

November 14, 2013

MoDOT Central Office – Local Programs Administrator  
[MaryAnn.Jacobs@modot.mo.gov](mailto:MaryAnn.Jacobs@modot.mo.gov)

RE: Letter of Interest for  
Traffic Engineering & TEAP

Poepping, Stone, Bach & Associates, Inc. (**PSBA**) welcomes the opportunity to express our interest in providing engineering services for traffic engineering and TEAP for the Missouri Department of Transportation (MoDOT) and Local Public Agencies in Northeast Missouri. **PSBA** has extensive experience in all facets of engineering for traffic engineering and TEAP and we have the qualifications and experience to complete these services in a manner that will more than meet your expectations. **PSBA** is well known for our commitment to completing projects on time and within budget. **PSBA** has completed or is currently working on similar traffic engineering and TEAP projects throughout Missouri, Iowa, and Illinois. There are more detailed descriptions of these projects below.

Our staff, location, experience and dedication to providing quality -engineering services make us uniquely qualified to undertake this challenging assignment. **PSBA** is an employee owned firm with over 45 years of experience in providing a full range of engineering, GIS and surveying services to governmental, commercial and industrial clients.

**Project Experience:**

- ◆ **48<sup>th</sup> & State Roundabout Study, Adams County, IL.** PSBA is currently completing a Feasibility Study and Intersection Design Study (IDS) of traffic control options for the proposed intersection improvement at 48<sup>th</sup> and State Streets in Quincy, IL. The feasibility study compares two alternatives for the improvement of operations and safety of the subject intersection. Specifically, the installation of traffic control signals versus construction of a roundabout. Existing traffic data was collected, and accidents for the last five years were provided by the Adams County Highway Department and the City of Quincy. Capacity analyses were performed for both alternatives for comparison of their operation effectiveness, and each alternative was analyzed as a potential countermeasure for the accident types recorded for their effectiveness on safety. Estimated construction costs were compared and an alternative is recommended.
- ◆ **Improvement of Hwy 61 and 48<sup>th</sup> Street Intersection with New Dedicated Turn Lanes and New Camera Actuated Traffic Signals, Fort Madison, IA.** Design of improvements on Highway 61 and incidental intersection work utilizing Primary Highway Design Criteria as specified in the Iowa Department of Transportation's Road Design Manual. Improvements on 48<sup>th</sup> Street was designed in accordance with Urban Design aids as specified in the Federal Aid Project Development Guides as development by the Iowa Department of Transportation for Local Public Agencies. Traffic signals were designed and constructed in accordance with the latest edition of the Manual of Uniform Traffic Control Devices.
- ◆ **Nauvoo Truck Bypass, City of Nauvoo, IL.** PSBA was contracted to provide the Feasibility Study for a variety of bypass routes to be narrowed to one or two through a process of environmental screening and public involvement. The scope included the development of three different truck route configurations, the recommended routing of

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<input type="checkbox"/> 100 SOUTH 54 <sup>TH</sup> STREET	P. O. BOX 709	QUINCY, IL 62306	PHONE 217/223-4605	FAX 217/223-1546
<input type="checkbox"/> 3523 MAIN STREET	P. O. BOX 817	KEOKUK, IA 52632	PHONE 319/524-8730	FAX 319/524-7720
<input type="checkbox"/> 801 BROADWAY, SUITE 224	P. O. BOX 190	HANNIBAL, MO 63401	PHONE 573/406-0541	FAX 573/406-0390

commercial trucks and analyzing each route, capacity and levels of service, drainage and accident studies, traffic counts, right-of-way acquisition, environmental assessment, historic site locations, flood hazards and cost estimates.

