

November 15, 2013



MoDOT Central Office—Local Programs Administrator  
c/o MaryAnn Jacobs  
Intermediate Planning Technician  
105 West Capitol Ave.  
PO Box 270  
Jefferson City, MO 65102-0270



RE: Missouri's LPA On-Call Services, Traffic Engineering / TEAP

Dear Ms. Jacobs and Members of the Selection Committee:

Thouvenot, Wade & Moerchen, Inc. (TWM) is a 100% employee-owned firm providing Civil & Structural Engineering, Land Surveying, and Planning Services to the St. Louis metropolitan area, as well as throughout Missouri, Illinois, and the Midwest. Since our inception in 1946, TWM has expanded into five primary disciplines – Transportation, Structures, Land Development, Water / Wastewater, and Surveying. All of our five offices are local, making us the 13th largest engineering firm in the entire St. Louis region. Either our downtown St. Louis office or St. Charles office will lead any traffic engineering and TEAP projects with collaborative support from our full Transportation Department.

Please accept this letter as our expressed interest in providing professional services to Missouri's Local Program Agencies for traffic engineering and TEAP projects.

#### GENERAL PROJECT EXPERIENCE

TWM designs hundreds of projects each year for a wide spectrum of clients. Over more than 65 years, that adds up to a wealth of experience. Included within that are some recent traffic engineering projects such as these:

***Morgan Avenue @ I-57 Diverging Diamond Interchange - Trip Generation Study and Intersection Design Studies (Federal & Local Funds):*** For the reconfiguration of this interchange in Marion, IL to an innovative Diverging Diamond above Interstate 57 (ADT 34,800), TWM prepared intersection design studies for two interchange intersections and adjacent intersections, performed traffic signal timing coordination, Synchro/SimTraffic traffic modeling of the entire project including intersections outside the Diverging Diamond, and a trip generation study for approximately 485 acres of future development. Also completed design of geometric layout, alternatives for an adjacent intersection layout (3-Leg, 4-Leg, roundabout), review of speed limit through the DDI, shared-use path and sidewalk location, signage, street lighting, pavement marking, and overhead signs. Pedestrian push buttons included an audible system to assist visually impaired pedestrians with crossing the roadways at each of the main intersections.

#### ***Troy-O'Fallon Road (CMAQ Funds)***

TWM designed intersection and roadway improvements for U.S. Route 40 and Troy-O'Fallon Road. Those improvements included: optimization of traffic signal timing; widening of Troy-O'Fallon Road; addition of turn lanes at the intersection and a left-turn lane at the Fair Oaks subdivision entrance. TWM prepared the traffic study, intersection design study including traffic capacity analysis, construction plans including geometric layout, signage, pavement markings and signalization for this project. The improvements increased capacity and safety.

#### ***Huntwood Road (STP Funds)***

The pavement replacement project presented difficult geometric constraints due to close proximity of many residences, two schools, two churches, and a fire station within the project corridor. TWM led public involvement and maintained frequent, detailed

#### PROJECT MANAGER

Sheila Kimlinger, PE, SE

#### Professional Licensure

PE: MO 2007, IL 1994, IN 2012  
SE: IL 1995

#### Education

MS, Civil Engineering - 1991  
BS, General Engineering - 1989

#### Contact

Ph. (314) 241-6300  
F. (314) 241-2391  
skimlinger@twm-inc.com

#### DEPUTY PROJECT MANAGER

Michelle Schwierjohn, PE

#### Professional Licensure

PE: MO 2012, IL 2010, IN 2012  
PTOE: in progress

#### Education

BS, Civil Engineering - 2005

#### TYPICAL TRAFFIC ENGINEERING & TEAP PROJECTS:

- Traffic Studies
- Signalization
- Signal Optimization
- Signing
- Lighting
- Pavement Markings
- Corridor Studies
- Traffic Generation Studies
- Intersections
- Parking Lot Capacity
- Overhead Signs
- Pedestrian Push Buttons, including audible capabilities

