Thank you for the opportunity to provide our Letter of Interest and Qualifications for this Bridge Replacement Project on SR 75 in Carroll County in the LaPorte District.

Janssen & Spaans Engineering (JSE) is an ISO 9001:2008 certified firm comprised of veteran staff with significant INDOT experience in the many aspects of roadway design, bridge design, interchange modifications, intersection improvements, and project management. JSE’s main office is located in Indianapolis with a branch office in Columbus, Indiana. All of our staff members are local to Indiana which ensures that the engineers and technicians assigned to this project are familiar with INDOT design standards and procedures.
PROPOSED PROJECT TEAM MEMBERS

Building a strong team has been JSE’s main focus over the past few years. We know the importance of having experienced staff and training new and existing staff to accomplish our goal of satisfying the customer by delivering projects on-time and on budget.

Jeff Matern, P.E. will lead our team as our Project Manager for this project. He has over 33 years of experience in all aspects of transportation engineering and project management. JSE chose Jeff because of his ability to manage projects similar in size and complexity to this project in Carroll County. He will be assisted by an experienced JSE team and sub-consultant team. JSE will assure that communication between our team is ongoing and frequent by implementing our plan discussed below.

COMMUNICATION PLAN

JSE believes that ongoing and frequent communication between our Project Manager (PM) and the INDOT PM is critical to the success of any project. Bi-weekly progress reports will be submitted to the INDOT PM to provide information related to tasks completed, schedule, scope changes, and budget and invoice summaries.

The JSE PM will also regularly utilize e-mail or conference calls to keep the INDOT PM and sub-consultants informed to insure procedures and schedules are being met between our team. This type of communication will be done as frequently as necessary, at critical times in the schedule and if significant issues arise that require INDOT input.

JSE staff visited the project site on March 22 to observe, review, and monitor the existing conditions and traffic movements. Our observations and the supporting documents provided have given our engineers a better understanding of the purpose and need of the project and the information needed to prepare our Letter of Intent.
RELEVANT PROJECT EXPERIENCE

JSE has worked with the LaPorte District on many types of transportation projects over the years with a very high success rate. We have also worked with similar bridge projects to the scope of the SR 75 bridge project and are confident we can have the same success if we are selected.

SR 46 over Gas Creek
Project Manager – Mark Swiderski, P.E.
State Road 46 over Gas Creek is a principal arterial located within Greensburg, Indiana with an existing stone arch culvert built in the late nineteenth century. INDOT deemed that the structure needed to be replaced due to the inadequate hydraulic opening as well as the poor structure condition. Janssen and Spaans Engineering performed the hydraulic design and economic analysis to determine the most cost efficient structure for the project. Since the structure was considered of historic importance, JSE directed its sub-consultant to proceed with a 4(f) alternative analysis and section 106 review. The section 106 review was approved by the Historic Review Board in early 2017.

SR 9 over Flat Rock River
Project Manager – Jeff Matern, P.E.
Through an exhaustive inspection and analysis of the existing historic bridge, JSE determined that it was not cost-effective to rehabilitate the existing bridge. JSE analyzed the cost-benefit and impacts of several maintenance of traffic options including complete road closure, partial width bridge construction, temporary runaround and a new bridge constructed on either side of the existing bridge replacing the original through truss bridge. JSE provided engineering assessment, hydraulic analysis, road design, bridge design, bridge rehabilitation, maintenance of traffic, and traffic design services for this $3 million bridge replacement and road reconstruction project.

SR 25 over Eel River
Project Manager – Keith Echternach, P.E.
JSE is currently providing engineering assessment, alternatives analysis, bridge hydraulic analysis, road, bridge, maintenance of traffic, utility coordination and traffic design services for the $5 million bridge replacement project on Market Street (former SR 25) over Eel River. JSE prepared a Bridge Project Scoping Report, Historic Bridge 4f Alternative Analysis Report, and Hydraulic Analysis Report to determine the best, most cost effective and least impact alignment/location for the new bridge and road approaches. Through the rigorous Section 106 process, JSE determined that it was not cost-effective, feasible or prudent to rehabilitate the existing bridge.
RELEVANT PROJECT EXPERIENCE

I-65 over Kankakee River

Project Manager – Jeff Matern, P.E.

