR PURPOSE, SHALL BE AT YOUR OR SUCH OTHER PARTY'S SOLE RISK AND WITHOUT ANY LIABILITY TO H&H.**

7. H&H Professionals. H&H employees or consultants may act as licensed, certified or registered professionals (including but not limited to Professional Engineers, Licensed Site or Environmental Professionals, or Certified Industrial Hygienists, collectively referred to in this section as "H&H Professionals") whose duties may include the rendering of independent professional opinions. You acknowledge that a federal, state or local agency or other third party may audit the services of H&H or other contractor/consultant(s), which audit may require additional services, even though H&H and such H&H Professionals have each performed such services in accordance with the standard of care set forth herein. You agree to compensate H&H for all services performed in response to such an audit, or to meet additional requirements resulting from such an audit, at the rates set forth in the applicable Proposal, amendment or change order.

8. Hazardous Materials; H&H "Not a Generator". Before any hazardous or contaminated materials are removed from the site, you will sign manifests naming you as the generator of the waste (or, if you are not the generator, you will arrange for the generator to sign). You will select the treatment or disposal facility to which any waste is taken. H&H will not be the generator or owner of, nor will it possess, take title to, or assume legal liability for any hazardous or contaminated materials at or removed from the site. H&H will not have responsibility for or control of the site or of operations or activities at the site other than its own. H&H will not undertake, arrange for or control the handling, treatment, storage, removal, shipment, transportation or disposal of any hazardous or contaminated materials at or removed from the site, other than any laboratory samples it collects or tests. You agree to defend, indemnify and hold

H&H harmless for any costs or liability incurred by H&H in defense of or in payment for any legal actions in which it is alleged that H&H is the owner, generator, treater, storer or disposer of hazardous waste.

9. Limits on H&H's Responsibility. H&H will not be responsible for the acts or omissions of contractors or others at the site, except for its own subcontractors and employees. H&H will not supervise, direct or assume control over or the authority to stop any contractor's work, nor shall H&H's professional activities or the presence of H&H or its employees and subcontractors be construed to imply that H&H has authority over or responsibility for the means, methods, techniques, sequences or procedures of construction, for work site health or safety precautions or programs, or for any failure of contractors to comply with contracts, plans, specifications or laws. Any opinions by H&H of probable costs of labor, materials, equipment or services to be furnished by others are strictly estimates and are not a guarantee that actual costs will be consistent with the estimates.

10. Changed Conditions.

a. You recognize the uncertainties relating to the furnishing of professional services, which often require a phased or exploratory approach, with the need for additional services becoming apparent during the initial services. You also recognize that actual conditions encountered may vary significantly from those anticipated, that laws and regulations are subject to change, and that the requirements of regulatory authorities are often unpredictable.
b. If changed or unanticipated conditions or delays make additional services necessary or result in additional costs or time for performance, H&H will notify you and the parties will negotiate appropriate changes to the scope of services, compensation and schedule.
c. If no agreement can be reached, H&H will be entitled to terminate its services and to be equitably compensated for the services already performed. H&H will not be responsible for delays or failures to perform due to weather, labor disputes, intervention by or inability to get approvals from public authorities, acts or omissions on your part or any other causes beyond H&H's reasonable control, and you will compensate H&H for any resulting increase in its costs.

11. Documents and Information. All documents, data, calculations and work papers prepared or furnished by H&H are instruments of service and will remain H&H's property. Designs, reports, data and other work product delivered to you are for your use only, for the limited purposes disclosed to H&H. Any delayed use, use at another site, use on another project, or use by a third party will be at the user's sole risk, and without any liability to H&H. Any technology, methodology or technical information learned or developed by H&H will remain its property. Provided H&H is not in default under this Agreement, H&H's designs will not be used to complete this project by others, except by written agreement relating to use, liability and compensation.