#### THOUVENOT, WADE & MOERCHEN, INC.

■ 720 Olive Street, Suite 200A, St. Louis, MO 63101  
■ Phone: (314) 241-6300 Fax: (314) 241-2391 [www.twm-inc.com](http://www.twm-inc.com)

EXCEPTIONAL SERVICE.  
NOTHING LESS.

coordination between the Village of Swansea and these entities throughout the design process. Services included significant staging and detour plan, flashing beacon/push button crossing at schools, and traffic signals (including an emergency vehicle priority system) at intersection with State 159, a five-lane arterial. Responsibilities also included verifying accidents along the corridor, intersection design study, traffic counts, HCS capacity analysis, traffic signal optimization, signage and pavement marking. The improvements increased capacity and safety.

**Memorial Hospital East (Local Funds):** TWM used traffic counts to perform trip generation and traffic distribution, signal warrant analysis, right- and left-turn lane warrant analysis, Synchro capacity analysis (including signal optimization) and to prepare a traffic study narrative. The firm also prepared Intersection Design Studies for the two proposed entrances into the hospital. Duties included design of geometric layout, pavement marking, and signage. TWM also reviewed the parking lot layout provided by the architect on the project and made necessary revisions to make in compliance.



### PAST PERFORMANCE

Our 65+ year history of serving public sector clients includes countless instances of our ability to deliver ‘on time’, ‘in budget’ and ‘done right.’ For example, on the Morgan Avenue Diverging Diamond project, TWM worked hand-in-hand with the DOT, City, and developers. Under a condensed time schedule, TWM produced feasibility studies to determine the best alternative for the interchange layout as well as performed multiple iterations, per request of the clients, for the project as a whole using Synchro/SimTraffic for impromptu presentations to determine the layout for the intersections adjacent to the DDI. All while reproducing Intersection Design Studies to fit the final outcome and finalizing the plans as the client made requests as land acquisition was underway. Our engineers worked long hours and remained dedicated to the effort to assure that the project was done right and on time, because that’s what we mean by “Exceptional Service. Nothing Less.” As an additional indication of past performance, note that only about 15% of TWM’s workload each year comes from new clients. The rest - 85% - is repeat business.

Many municipal clients will tell you that TWM is their ‘go-to’ firm and that client satisfaction with the design process is one of our greatest strengths. We engineer quality plans that result in minimal change orders during construction, efficiently and effectively planning and designing with the owner’s needs, budget, and schedule as the highest priorities.

As a part of this on-call submittal process, we have provided three reference forms, all of which have rated TWM as “Excellent” or “Above Average” for our traffic engineering work. In addition, each of the descriptions of similar projects within our marketing brochure include client contact information. We encourage you to call them for their candid opinion of our past performance. Or visit our webpage at [www.twm-inc.com](http://www.twm-inc.com) and choose any of the many projects we have listed, then call those clients and ask them for an unvarnished perspective.

### QUALIFICATIONS AND KEY PERSONNEL

We have proposed that Sheila Kimlinger, P.E., S.E., serve as Project Manager. Sheila has 22 years of experience in designing and managing transportation and structural projects throughout the Midwest. Sheila will be supported by a full team of local TWM engineers, surveyors, and technical staff, including Michelle Schwierjohn, P.E., as the Deputy Project Manger. The table on the following page depicts the breadth and depth of the experience among our staff, any of whom would be available to work on the project team or lend their expertise to your traffic engineering projects.

While TWM can handle nearly every aspect of a traffic engineering project, we frequently partner with other firms to fulfill DBE goals. Depending on the client’s specific needs, we have the flexibility and established relationships to build the team best suited to the project at hand.

