Work Plan for Utilizing Indefinite Delivery / Indefinite Quantity Contracting for Bridge and Pavement Preservation

Purpose and Scope

The Indiana Department of Transportation (INDOT) submits this work plan for review and approval to evaluate the use of Federal-Aid for Indefinite Delivery / Indefinite Quantity Contracts (ID/IQ) to address bridge and highway preservation needs. With approval of this work plan, the Indiana Department of Transportation (INDOT) will use federal aid for ID/IQ Contracts under the Federal SEP-14 program.

INDOT Preservation Strategy

INDOT has identified three *Critical Success Factors* (CSF) that are essential for the management of a comprehensive Preservation Program.

(1) Routine identification of preservation needs uniformly across the entire network of assets.
(2) Efficient and effective delivery to construction.
(3) A fair, balanced, and effective construction contract that mitigates contractor risk, affords consistent profitability, and incentivizes high quality work.

Current Preservation Practice

Presently, bridge and pavement preservation projects are programmed through the Bridge and Culvert Preservation Initiative (BCPI) and Pavement Preservation Initiative (PPI) Programmatic Agreements. This requires approximately two to three years from the time that the preservation need is identified to the time that the construction contract can be Let to address the need. Contracts are Let by developing detailed plans and a contract book with an identified location and a detailed pay item list for each item of work. The contractors bid each pay item, with the award going to the lowest responsive, responsible bidder. This method is suitable for traditional contracts involving major replacement and rehabilitation projects. For minor preservation repairs, the project development time and associated development costs are prohibitive to delivering the relatively modest construction value of the contract. We also lose bid favorability in small preservation contracts, because there are often not a lot of competitive bidders for these small projects. Another characteristic that is inherent to small preservation projects is that there is a very high ratio of risk to profitability. There are very small profit margins for the contractor due to the small quantity of work, but very high levels of risk. Preservation repairs often are not addressed, because of the associated cost and time issues mentioned above.

Routine identification of preservation needs and timely resolution of the deficiency is essential for management of a productive preservation program. The three primary mechanisms that INDOT uses to identify deficiencies are biennial bridge inspections, maintenance crew observations, and customer complaints. The current time to cure (the time it takes from the point the problem is identified, to the contract closeout) is an extraordinary impediment to those stakeholders' confidence in their role as having ownership in the resolution of the subject deficiencies. The second CSF is where our current process needs the most improvement. Currently, our small project development process is identical to our large project delivery process. The exorbitant contract development "soft" costs (costs internal to INDOT for contract development) make the delivery of small preservation projects an inefficient and costly process. The development time (multiple years) makes the implementation of the remedy much later than it should be completed, allowing continued deterioration throughout the duration of the

contract development process. The third CSF affords an opportunity for improvement by effectively managing the contractors risk associated with small projects. Currently, Contractors must approach the bidding process with a large number of unknowns. Uncertainty regarding working hours subject to traffic congestion policies, and uncertainties with vague pay items leaves the contractors exposed to high risks with minimal profitability on small preservation projects.

Proposed Preservation Strategy

It is anticipated that the ability to resolve deficiencies within months rather than years will increase the frequency with which deficiencies are reported. It is also anticipated that the accelerated resolution of deficiencies will dramatically improve Customer Satisfaction by expediting the resolution of customer complaints.

In evaluating INDOT's current Preservation Program through the lens of the three identified Critical Success Factors, it was determined that innovative procurement methods should be evaluated with the intention of optimizing how we achieve the identified Preservation CSF's. To accomplish these goals, INDOT identified an Indefinite Delivery / Indefinite Quantity (ID/IQ) Contract as a potential tool for procuring Preservation Projects. ID/IQ is an indefinite quantity contract under which INDOT may assign the contractor an ongoing series of individual Job Orders.

To begin the process of establishing an ID/IQ program, INDOT researched the existing ID/IQ programs that are active at other State DOT's. After numerous discussions with representatives from FHWA, other State DOT's, and academic experts on ID/IQ, INDOT moved forward with selecting a consultant to act as a facilitator in helping establish INDOT's ID/IQ program. A Request For Proposals was issued to more than 1900 consulting firms that were identified as having provided consulting services to State DOT's in the past. One week prior to closing the RFP submittals, an Open Question and Answer session was held allowing an opportunity for interested parties to ask questions about INDOT's intent for the ID/IQ program. 21 individuals attended the meeting representing 11 Consulting Firms, 2 Contractors, the Indiana Contractor's Association, INDOT, and FHWA. There were 3 consulting companies that submitted proposals for the INDOT ID/IQ program. Those three consultants were scored for their Technical Approach to the program. Then, the top two scores were short listed for a second phase of the selection process. The second phase of the selection required interviews of each of the two short-listed firms. After the interviews, the two firms were scored for their Business Approach to the ID/IQ program. The contract was awarded to the consultant that scored the highest for each of the two independent steps of the selection process. The two short-listed consultants offered unique approaches to the ID/IQ program. The approach that was ultimately selected is based on the Job Order Contracting procurement methodology.