12. Electronic Media. In accepting and utilizing any drawings, reports and data on any form of electronic media generated by H&H, you covenant and agree that all such electronic files are instruments of service of H&H, who shall be deemed the author, and shall retain all common law, statutory law and other rights, including copyrights. In the event of a conflict between the signed documents prepared by H&H and electronic files, the signed documents shall govern. You agree not to reuse these electronic files, in whole or in part, for any purpose or project other than the project that is the subject of this Agreement. Any transfer of these electronic files to others or reuse or modifications to such files by you without the prior written consent of H&H will be at the user's sole risk and without any liability to H&H.

13. Confidentiality; Subpoenas. Information about this Agreement and H&H's services and information you provide to H&H regarding your business and the site, other than information available to the public and information acquired from third parties, will be maintained in confidence and will not be disclosed to others without your consent, except as H&H

reasonably believes is necessary: (a) to perform its services; (b) to comply with professional standards to protect public health, safety and the environment; and (c) to comply with laws and court orders. H&H will make reasonable efforts to give you prior notice of any disclosure under (b) or (c) above. You will reimburse H&H for responding to any subpoena or governmental inquiry or audit related to the services, at the rates set forth in the applicable Proposal, amendment or change order.

14. Insurance. During performance of the services, H&H will maintain workers compensation, commercial general liability, automobile liability, and professional liability insurance. H&H will furnish you certificates of such insurance on request.

15. Indemnification. You agree to hold harmless, indemnify, and defend H&H and its affiliates and subcontractors and their employees, officers, directors and agents (collectively referred to in this paragraph as "H&H") against all claims, suits, fines and penalties, including mandated cleanup costs and attorneys' fees and other costs of settlement and defense, which claims, suits, fines, penalties or costs arise out of or are related to this Agreement or the services, except to the extent they are caused by H&H's negligence or willful misconduct.

16. Limitation of Remedies.

a. To the fullest extent permitted by law and notwithstanding anything else in this Agreement to the contrary, the aggregate liability of H&H and its affiliates and subcontractors and their employees, officers, directors and agents (collectively referred to in this paragraph as "H&H") for all claims arising out of this Agreement or the services is limited to $50,000 or, if greater, 10% of the compensation received by H&H under this Agreement.
b. You may elect to increase the limit of liability by paying an additional fee, such fee to be negotiated prior to the execution of this Agreement.
c. Any claim will be deemed waived unless received by H&H within one year of substantial completion of the services.
d. H&H will not be liable for lost profits, loss of use of property, delays, or other special, indirect, incidental, consequential, punitive, exemplary or multiple damages.
e. H&H will not be liable to you or the site owner for injuries or deaths suffered by H&H's or its subcontractors' employees.
f. You will look solely to H&H for your remedy for any claim arising out of or relating to this Agreement, including any claim arising out of or relating to alleged negligence or errors or omissions of any H&H principal, officer, employee or agent.

17. Disputes.

a. All disputes between you and H&H shall be subject to non-binding mediation.
b. Either party may demand mediation by serving a written notice stating the essential nature of the dispute, the amount of time or money claimed, and requiring that the matter be mediated within forty-five (45) days of service of notice.
c. The mediation shall be administered by the American Arbitration Association in accordance with its most recent Construction Mediation Rules, or by such other person or organization as the parties may agree upon.
d. No action or suit may be commenced unless mediation has occurred but did not resolve the dispute, or unless a statute of limitation period would expire if suit were not filed prior to such forty-five (45) days after service of notice.

18. Miscellaneous.

a. Illinois law shall govern this Agreement.
b. The above terms and conditions regarding Limitation of Remedies and Indemnification shall survive the completion of the services under this Agreement and the termination of the contract for any cause.
c. Any amendment to these Terms and Conditions must be in writing and signed by both parties.
d. Having received these Terms and Conditions, your oral authorization to commence services, your actions, or your use of the Report or Work Product constitutes your acceptance of them.
e. This Agreement supersedes any contract terms, purchase orders or other documents issued by you.
f. Neither party may assign or transfer this Agreement or any rights or duties hereunder without the written consent of the other party.
g. Your failure or the failure of your successors or assigns to receive payment or reimbursement from any other party for any reason whatsoever shall not absolve you, your successors or assigns of any obligation to pay any sum to H&H under this agreement.
h. These Terms and Conditions shall govern over any inconsistent terms in H&H's Proposal.
i. The provisions of this Agreement are severable; if any provision is unenforceable it shall be appropriately limited and given effect to the extent it is enforceable.
j. The covenants and agreements contained in this Agreement shall apply to, inure to the benefit of and be binding upon the parties hereto and upon their respective successors and assigns.