TWM is proud to be an equal opportunity employer and never bases hiring decisions on race or gender. We have a voluntary affirmative action plan in place to encourage applications from a diverse population, and we actively recruit through channels that help reach those potential applicants. We also seek talented women within the engineering community. Currently, 36% of our individual shareholders, 31% of our managers, and 31% of our professional engineers are female—nearly double the St. Louis Metropolitan Statistical Area (MSA) availability figure of 16% female engineers. TWM strives to achieve a mixture of backgrounds and experience on every project in order to broaden the dynamics of the project team. By building a project team where age and background ranges significantly, TWM is able to combine conventional engineering methods with today’s



TWM Experience	Years Experience	MODOT "LPA Basic Training" Management Course	Signals	Signage	Pavement Markings	Lighting	Safety / Operations	Intersections	Parking Lots	Traffic Counts
Sheila Kimlinger, PE, SE	22	X		X	X		X			
Michelle Schwierjohn, PE	8		X	X	X		X	X	X	X
Barry Roberts	43		X	X		X	X			
Rob DeConcini, PE	23		X	X	X		X	X	X	X
Paul Hanson, CFM	17	X		X	X			X	X	X
Matt Kitzmiller, PE	13	X	X	X	X		X	X	X	X
Jeff Taylor, PE	9		X	X	X	X		X	X	X
Scott Goforth, PE	9	X	X	X	X		X	X		
Josh Stein, PE	7	X		X	X		X	X		X

technology, resulting in a more efficient and higher quality product. TWM's current mentoring practices enhance professional growth among our diverse workforce of experienced managers as well as staff who are in earlier stages of their careers.

**FAMILIARITY & CAPABILITY**

We understand that the new LPA on-call list will become effective in Spring 2014. At this time all of our key personnel have the availability to be dedicated to their respective roles on the project team of any project for which we are selected. In addition, because our staff is all local to the greater St. Louis area, TWM is able to temporarily reassign and/or relocate staff as necessary to complete short project deadlines, a common occurrence for on-call type projects. Based on our committed workload to date, our availability firm-wide is 44.1% for 2014 and 97.7% for 2015. TWM's specialized experience in traffic engineering allows us to successfully design solutions unique to each Local Agency.

Because TWM is quite familiar with working on local and federal projects, you can rest assured that your traffic engineering project will be compliant with all regulations. In the last 5 years, we have completed 25 traffic engineering projects. We are fully capable of providing the full range of services required to produce studies, models, plans, specifications, and estimates to meet federal requirements. We have an impressive record of keeping projects on time and in budget for the Local Agencies we serve, and we will work diligently to meet your needs.

**ACCESSIBILITY**

TWM will manage your project from either our St. Louis or St. Charles office, depending on the project location. As mentioned above, however, our staff is readily available to easily shift locations to form project teams or to work closer to specific projects. We are also able to quickly establish new locations if required by a specific project or client. We aim to remain flexible in order to quickly respond to changing needs.

Our mission at TWM is "Exceptional Service, Nothing Less." The success of a project has a direct correlation to the quality of service and deliverables provided by the chosen consultant. A part of providing Exceptional Service to our clients is being 100% accountable for the deliverables that we provide over the course of our partnership. Therefore, in order to fulfill our mission, quality must be and is a top priority in our daily efforts.

All of the employee owners of TWM appreciate the opportunity to submit this LOI and welcome the possibility of demonstrating to you firsthand our capabilities and our level of client service on your projects. Should you need any additional information or have any questions, please feel free to contact me by phone at (314) 241-6300 or by email at skimlinger@twm-inc.com.

Sincerely,

Sheila Kimlinger, P.E., S.E.  
Manager, Transportation Engineering / Proposed Project Manager



**Missouri's  
Local  
Program**  
for community  
development



## TRAFFIC ENGINEERING

TWM understands that in today's economy, the solutions to traffic challenges need to be safe, effective, and affordable. We have worked for DOTs, counties, local municipalities, and developers, ensuring the projects meet regulations. TWM's broad traffic engineering expertise includes:



**Traffic Studies and Trip Generation Studies** – traffic counts, establishing existing traffic conditions, predicting generated traffic, traffic signal warrants, left-turn and right-turn lane warrants, determining intersection sight distance, traffic capacity analysis, traffic signal timing and optimization, and determining necessary roadway improvements for the given design year—making suggestions on how to split into phases as necessary.