Jeff was the project manager for the rehabilitation of the Northbound and Southbound I-65 bridges over the Kankakee River in the LaPorte District. The original scope of the project was to replace the steel I-girder superstructures due to the presence of fatigue cracks in numerous locations in the steel girders. Jeff worked closely with INDOT staff to establish structural retrofit details for the steel girders to address the fatigue cracking situation and eliminate the immediate need for the superstructure replacement.

SUB-CONSULTANTS

The combined experience of Geotill' engineer has been helping shape Indiana’s highway network, providing comprehensive services in geotechnical engineering. We have a well-established geotechnical highway design practice employing highly experienced design professionals in the Midwest.

Locally, we have recently delivered challenging, high-profile projects for INDOT that have raised the bar for innovative engineering and project delivery:

- I-69 Segment 2 Bridge at Black Ankle Creek Valley
- SR 62, SR 250, SR 262, SR 1 and SR 56 Landslide Failures
- SR 135 Road New Interchange at US 50

With a record of reducing road construction times, implementing Open Roads practical design philosophies, pursuing Design Exceptions where appropriate, and finding unique geotechnical solutions, we have delivered innovative, cost-saving solutions on some of INDOT’s most challenging and schedule-critical projects.

GEOTILL is Prequalified with INDOT for the required work types:

- 7.1 Geotechnical Engineering Services
SUB-CONSULTANTS

Little River Consultants was founded in 2015, providing you a new option for Natural Resource Consulting. We may be a newly formed company, but we are built on experience. Our president and founder has over 20 years of experience in the industry, focused in Indiana and the greater Midwest. We are a Woman-Owned Small Business, located in the heart of Indiana.

Little River Consultants is Prequalified with INDOT for the required work types:

- 5.2 Environmental Document Preparation - CE
- 5.3 Environmental Document Preparation - Section 4(f)
- 5.6 Waterway Permits

Weintraut & Associates, Inc. is a small, woman-owned business with an established reputation for providing high-quality, on-time, on-budget cultural resource management consultation and NEPA documentation. Weintraut & Associates’ professional staff meets the Secretary of the Interior’s Qualification Standards and Indiana State Standards in the areas of planning, prehistoric archaeology, historic archaeology, folklore, and history. Weintraut & Associates consistently scores very well on performance evaluations by the agencies and has been awarded three consecutive Section 106 on-call contracts by the Indiana Department of Transportation. Over the past several years, W&A has worked on the Section 106 documentation of numerous types of bridge projects.

W&A is Prequalified with INDOT for the required work types:

- 5.9 Archaeological Investigations
- 5.10 Historical/Architectural Investigations

All right-of-way projects will be managed by Jackie Dodd, with the assistance of Ruth Johns, who will be the points of contact for the client. Dodd is pre-qualified as an INDOT Buyer and is familiar with INDOT’s forms and procedures regarding Right-of-Way acquisition and Closing. Dodd Title Corporation, owned and operated by Jackie Dodd, is an agent for Attorneys’ Title Guaranty Fund, a real estate title insurance company. Jackie Dodd is an attorney licensed in the State of Indiana, and has previous experience as a banker and commercial lender – Jackie has closed real estate transactions throughout her 28 year career as a banker and attorney making her qualified to manage the On Call – Right-of-Way Title Research, Title Updates and Closing Services.

Dodd Title is Prequalified with INDOT for the required work types:

- 12.2 Title Research
Our entire 60 employee staff at JSE is devoted to providing engineering services to INDOT specializing in most transportation projects including the bridge replacement on SR 75 in Carroll County. To date, our current INDOT workload is only 15% of our available contract capacity. Both road and bridge teams have the available capacity to meet LaPorte Districts needs. JSE is also nearing completion for the On Call Project Development Services with INDOT Central Region.
**PROJECT MANAGER**

**JEFF MATERN, P.E.**

**EXPERIENCE** - Jeff Matern is a registered Professional Engineer in Indiana with over 33 years of experience in the transportation design industry. Jeff has served as Project Manager for over 70 bridge replacement and rehabilitation projects for both INDOT and local agencies with projects ranging in complexity from local road to major interstate interchange bridges.