BOTH PARTIES HERETO WARRANT AND REPRESENT that they have full right, power, and authority to execute this Contract.

IN WITNESS THEREOF, the parties hereto have executed this Agreement as of the day and year first specified above.

CONSULTANT HUFF & HUFF, INC.	CLIENT TRANSYSTEMS CORPORATION
Linda L Huff	
Signature	Signature
Linda L. Huff, P.E.	
Typed Name	Typed Name
Principal	
Officer's Title	Officer's Title
March 15, 2016	
Date	Date

Illinois Department of Transportation

Cost Estimate of Consultant Services (CPFF)

Firm	Huff & Huff, Inc.
Route	Central Avenue (FAU 1296)
Section	Green Bay Rd to Sheridan Rd
County	Cook
Job No.	
PTB & Item	

Date 3/16/2016

Overhead Rate **171.26%**

Complexity Factor **0**

Item	Manhours	Payroll	Overhead & Fringe Benefits	In-House Direct Costs	Fixed Fee	Outside Direct Costs	Services By Others	Total	% of Grand Total
PESA	41	1,310.01	2,243.52	62.55	524.33	270.00	0.00	4,410.42	88.20%
Project Management	2	80.02	137.04	0.00	31.47	0.00	0.00	248.54	4.97%
QA/QC	2	110.01	188.40	0.00	43.27	0.00	0.00	341.68	6.83%
TOTALS	45	1,500.04	2,568.97	62.55	599.08	270.00	0.00	5,000.63	100.00%

Method of Compensation:

Cost Plus Fixed Fee 1	[X]	14.5%[DL + R(DL) + OH(DL) + IHDC]
Cost Plus Fixed Fee 2	[ ]	14.5%[DL + R(DL) + 1.4(DL) + IHDC]
Cost Plus Fixed Fee 3	[ ]	14.5%[(2.3 + R)DL + IHDC]
Specific Rate	[ ]	
Lump Sum	[ ]	

Illinois Department of Transportation

Average Hourly Project Rates

Route	Central Avenue (FAU 1296)
Section	Green Bay Rd to Sheridan Rd
County	Cook
Job No.	
PTB/Item	

Consultant Huff & Huff, Inc.

Date 3/16/2016

Sheet 1 **OF** 1

Payroll Classification	Avg Hourly Rates	Total Project Rates			PESA			Project Management			QA/QC								
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	70.00	1	2.22%	1.56							1	50.00%	35.00						
Senior Geotechnical Cons.	58.08	0																	
Senior Consultant	57.95	0																	
Senior Geologist PM	48.62	0																	
Geologist PM	30.64	0																	
Senior Engineering PM	46.41	0																	
Engineering PM	38.32	0																	
Assistant PM Engineer II	37.08	0																	
Assistant PM Engineer I	31.66	34	75.56%	23.92	34	82.93%	26.25												
Engineer 1	29.56	0																	
Senior Scientist PM	40.01	4	8.89%	3.56	1	2.44%	0.98	2	100.00%	40.01	1	50.00%	20.01						
Scientist PM I	39.82	0																	
Assistant PM Scientist	25.51	0																	
Senior Technical Scientist	34.00	0																	
Environmental Scientist E1	23.74	0																	
Senior Planning PM	45.04	0																	
Planning PM	32.64	0																	
Senior Technical Specialist	42.88	1	2.22%	0.95	1	2.44%	1.05												
Senior CADD Specialist	31.20	4	8.89%	2.77	4	9.76%	3.04												
Administrative Managers	37.12	0																	
Sr. Administrative Assistant	25.88	1	2.22%	0.58	1	2.44%	0.63												
Administrative Assistant	21.16	0																	
Senior PM II (on call)	57.69	0																	
Senior PM I (on call)	38.89	0																	
Engineering Intern	18.00	0																	
Intern	15.50	0																	
		0																	
		0																	
		0																	
		0																	
TOTALS		45	100%	$33.33	41	100%	$31.95	2	100%	$40.01	2	100%	$55.01	0	0%	$0.00	0	0%	$0.00