- ◆ **Intersection of Main Street and Norfolk Southern Railroad, Marion County, MO.** PSBA assisted the City of Hannibal in a pilot program to install pedestrian crossing signals at the intersection of the Norfolk Southern Railroad Crossing and Main Street. PSBA provided a “sketch” plan view showing approximate location for signals and controls, along with a list of major items needed for installation.
- ◆ **Construction of Maine Street from 4<sup>th</sup> – 10<sup>th</sup> Street, Quincy, IL.** PSBA provided the Phase II design engineering services for the reconstruction of Maine Street through the Central Business District of Quincy, IL. This project raised unique challenges because of the 100+ years of past improvements along this corridor. Much of the work took place behind the curbs where sidewalks were removed and replaced and the addition of a 4-ft wide brick paver median was installed next to the parking lanes. Seventy-eight new period style street lights were included to comply with recommendations from the 1996 Recommended Actions for the Revitalization of Quincy’s Central Business District. Intersection improvements included incorporating ADA compliant handicap ramps and obsolete traffic signals were removed. The three intersections that still warranted signals were provided with modern, high-efficiency equipment. Urban design landscaping improvements included all new tree plantings that are better suited for a harsh, dense commercial environment.
- ◆ **Improvements of US Route 136 and IL Route 94, Carthage, IL.** PSBA provided the Phase II design engineering services for an urban signalized intersection of FAP 315 (US Route 136) and FAP 514 (IL Route 94) in the City of Carthage in Hancock County, IL for the Illinois Department of Transportation. The intersection relocation required reconfiguration of existing commercial entrances, lane and turning radii widening, ROW taking, drainage improvements, utility adjustments, milling, resurfacing and traffic signalization. An abandoned service station at this intersection complicated storm sewer improvements due to contaminated soils from a leaking underground tank. Traffic Control and Construction Staging kept traffic using the intersection and all commercial properties accessible throughout the construction period.
- ◆ **North 5<sup>th</sup> Street Bridge Over Cedar Creek, Quincy, IL.** Design of replacement structure and associated road work. Provided surveys, hydraulics, flood flow histories, permits, bridge condition report, preliminary bridge design and hydraulic report which included economic analysis of bridge and high water effects, prepared environmental and planning documents, prepared preliminary roadway and drainage structure plans; traffic studies and counts and special intersection studies as required; complete general and details plans, special provisions and estimates of cost. This bridge is a single span, 128 foot by 35 foot wide steel plate girder structure in an 8 inch concrete deck, concrete parapets with open abutments.
- ◆ **Streetscape for the KROC Center, Quincy, IL.** PSBA was a subconsultant to provide services for Survey and Design for street and right-of-way improvements around the new KROC Center between 3<sup>rd</sup> and 4<sup>th</sup> Street on Hampshire. Site Survey services included field surveying using IDOT Codes and development of base drawings of the project and creating a DTM in Microstation and Geopak using IDOT format and standards. Street Design services include developing plans and specifications in Microstation and Geopak in IDOT format, intersection study, and convert lighting and landscape plans into Microstation format.
- ◆ **Illinois Route 4 (Route FAP 662) Phase I & Phase II Engineering Services, Sangamon County, IL.** Phase I Included the Preparation of a Project Report (Categorical Exclusion) for the reconstruction/rehabilitation of IL Route 4, Sangamon County, Illinois. The improvement limits were from north of Mansion Road to Independence Drive, north of Chatham. The study limits extended south from Independence Drive to south of Teal Drive. PSBA prepared plan and profile sheets, prepared a location map, Traffic Management Analysis exhibits, and typical sections (roadway). The design study included studying alternatives, developing typical cross sections from Department policies, developing a Traffic Management Analysis to address construction sequence and maintenance of traffic during construction, calculating quantities and total cost alternatives, comparing alternatives and making recommendations, and attending coordination meetings as needed and presented project description at FHWA/IDOT Bi-Monthly Coordination Meeting as directed by the Department. PSBA prepared two draft project reports for submittal. After review by the Department, PSBA revised the draft project report and provided four copies of the preliminary project report for circulation purposes. PSBA prepared mosaics and displays (location map, typical sections, etc.), researched and included property owner’s names, prepared handouts and questionnaires and attended a “dry run” and actual public hearing. PSBA revised the draft project report, assessed the public involvement, made recommendations and provided four copies of the final report.
- ◆ **Corridor Study for Illinois Route 336, Carthage, IL.** This project was awarded to PSBA by the City of Carthage and the Illinois Department of Transportation (IDOT) through a State grant. This was an IDOT pilot project designed