**LEADERSHIP** – Jeff has been responsible for directing and overseeing the work of multiple bridge design teams which enables him to share his experience and knowledge while maintaining involvement in numerous concurrent projects. Jeff uses his expertise in bridge replacement and bridge rehabilitation to provide guidance and direction during the design process while also ensuring that the projects meet or exceed the quality, budget, and scheduling expectations of the client.

**REPRESENTATIVE PROJECT EXPERIENCE**

**I-65 over the Kankakee River – Bridge Project Manager** (Project engineer for the design of a retaining wall along SR 56 consisting of drilled shafts with lagging panels spanning between them held back with rock anchor tie backs. The wall had over 300 drilled shafts placed over half of a mile of road to prevent it from continually experiencing down-slope failure resulting in roadway settlement.)

**S.R. 9 Bridge over Flatrock River Replacement – Bridge Project Manager** (Jeff oversaw and managed the bridge design for this $3 million bridge replacement project. The roadway alignment was complicated due to the bridge being located on a short tangent between two horizontal curves. This project included the removal of the existing historic through truss bridge.)

**US 41 Bridge Replacement over EJ&E Railroad – Bridge Project Manager** (Project manager/designer for U.S. 41 bridge replacement over EJ&E RR in Schererville. Project included the design of a four-span, 410-foot long, 84-foot wide, replacement bridge; a six-foot raise in grade with mechanically stabilized earth walls; and development of a traffic maintenance scheme to allow building the structure one-half at a time under heavy traffic in a highly developed commercial corridor.)
**KEY MEMBERS**

**Patricia Conner**  
Environmental Manager  
*Certifications:* FHWA/INDOT NEPA  
*Education:* BS, Anthropology, Depauw University  
- 25 years of experience working in the transportation field  
- Will report to PM Jeff Matern and will coordinate closely with Sub-Consultants  
- Responsible for environmental management for JSE and oversees the work and scheduling of JSE sub-consultants that may be required for Section 106 or environmental field surveys  
- FHWA/INDOT NEPA certification and has attended INDOT Cultural Resource training

**Josh Foster, P.S.**  
Survey Manager  
*PS Registration:* Indiana  
*Education:* BS, Land Surveying, Purdue University  
- Registered professional surveyor in the state of Indiana  
- Managed survey operations on road and bridge projects statewide on numerous sites and for many federally-funded mapping projects  
- Responsible for all areas of surveying at JSE including: aerial control, topographic survey, boundary and right-of-way surveys, right-of-way plats, and right-of-way engineering

**Christina Lu, P.E.**  
Bridge Design Manager  
*PE Registration:* Indiana  
*Education:* BS, Civil Engineering, University of Kentucky  
- Has over 18 years of experience in transportation engineering  
- Experienced in preparing and reviewing structural design calculations for steel prestressed concrete & post-tensioned concrete bridges, developing construction plans, reviewing drawings, consultant review for INDOT projects  
- Supervises drafting personnel in the development of CAD and reviews shop drawings

**Paul Myers, P.E.**  
Road Design Manager/QC  
*PE Registration:* Indiana  
*Education:* BS, Civil Engineering, Purdue University  
- Registered Professional Engineer in Indiana  
- 31 years of experience including road design, bridge design, hydraulic design, and project management  
- Seven years of experience working at INDOT  
- Designed and managed many large and small road improvement projects ranging from the $51.9 million to $250 thousand small structure replacements
**Malek M. Smadi, Ph.D, P.E.**
Geotechnical Services