HUFF & HUFF, INC.
SUMMARY OF INHOUSE DIRECT COSTS
Project: TranSystems - Central Ave Wilmette PESA

									DIRECT
Task 1 - PESA									
Trips - Company	65 miles	x	1	x	$	0.54	=	$	35.10
Tolls			6	x	$	1.50	=	$	9.00
Reproduction	3 sets	x	150	x	$	0.03	=	$	13.50
Color copies	3 sets	x	10	x	$	0.11	=	$	3.30
Photo sheets	3 sets	x	5	x	$	0.11	=	$	1.65
			0	x	$	-	=	$	-
					Task Total			**$**	**62.55**
Task 2 - Project Management									
			0	x	$	-	=	$	-
					Task Total			**$**	**-**
Task 3 - QA/QC									
			0	x	$	-	=	$	-
					Task Total			**$**	**-**
					GRAND TOTAL			**$**	**62.55**

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HUFF & HUFF, INC.
SUMMARY OF OUTSIDE DIRECT COSTS
Project: TranSystems - Central Ave Wilmette PESA

							OUTSIDE
Task 1 - PESA							
Federal Express	1	x	$	20.00	=	$	20.00
Records Search	1	x	$	250.00	=	$	250.00
	0	x	$	-	=	$	-
				Task Total		**$**	**270.00**
Task 2 - Project Management							
	0	x	$	-	=	$	-
				Task Total		**$**	**-**
Task 3 - QA/QC							
	0	x	$	-	=	$	-
				Task Total		**$**	**-**
				GRAND TOTAL		**$**	**270.00**

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HUFF & HUFF, INC.
SUMMARY OF SERVICES BY OTHERS
Project: TranSystems - Central Ave Wilmette PESA

					OUTSIDE
Task 1 - PESA					
	0	x	$ -	=	$ -
			Task Total		**$ -**
Task 2 - Project Management					
	0	x	$ -	=	$ -
			Task Total		**$ -**
Task 3 - QA/QC					
	0	x	$ -	=	$ -
			Task Total		**$ -**
			GRAND TOTAL		**$ -**

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Approach (outline)

Background

- Downtown Wilmette, walkable mixed-use community
- Stately residential neighborhoods
- Central Avenue east-west connector between Green Bay Road and Sheridan Road
- Multi-modal, vehicular, train bus, bike, pedestrian
- STP funding for Complete Streets improvements

Existing Conditions

- Two distinct areas - downtown and residential neighborhood
- Streetscape in downtown
- Traditional parkway/sidewalk in residential neighborhood
- No dedicated accommodations for bicycle traffic
- Materials in need of improvement
- Preserve large trees
- Iconic pedestrian light fixtures

Potential Improvements

- Sidewalk configurations and materials
- Crosswalk configurations and materials
- Bicycle accommodations such as shared and dedicated bike lanes
- Traffic calming components such as corner bump-outs, speed tables and pedestrian warning devices
- Green infrastructure components such as permeable paving, infiltration planters, bioswales and native plantings
- Furnishings such as benches, litter and recycling receptacles, bike racks and planters
- Lighting including roadway, pedestrian and accent lighting
- Community gateways, wayfinding and regulatory signage
- Landscape components including preservation of existing trees, new street trees, shrubs, perennials and ornamental plantings

Public Input and Consensus

- One-on-one interviews
- Visioning workshop
- Public open house
- Village Board approval

Budget and Funding

- Budget established as part of Phase I process
- STP funding
- Other funding

Schedule

- Phase I submittal anticipated December 2016

Scope of Services

Phase I – Preliminary Design

The goal for this part of the engagement is determine the funding requirements, clearly identify the IDOT submittal, review, and approval processes, establish consensus on the preliminary design of the improvements and obtain IDOT Phase I approval for the project.