to study the impacts that a new four lane highway and interchange would have on existing development in the community. The project was completed through the direction of a ten member citizen advisory committee plus ex-officio members from the City of Carthage and the University of Illinois Extension Service. The scope of work for the 535 +/- acre study area included a transportation analysis (e.g., Access Management, Capacity, Level of Service), existing land use analysis/future land use projections, annexation possibilities, retail trade analysis, evaluation of community services, development of urban design strategies, an analysis of the impact on the environmental systems and historical resources, an analysis of the infrastructure and recommended improvements for new development to occur, and implementation strategies.

**Key Personnel:**

- ◆ **Principal-in-Charge** - Charles S. Bach Jr. (SE & PE) has over 42 years of experience in all aspects of structural and civil engineering, bridge design on routine structures including cost comparisons, hydraulics, detailing and structural design.
- ◆ **Project Manager** - Michael J. Purol (PE) joined PSBA in 2009 and is the Vice President in charge of the Missouri office. He has additional experience working with MoDOT personnel. Michael has project experience in urban and rural roadway design, bridge design, hydraulic analysis of open and close channel flow, sanitary and storm sewer design, drainage analysis, and specification writing.
- ◆ **Civil Engineer** – Zachary Leach (PE) joined PSBA in 2009. His current engineering duties include road and highway design, site design, environmental, general civil work, and material/construction observation. Before joining PSBA, Zach was previously employed by the City of Edwardsville as an Engineering Technician.
- ◆ **Civil Engineer** – Nathen Leach (EIT) started at PSBA in 2010 assisting with land and field surveys. Since that time his duties include road and highway designs, site development, environmental and general civil work. He has also worked as a material/construction inspector.
- ◆ **Electrical Engineer** - Todd Clevenger has over 22 years of electrical design experience and specializes in electric and communication design with experience in signal design, camera detection, security and street lighting. Before joining PSBA in 2000, Todd was as an electrical contractor providing LAN installation for public schools, installation of 3 phase for commercial agriculture plant, residential wiring and trouble shooting, and energy management system in a commercial environment. He was also employed at Glenayre Electronics, Inc. managing the installation of RF paging equipment and was involved with the design of control systems utilizing PLC industrial controls and hydraulic systems of mainframe computer systems. Other responsibilities included inspection and installation of mainframe computer systems on U.S. military installations.
- ◆ **Sr. Engineering Technician** – Bill Richards has been with PSBA since 2007 upon his retirement as Public Works Director for the City of Keokuk, Iowa. Mr. Richard’s brings more than 36 years of professional experience in municipal government with responsibilities in upper level management, including all aspects of public improvements. Since joining PSBA, Mr. Richards has been involved in the design of numerous street construction projects, the initial planning for storm water separation; the initial planning for domestic water supply; the design for sanitary sewer bar screen systems; construction project inspection for street construction, water main extensions and sanitary sewers extensions, and conceptual design for traffic signal improvements.

PSBA appreciates the opportunity to present our qualifications to perform on-call professional services. If selected, PSBA will provide the quality product that our clients have come to expect from our firm and we will complete the work within your schedule.

Sincerely yours,

POEPPING, STONE, BACH & ASSOCIATES, INC.