**Intersection Design Studies** - geometric layout of the intersection, signage layout, pavement marking layout, traffic data, traffic capacity analysis, traffic signal mast arm and post layout, traffic signal timing.



**Corridor Studies** - reviewing a group of roadways within a municipality or region and determining alternative corridors to be created to alleviate congestion, consider signalization coordination, and suggest intersections to be improved.

**Parking Lot Capacity** - parking lot layout and number of required spaces per regulations, flow of site with roadway layout, geometric layout of parking spaces and aisles.



**Traffic Signal Plans** - signal layout, signal wiring, conduits, detector loops, interconnect with lighting, signage, flashing beacons, interconnection emergency vehicle priority system, pedestrian push button with audible capabilities and Braille signage at intersections allowing pedestrians to safely cross, and cost estimates.



**Lighting Plans** - lighting layout, lighting calculations, wiring, conduits, and cost estimates.



**Overhead Signs** - truss structures, monotube structures, cantilever truss structures, bridge mounted structures, break-away structures, and foundations.



### THOUVENOT, WADE & MOERCHEN, INC.

■ 720 Olive Street, Suite 200A, St. Louis, MO 63101  
■ Phone: (314) 241-6300 Fax: (314) 241-2391

■ 400 N. Fifth Street, Suite 101, St. Charles, MO 63301  
■ Phone: (636) 724-8300 Fax: (636) 724-8304

[www.twm-inc.com](http://www.twm-inc.com)

**OWNER:**  
Madison County, IL  
Highway Department

**CONTACT:**  
Mark Gvillo, P.E.  
Madison County Engineer  
7037 Marine Road  
Edwardsville, IL 62025  
(618) 296-4744

**COMPLETION DATE:**  
2008

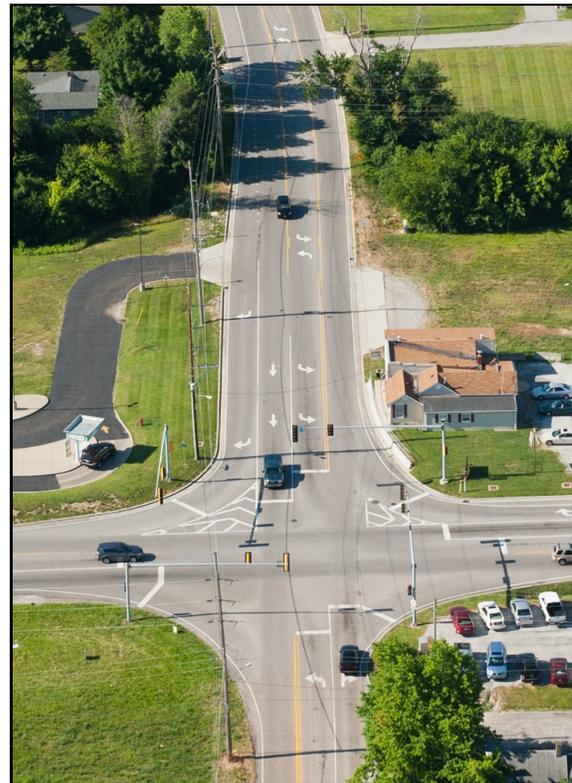
**CONSTRUCTION COST:**  
\$1,634,000

**TWM RESPONSIBILITIES:**  
Civil Engineering  
Land Surveying  
Construction Observation

**TWM CONTACT:**  
Matt Kitzmiller, P.E.  
Michelle S. Schwierjohn, P.E.

### INTERSECTION: U.S. ROUTE 40 AT O'FALLON ROAD

TWM designed improvements to increase the capacity of this congested intersection on U.S. Route 40, a major regional arterial in Madison County, Illinois. The CMAQ-funded improvements included widening the Troy-O'Fallon Road leg to increase storage for left-turning traffic onto U.S. Route 40. TWM also increased storage for left-turning traffic from U.S. Route 40 onto the minor legs, and refined the timing of the traffic signals to accommodate these changes in lane storage. TWM performed the necessary studies and analyses, designed the improvements, and observed construction.