A major component of Job Order Contracting is a Construction Task Catalog (CTC) consisting of a comprehensive list of work activities called pre-priced tasks. The CTC contains preset unit prices for the direct cost of each task. The unit prices are calculated using local labor, equipment, and material costs. Contractors will be asked to bid two adjustment factors to be applied to the pre-priced tasks in the CTC—one for working during normal working hours and another for working other-than-normal working hours (evenings, weekends, recognized holidays and when INDOT can only provide access to the work site for less than 7 hours at any one time. Each adjustment factor is weighted (e.g. 75%, 25%) and the sum of the weighted adjustment factors determines the lowest bidder. ID/IQ will be used for small to medium-sized bridge, culvert, and pavement preservation projects.

Once a contract is awarded to the lowest, responsive, responsible bidder, and projects are identified, the

contractor and INDOT's project manager will meet at the project site and discuss the work to be performed. After the site meeting, INDOT's project manager will develop a Detailed Scope of Work and issue a Request for Proposal to the contractor. The contractor will then build a Proposal Package which includes the Price Proposal, a construction schedule, and a list of subcontractors and will submit the Proposal Package to the INDOT project manager for review and approval. The Price Proposal amount is determined by the unit price of the individual tasks, multiplied by the quantity determined by the Detailed Scope of Work, multiplied by the appropriate adjustment factor based on the work schedule. The INDOT project manager will compare the price proposal to historical price data if available to verify the appropriateness of performing the work through the JOC. Once the Proposal Package is approved by the INDOT project manager, a Job Order will be issued to the contractor.

If there is a change in the Detailed Scope of Work after a Job Order is issued, any extras, changes or deletions are handled as a Supplemental Job Order where the Contractor is required to price the work in the same manner as the original Price Proposal – unit prices multiplied by the quantity multiplied by the appropriate adjustment factor. This eliminates the traditional change order negotiation and avoids claims and delays.

ID/IQ provides a timely response to preservation needs on an as-needed basis as the time frame for procuring each project is drastically reduced. ID/IQ contracts can be limited in scope. The scope of work for each ID/IQ Contract can be tailored to the type of asset for which work is required.

Federal legislation allows highway bridge and pavement preservation projects to be eligible for federal-aid funding. The FHWA Special Experimental Project No 14 (SEP-14) may be used to evaluate promising non-traditional contracting techniques.

The Contract will be administered in accordance with INDOT's current practice for inspections, payments, schedule / work progress, and project close-out. The Pilot Program will be used to identify some best practices with regards to staffing for construction inspection on the IDIQ Contracts.

NEPA review will be performed for each Job Order. A scoping document will be developed for each job order that identifies the scope of work and pertinent project parameters. The environmental review will be performed by a qualified Environmental Consultant. INDOT will review and approve the final environmental document for all projects. The environmental document must be approved, and all prescribed mitigation measures must be incorporated into the construction plan prior to the Project Manager awarding Notice to Proceed to the Contractor. From a project management standpoint, environmental compliance will most likely be the Critical Path for most Job Orders.

DBE Goals will be established for the Contract. Work items that are DBE specific will be identified and reported at project closeout.

Proposal

INDOT requests $1,000,000 of federal funds to fund ID/IQ contracts for bridge, culvert, and pavement preservation activities under the SEP-14 "Alternative Contracting" program. The $1M request will fund the initial year of the Pilot Program in the Greenfield District. Throughout the course of the first year of the Pilot Program, INDOT will coordinate with FHWA to evaluate the effectiveness of the program. Assuming that INDOT and FHWA are satisfied with the results of the program at the end of the year, INDOT will request an additional $6,000,000 to fund individual ID/IQ contracts in each of the 6 INDOT Districts. The following provides the criteria for the program:

- FHWA 1273 will be included in all ID/IQ bid documents.
- INDOT will bid two ID/IQ Contracts in the Greenfield District. One Bridge and Culvert Preservation ID/IQ Contract, and one Pavement Preservation ID/IQ Contract
- Each ID/IQ contract will have a scheduled completion date of one year from the date of award.
- Each contract will include a provision to extend the contract for one additional term (the contract award amount and a completion date one year from approval).
- Each extension is to be mutually agreed upon between the Department and the contractor. The general scope of the ID/IQ contracts will be for bridge, culvert, and pavement preservation activities. Based on the success of the pilot program, INDOT may explore the use of ID/IQ for the preservation of other highway assets that may be explored within the program and subject to the concurrence of FHWA.

Schedule

- INDOT has identified some of the activities that will be included in the CTC.
- Upon award of Notice to Proceed to the IDIQ Consultant, INDOT and the Consultant will work with FHWA to determine the appropriate work types within the Bridge, Culvert, and Pavement Preservation Categories.
- INDOT will use Federal Funds for the associated consulting fees to be paid to the ID/IQ consultant to prepare the CTC. Once finalized, INDOT will solicit bids through its traditional bidding process. Each contract will be awarded to the lowest, responsive, responsible bidder. We expect to have the CTC ready for Letting by August 2015.
- The ID/IQs will be administered in accordance with Federal Highway Administration and INDOT guidelines for the Federal Bridge and Pavement Preventive Maintenance Program.

Evaluation

INDOT will review and evaluate the following during the pilot ID/IQ program:

- Time to complete the ID/IQ bid documents
- Time for bidding and award execution
- Responsiveness of contractors
- Cost to perform the work
- Ability to handle scope changes
- Contractor's ability to complete each Job Order in a timely manner
- Quality of work delivered

Reporting

- The INDOT ID/IQ Program Manager will submit an annual status report to FHWA.
- The INDOT ID/IQ Program Manager will submit a final evaluation report to FHWA within four months after completion of the pilot program.