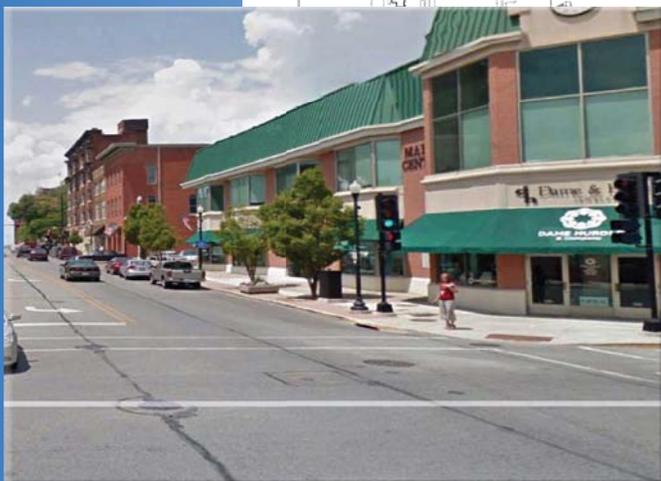
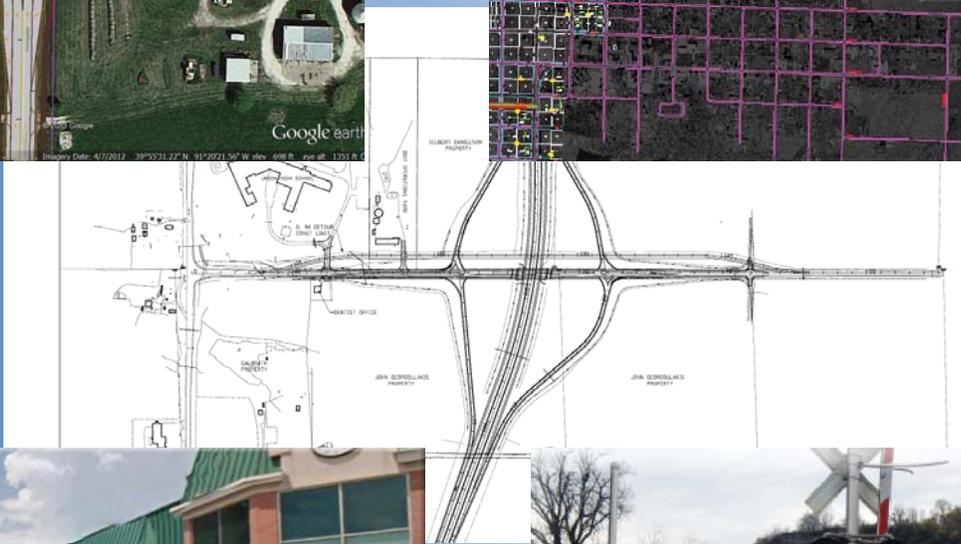
Michael J. Purol, P.E.  
Vice-President of Missouri Office  
MJP:js

# PSBA

Poepping, Stone, Bach & Associates, Inc.

Engineers, Architects, Surveyors, GIS  
www.ppsba.com

Working with Local Public Agencies Since 1968  
Traffic Engineering & TEAP



Developing Partnerships ■ Creating Innovative Solutions ■ Delivering Proven Results

# Traffic Engineering Team



**Position: Executive V.P.**  
Professional Engineer (IL, MO, IA, KS) and a Licensed Structural Engineer (IL). Since joining PSBA, Charlie has been the Corporate Officer in charge of Structural Engineering projects for the firm.

**Charles S. Bach, Jr. P.E., S.E.**



**Position: Sr. Eng. Technician**  
Bill has been with PSBA since 2007. Prior to working for PSBA Bill was the Director of Public Works for Keokuk Iowa. Bill specializes in Street Design/Construction/Inspection, Traffic Signal Improvements, and Storm Water.

**Bill Richards**



**Position: V.P. Missouri Office**  
Professional Engineer (IL, MO). Since joining PSBA Michael has been responsible for Project Management of all project located in the State of Missouri. Michael has nearly 12 years of Project Management experience.

**Michael J. Purol, P.E.**



**Position: Civil Engineer**  
Nathen joined the PSBA team in 2010. His experience includes Municipal design, Road/Highway, Site Design, Environmental, and General Civil work. Nathen has worked in the field as a survey technician and as a material/construction inspector.

**Nathen Leach, E.I.T.**



**Position: Electrical Engineer**  
Todd specializes in electric and communication design. Todd has experience in signal design, camera detection and security, and street lighting.