**PE Registration:** Indiana  
**Education:** MS, Civil Engineering, Jordan University of Science and Technology

- 28 years of geotechnical experience  
- Research and professional interests include foundation engineering, construction problems, numerical techniques, granular soils subjected to earthquakes, ground modification technology, and underground construction  
- Member of the American Society of Civil Engineers, International Society for Soil Mechanics and Foundation Engineering and Geo-Institute of ASCE  
- Malek’s enthusiastic ability to deliver projects of all complexity levels has been demonstrated on numerous assignments, including those with accelerated schedules

**Rachele Baker, PWS, CPESC**
Environmental Services

**Certifications:** FHWA/INDOT NEPA  
**Education:** BS, Natural Resources & Environmental Science/ Purdue University

- Project Manager and Environmental Scientist with over 20 years of experience in environmental projects  
- Experience includes stream and wetland mitigation design and monitoring, NEPA environmental assessments and categorical exclusions, permitting and compliance  
- NEPA documents addressed air quality, noise levels, water quality, wetlands, endangered species, karst, archaeological features, historic structures
UNDERSTANDING & APPROACH

Understanding

JSE visited the project site located of SR 75 over Wildcat Creek approximately 4.51 miles south of SR 18 in Carroll County. We also reviewed the advertised mini scope, the current Bridge Inspection Reports and the existing plans on file in the INDOT Research and Documents Library.

The existing structure is a two span structure with one-61.5’ long steel beam approach span and one-175’ long steel truss main span which carries SR 75 crossing Wildcat Creek. The structure was built in 1947 with the first rehab performed in 1974 and second rehab performed in 2001. The existing structure also received new paint in 2007. The structure shows multiple signs of structural deficiencies including wearing surface cracking, joint degradation, splice and gusset plate corrosion and some localized rusting on vertical and diagonal truss members. The Inventory Rating of the structure is 30 tons and the Inventory Rating (H) is 17 tons. Both of these Ratings are considered insufficient to allow bridge deck overlay which requires 36 tons Inventory Rating.

The existing steel through truss bridge is considered a historic bridge and it is determined eligible for the National Register under Criterion C as the structure represents distinctive characteristics in bridge construction, design or engineering. Based on the information in the Indiana Historic Bridge Inventory Volume 4, this historic bridge is listed as a Non-Select Bridge since it was constructed post-1944 receiving a medium Eligibility Score. Wildcat Creek passing under the bridge is designated as State Scenic River which demands additional environmental measures and concerns.
The purpose of this project is to provide a long term resolution for this bridge that is under the low inventory rating and requires future high maintenance fees to retain its structural integrity. Based on our understanding, the intention of this project is to replace the historic bridge with a new bridge that carries the traffic of SR 75 over Wildcat creek in a functional, safe and cost effective manner. For the first phase of the project, JSE will provide Bridge Assessment Development Service to collect and review various information such as environmental constraints and historical/architectural investigation to better define the scope of work. The Engineering Assessment/Engineer’s Report will emphasize the environmental constraints, constructability concerns, maintenance of traffic issue and summarize various design considerations to meet the project needs. This report will include an economic analysis to determine the best bridge replacement alternative that considers various span configurations, preliminary hydraulic analysis and approach roadway profile grade analysis.

After the scope of the work is defined, JSE anticipates providing bridge, road, environmental, topographic, survey, geotechnical, right-of-way, utility coordination and plan development services for the construction contract documents. For this environmentally sensitive project that requires CE, Section 4(f) documentation and Section 106 scheduling, JSE will start environmental services with early coordination to stay off the critical path. Sufficient environmental services are critical to identify the limiting constraints of the project, to obtain environmental approval within project schedule and to deliver the project in effective manner.
Why you should select Janssen & Spaans Engineering, Inc.

Diversified Experience – We have the skills and technical expertise to tackle any project type or size need in the LaPorte District.

Available Capacity – JSE’s current active INDOT project assignments are much less than in years past. We have and are currently preparing tracings submittals for a number of our INDOT projects.

Committed to Saving INDOT Money – JSE has applied INDOT’s Open Roads Policy on over 40 INDOT projects resulting in over $15 million in cost savings to INDOT.

JSE offers an absolute commitment to the success of each assignment by providing the highest quality transportation design and project management services.

Thank You