**OWNER:**  
Village of Swansea, IL

**CONTACT:**  
Craig S. Coughlin  
Acting Village Administrator  
1400 N. Illinois Street  
Swansea, IL 62226  
(618) 234-0044

**COMPLETION DATE:**  
2008

**CONSTRUCTION COST:**  
\$2,170,000

**TWM RESPONSIBILITIES:**  
Civil Engineering  
Land Surveying

**TWM CONTACTS:**  
Sheila J. Kimlinger, P.E., S.E.  
Tony J. Erwin  
Michelle S. Schwierjohn, P.E.



### HUNTWOOD ROAD RECONSTRUCTION

TWM's design for the reconstruction of Huntwood Rd from IL Route 159 to Old Caseyville Rd included new HMA pavement flanked by curb and gutter and road widening to 36' to allow for a continuous two-way left-turn lane for the project length. Services included significant staging and detour plan, flashing beacon/push button crossing at schools, and traffic signals (including emergency vehicle priority system) at intersection with IL 159, a five-lane arterial. Responsibilities also included verifying accidents along the corridor, intersection design study, traffic counts, HCS capacity analysis, traffic signal optimization, signage and pavement marking. The improvements increased capacity and safety.



**REPRESENTATIVE PROJECTS**

**OWNER:**  
Illinois Department of  
Transportation, District 9

**CONTACT:**  
Charles Stein, PE  
Dist. 9 Studies & Plans Eng.  
P.O. Box 100  
Carbondale, IL 62903  
(618) 549-2171

**COMPLETION DATE:**  
2014 (est.)

**CONSTRUCTION COST:**  
\$9,500,000

**TWM RESPONSIBILITIES:**  
Traffic Modeling  
Intersection Design Studies  
Civil Engineering  
Structural Engineering  
Land Surveying

**TWM CONTACTS:**  
Sheila J. Kimlinger, P.E., S.E.  
Michelle S. Schwierjohn, P.E.



**DIVERGING DIAMOND INTERCHANGE**

TWM studied and is now reconfiguring the existing partial interchange at I-57 and Morgan Ave in Marion, Illinois, to a Diverging Diamond Interchange. A DDI is different in that the two directions of traffic on the freeway overpass briefly travel on the opposite side of the road from what would be “normal”. The advantage is the ability to remove left-turn movements from the intersections of the ramps and minor roadway creating a free-flow condition for these movements. TWM’s work included Traffic Analysis and Modeling, Intersection Design Studies, and Final Plans. Overhead signs, signalized intersections, and lighting were also included.

**OWNER:**  
Illinois Department of  
Transportation, District 7

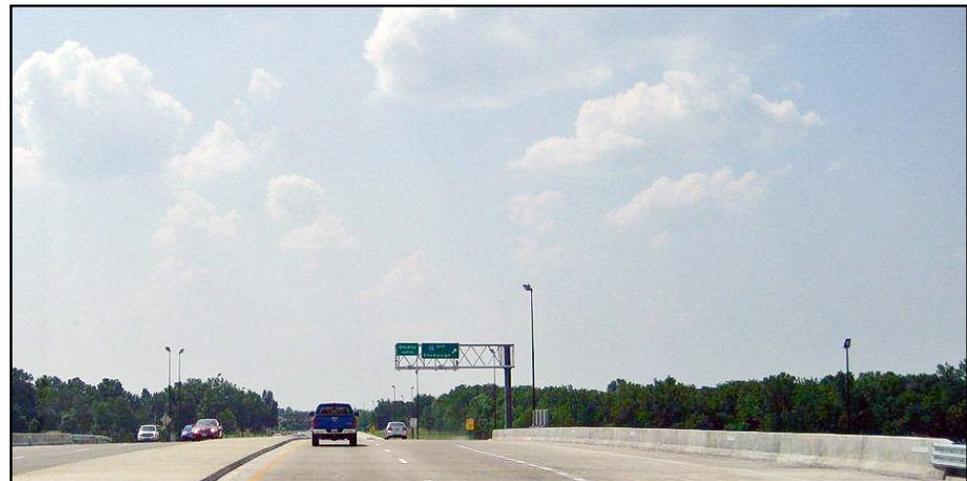
**CONTACT:**  
Gary Welton, PE  
Dist. 7 Studies & Plans Eng.  
400 West Wabash Avenue  
Effingham, IL 62401  
(217) 342-8241