**Todd Clevenger**



**Position: Civil Engineer**  
Professional Engineer (IL, MO, IA). Since joining the PSBA team in 2009, Zachary has had experience with Interchange/Intersection Design Studies, Intersection Geometrics, and Traffic Signal Design. Zachary has worked in the field as a project engineer and as a material/construction inspector.

**Zachary Leach, P.E.**

Our Design Team will bring over 100 years of combined experience to your project. Our team specializes in transportation related services and will help you complete a successful project on time and budget. Please feel free to contact **Michael Purol in our Hannibal office at 573-406-0541** or Charlie Bach in our Quincy office at 217-223-4605 to discuss your project in more detail.



## ***Intersection of 48th and State St. Adams County, Illinois***

**Client:** Adams County Highway Department

**Contact:** James Frankenhoff

**Construction Cost:** \$2.4M(estimate)

**Services:** PSBA presented alternate intersection designs including different signal and roundabout configurations. After comparing several alternatives a detailed intersection design study was completed for the selected roundabout design.



## ***Highway 61 and 48th Street Signal Improvements***

**Client:** City of Fort Madison

**Contact:** Byron Smith

**Construction Cost:** \$552,000

**Services:** PSBA provided Preliminary (Design) Engineering, Construction Engineering, and Engineering for Land Acquisition services to the City of Fort Madison. This included preliminary survey, project plans, and right-of-way layout requirements, preparing final design of grade & paving contract, preparing the final estimate of costs, construction staking, construction observation/inspection and materials testing and preparation of land transfer documents.



## ***Nauvoo Truck Bypass***

**Client:** City of Nauvoo

**Contact:** Mayor John McCarty

**Services:** PSBA presented alternate intersection designs including different signal and roundabout configurations. After comparing several alternatives a detailed intersection design study was completed for the selected roundabout design.



## ***Int. of Main Street and NS RR Marion County, Missouri***

**Client:** City of Hannibal

**Contact:** Mark Rees, P.E., City Engineer

**Construction Cost:** N/A In-Kind Const.

**Services:** When the City agreed to participate in a pilot program to install pedestrian crossing signals at a Rail road crossing they contracted PSBA to assist with all aspects of the project.



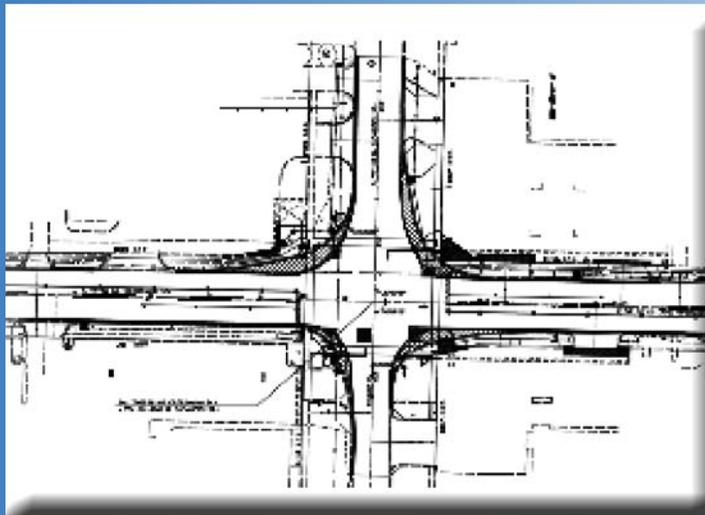
## ***Main Street 4th Street - 10th Street Quincy, IL***

**Client:** City of Quincy

**Contact:** Martin Wagner

**Construction Cost:** \$1.7M

**Services:** PSBA was contracted to provide surveying and engineering services related to the downtown improvements. Improvements included new LED Traffic and Pedestrian signals.



## ***Urban Signalized Intersection of US Route 136 and IL Route 94 Carthage, IL***

**Client:** IL Dept. of Transportation, Dist. 6

**Contact:** Sal Madonia

**Services:** PSBA provided the Phase II design engineering services for this project which involved an intersection relocation that required reconfiguration of existing commercial entrances, lane and turning radii widening, ROW taking, drainage improvements, utility adjustments, milling, resurfacing and traffic signalization.