A. Pre-Design

Objective: Confirm the characteristics of the existing resources, jurisdictional requirements, owner, user and stakeholder interests, and produce maps and a program summary that will be the basis for further design.

Process: Hitchcock Design Group will:

1. Participate in a project kick-off meeting with consultant team representatives, Village representatives, IDOT representatives and other team members confirming:
   a. Funding requirements
   b. Submittal, review and approval processes
   c. Village, consultant, and IDOT contacts
   d. Communications protocol
   e. Tentative schedule
   f. Other administrative considerations

2. Identify jurisdictional interests, operational practices, development plans and construction procedures by discussing the project with representatives of the appropriate constituent and regulatory groups including:
   a. Village of Wilmette
   b. IDOT

3. Collect and review readily available existing data for the project area and the immediate surroundings including:
   a. Aerial photography
   b. GIS information
   c. Topographic surveys
   d. Boundaries, property ownership and easements
   e. Utility atlases
   f. Power and communication utility information
   g. Zoning ordinances
   h. Municipal comprehensive plan
   i. Previously prepared plans and reports for the study area
   j. Pending improvement plans

4. Observe and photograph the project area and immediate surroundings in order to identify readily apparent physical conditions and patterns of use.

5. Using the inventoried data, prepare **Base Maps** at appropriate scales for the study area.

6. Prepare a **Site Analysis Plan** for the study area including:
   k. Opportunities and constraints
   l. Natural resources
   m. Infrastructure
   n. Adjacent influences

7. Conduct individual interviews with selected project stakeholders to identify attitudes and opinions about the history, image, culture, hospitality and development potential of the project site. Potential interview candidates include:
   o. Municipal elected officials
   p. Municipal department heads and other key staff members
   q. Jurisdictional agency representatives
   r. Adjacent property and business owners
   s. Local real estate developers and brokers

8. Prepare for and conduct a public workshop to gather input from attendees regarding the project program, ideas and concerns. Potential attendees include:
   t. Municipal elected officials and staff members
   u. Adjacent property and business owners
   v. Community and special interest groups
   w. Members of the general public

9. Prepare a **Program Summary** that outlines the existing resources, stakeholder interests and consensus project elements to advance.

Deliverables: **Base Maps**; **Site Analysis Plan**; **Program Summary**

B. Preliminary Design
Objective: Reach consensus on the type, location, organization, scale, character and potential cost of specific capital improvements and prepare and submit the necessary documentation to secure Phase I approval from IDOT.

Process: Following Research and Analysis approval, Hitchcock Design Group will:

1. Prepare **Preliminary Design Alternative Prototypes** including appropriate plan views, sections, elevations and other graphic images to illustrate the organization, scale and character of the improvements including:
   a. Sidewalk configurations and materials
   b. Crosswalk configurations and materials
   c. Bicycle accommodations such as shared and dedicated bike lanes
   d. Traffic calming components such as corner bump-outs, speed tables and pedestrian warning devices
   e. Green infrastructure components such as permeable paving, infiltration planters, bioswales and native plantings
   f. Furnishings such as benches, litter and recycling receptacles, bike racks and planters
   g. Lighting including roadway, pedestrian and accent lighting
   h. Community gateways, wayfinding and regulatory signage
   i. Landscape components including preservation of existing trees, new street trees, shrubs, perennials and ornamental plantings

2. Prepare a **Preliminary Construction Cost Opinion** using recognized systems costs for each schematic design alternative.

3. Review the Preliminary Design Alternatives with consultant team representatives, Village representatives and other team members.