**COMPLETION DATE:**  
2011

**CONSTRUCTION COST:**  
\$6,500,000

**TWM RESPONSIBILITIES:**  
Civil Engineering  
Structural Engineering  
Land Surveying

**TWM CONTACTS:**  
Sheila J. Kimlinger, P.E., S.E.  
Michelle S. Schwierjohn, P.E.



**U.S. ROUTE 51 OVER I-72**

Complete removal and replacement of the US Route 51 bridge over I-72 in Forsyth, Illinois - fast-tracked because concrete spalls were falling onto I-72 below. Despite the tight schedule and heavy traffic loads, it was completed with just over 1% in extras - a testament to the thorough plans. The 2-span steel web girder (composite) bridge is 253’ in length and 117’ wide. Roadway and bridge were raised to accommodate updated clearance requirements over I-72. Project included significant staging plan, underpass lighting, two cantilever sign structures and foundations, and two bridge-mounted sign structures.





## BY THE NUMBERS

67

Years in Business

13th

Largest  
Engineering Firm in  
the St. Louis Region  
St. Louis Business  
Journal

#1

Engineering Firm in  
Southwestern Illinois  
9 consecutive years  
Illinois Business Journal  
"Industry Leaders"

25

Licensed Civil  
Engineers

5

Licensed Structural  
Engineers

6

Licensed Land  
Surveyors

4

Engineers in Training

1

Surveyor in Training

6

States in which TWM  
staff hold licenses:  
Missouri, Illinois,  
Indiana, Kentucky,  
Nebraska, Texas

Thouvenot, Wade & Moerchen, Inc. (TWM) provides Civil & Structural Engineering, Land Surveying, and Planning Services to the St. Louis metropolitan area, as well as throughout Missouri, Illinois, and the Midwest. Since our inception



in 1946, we have diversified into five primary disciplines – Structures, Transportation, Land Development, Water / Wastewater, and Surveying.

In order to create effective, efficient, and economical solutions to the challenges faced by our clients, we draw upon the extensive knowledge, skills and experience of 65 licensed professionals and support staff:

All of our employees have a natural passion for solving problems and care deeply about providing exceptional service to you as a client. For that reason, **more than 85% of TWM's work comes from repeat business**, built upon a solid reputation for being able to get the job done right. And the reason why clients in each of our five primary disciplines will tell you TWM is their "go-to" firm.

## WHAT DOES TWM OFFER YOU?

### Peace of mind.

From humble beginnings to leading the way with cutting edge technology, TWM has a long history of providing exceptional service to our clients. We succeed in delivering our projects **on time, in budget, and done right** by living our core values:

**Quality | Relationships | Stability | Ambition | Loyalty**

That's important to you because you deserve to invest your project funding in a firm that will provide your desired return—a quality product that meets your needs. As your trusted advisor, we offer our professional expert opinion backed by decades of practical experience using the latest technological tools.

Our conservative fiscal and operational approach to business means you don't have to worry whether we'll exist next month or next year. We persevere, finding solutions to obstacles that threaten to slow or halt your project, and we handle the details so you don't have to. Serving as your loyal partner, we tailor our services to your needs and keep your best interests as our primary focus.

### Exceptional Service. Nothing Less.

It's a simple but bold mission statement. Every TWM employee knows and understands that we make this same promise to every current and potential client. Therefore, they also know that it is up to each of us, individually and collectively, to deliver on that promise at every opportunity.

So from the beginning of your project to the end, you get the dedication, commitment, and passion of our professional and support staff. Everyone working together to provide you with the highest level of professional service.

We take care of our clients. And we consider it our mission to help you succeed. Solving your problems is our passion.