4. Prepare for and conduct a public meeting to present the Preliminary Design Alternatives and gather input from attendees regarding the Preferred Alternative. Potential attendees include:
   a. Municipal elected officials and staff members
   b. Adjacent property and business owners

c. Community and special interest groups
d. Members of the general public

5. Based on input received from the public meeting and client representatives, refine the **Preferred Alternative** (or combination of alternatives) including updating the Construction Cost Opinion.

6. Present the Preferred Alternative to client representatives, municipal elected officials and other project stakeholders at a public meeting.

7. Document the **Preliminary Design Documents** as required for the IDOT Phase I documents (CE 1 with Report).

8. Revise the documents, prepare a disposition of comments, and resubmit to IDOT as necessary to facilitate Phase I approval.

Deliverables: **Preliminary Design Alternatives**; **Preliminary Construction Cost Opinion**; **Preferred Alternative**; **Preliminary Design Documents**

General Project Administration

In addition to the services outlined above, HDG will administer the performance of its own work throughout the term of the contract by providing the following services:

A. Communications
1. Schedule, create agendas and summarize the highlights of periodic meetings
2. Rehearse, attend and present at public forums identified
3. Collect and disseminate communications from other parties
4. Periodically inform your representative about our progress

B. Schedules
1. Create, periodically update and distribute the project schedule
2. Coordinate the activities of our staff and our consultants

C. Staffing
1. Select and assign staff members and consultants to appropriate tasks and services
2. Prepare and administer consultant agreements

D. File Maintenance
1. Establish and maintain appropriate correspondence, financial, drawing and data files
2. Obtain appropriate insurance certificates from consultants
3. Maintain appropriate time and expense records

Optional, Additional Services

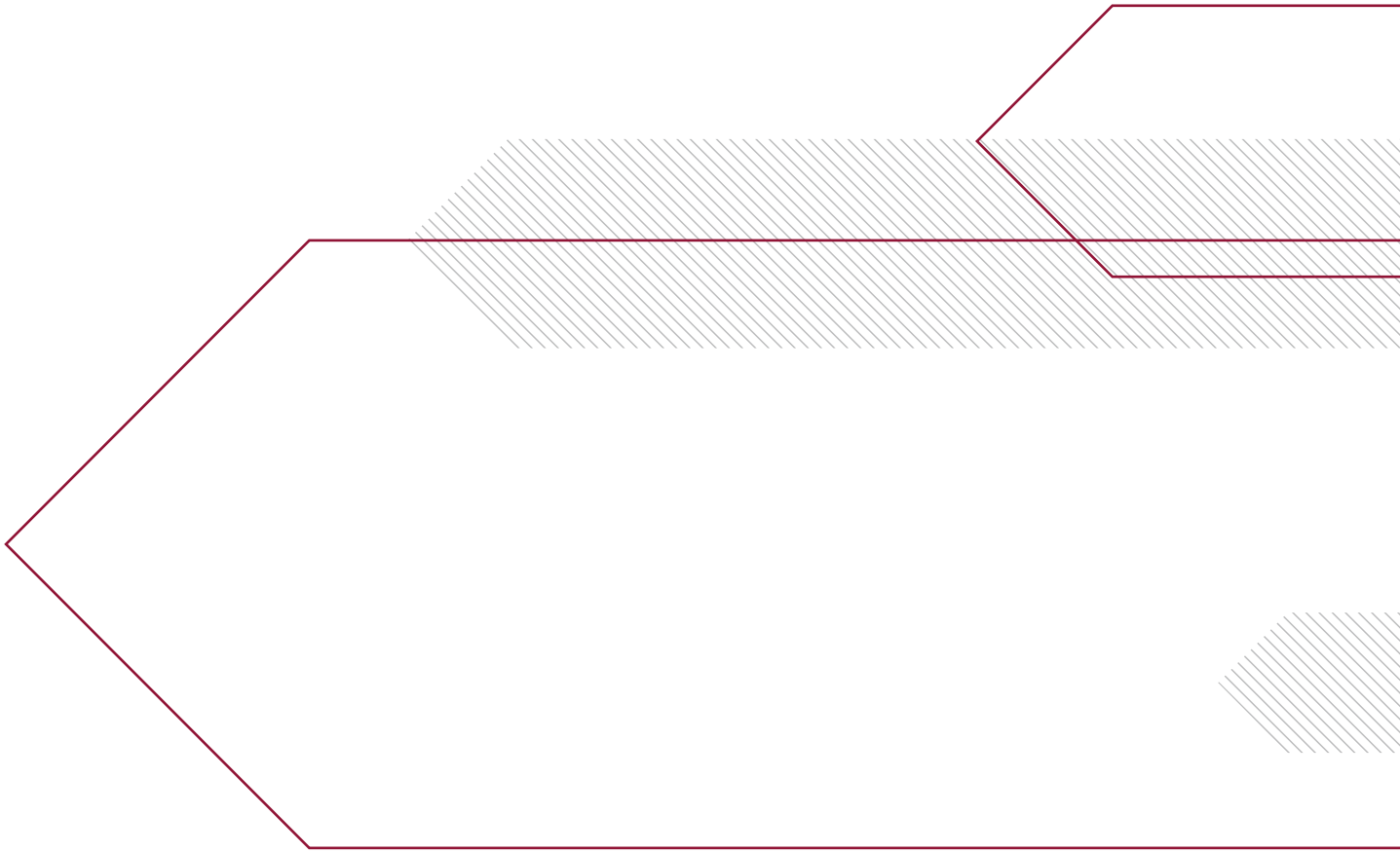
Services or meetings not specified in this scope of services will be considered additional services. If circumstances arise during our performance of the outlined services that we believe require additional services, we will promptly notify you about the nature, extent and probable additional cost of the additional services, and perform only such additional services following your written authorization.

Optional Services

HITCHCOCK DESIGN GROUP
creating better places

Wilmette Central Avenue
Professional Fees
March 24, 2016

	Professional Fees					*Expenses*		
	Principal II $180	Sr Assoc I $130	Assoc I $105	Jr Assoc II $95	**sub-total**	service bureau	travel	**sub-total**
PRELIMINARY DESIGN SERVICES								
A. Pre-Design								
1 Kick-off meeting (1)	4			4	**8**	$ 25	$ 55	
2 Identify requirements	1			4	**5**			
3 Collect and review data			2	4	**6**			
4 Observe, photograph site	4			4	**8**		$ 55	
5 Prepare **Base Maps**				4	**4**			
6 Prepare **Site Analysis Plan**	4		4	16	**24**			
7 Conduct interviews (2)	8				**8**	$ 100	$ 55	
8 Public workshop (3)	4			4	**8**	$ 250	$ 55	
8 Prepare **Program Summary**	2			2	**4**			
Sub-total hours	**27**	**0**	**6**	**42**	**75**			
Sub-total fee	**$ 4,860**	**$ -**	**$ 630**	**$ 3,990**	**$ 9,480**	**$ 375**	**$ 220**	**$ 595**
B. Preliminary Design								
1 Prepare **Alternative Prototypes**	8	4	8	36	**56**			
2 Prepare **Preliminary Cost Opinion**	4			8	**12**			
3 Review with team (4)	4			4	**8**	$ 50	$ 55	
4 Public open house (5)	4			4	**8**	$ 500	$ 55	
5 Prepare **Preferred Alternative**	4	4		16	**24**			
6 Present Preferred Alternative (6)	4			4	**8**	$ 150	$ 55	
7 Prepare **Preliminary Design Documents**	4		4	24	**32**			
8 Revisions and disposition	2			8	**10**			
Sub-total hours	**34**	**8**	**12**	**104**	**158**			
Sub-total fee	**$ 6,120**	**$ 1,040**	**$ 1,260**	**$ 9,880**	**$ 18,300**	**$ 700**	**$ 165**	**$ 865**
Preliminary Design Total:					**$ 27,780**	$ 1,075	$ 385	**$ 1,460**
Project Total:								**$ 29,240**



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