

# Work Plan for Utilizing Job Order Contracting for ITS Maintenance Contracts

## Purpose and Scope

The purpose of this work plan is to provide a format to evaluate the use of Federal-aid for Job Order Contracts (JOC) to address Intelligent Transportation Systems preventive maintenance contracts. With approval of this work plan, the New Jersey Department of Transportation (NJDOT) will use federal aid provided for the preventive maintenance and replacement of ITS Facilities using the JOC method in accordance with SEP-14.

## Current Method

Scheduled ITS preventive maintenance repair and replacements are currently accomplished by state forces supplemented by low bid contracts. Contractors are obtained through the use of the traditional contracting process whereby the owner identifies the locations and provides detailed estimates for each item of work. The contractors bid each item of work, with the award going to the lowest responsive, responsible bidder. This proven method is suitable for planned replacement when the utility life of ITS Devices is known and about to expire, but for minor maintenance repairs the process is costly and time consuming. Undergoing the traditional bidding process, the same administrative and engineering resources required for replacement projects are necessary for minor repairs and other maintenance activities. Due in large part to the aforementioned reason, minor repairs, typically involving minimal costs, are often times left unaddressed. As a result, more significant damage ensues requiring more costly and urgent repairs.

## Opportunities for Improvement

Job Order Contracting is an indefinite quantity contract under which NJDOT may assign the contractor an ongoing series of individual Job Orders. A major component of Job Order Contracting is a Construction Task Catalog (CTC) consisting of hundreds of work activities called pre-priced tasks. The CTC contains preset unit prices for the direct cost of each task. These 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 NJDOT 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. JOC will be used initially as a pilot for preventive maintenance and the replacement of ITS facilities.

Once a contract is awarded to the lowest, responsive, responsible bidder, and projects are identified, the contractor, NJDOT's project manager, and the project's Resident Engineer (NJDOT or consultant) will meet at each project site and discuss the work to be performed. After the site meeting, NJDOT's Project Manager will develop a Detailed Scope of Work and issue a Request for Proposal to the contractor. This Detailed Scope of Work will consist of ITS preventive maintenance services and the replacement of ITS field devices/equipment (CCTV, DMS, Etc.). Preventive maintenance services may include software/firmware updates and cleaning/tuning of ITS devices and components, however NJDOT will coordinate with FHWA to ensure that appropriate sources of funding are used.

NJDOT's project manager will also ensure that all applicable documents and certifications (environmental, utility, right of way, railroad, Public Interest Findings, and SERF) are completed, approved, and provided to the appropriate authorities. 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 NJDOT 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. Once the Proposal Package is approved by the NJDOT Project Manager and a FHWA representative, 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.

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

Federal legislation allows all preventive maintenance activities that extend the service life of a highway facility to be eligible for federal-aid funding. NJDOT was granted approval to use federal funding for ITS Contract Maintenance Projects. The FHWA Special Experimental Project No 14 (SEP-14) may be used to evaluate promising non-traditional contracting techniques.

## Proposal

NJDOT is requesting \$5,000,000 of federal funding under the SEP-14 "Alternative Contracting" program to assign two Job Order Contracts for ITS preventive maintenance in the North and South Regions of New Jersey. \$2,500,000 would be allocated to both the North and South Jersey Regions each. The following list provides criteria for the proposed program:

- FHWA 1273 will be included in all Job Order Contract bid documents.
- NJDOT will bid two Job Order Contracts; one for each North and South Regions of New Jersey.
- Each Job Order Contract will have an estimated annual value: \$2,500,000 for the JOC program
- The contracts will have a fixed term of one year each and will be effective for their applicable regions.
- The general scope of the Job Order Contracts will be for ITS preventive maintenance. Based on the success of the pilot program, NJDOT may explore the use of JOC for future preventive maintenance contracts subject to the concurrence of FHWA.
- Each Job Order Contract will be managed by the Department's Bureau of Mobility and Systems Engineering.

## Schedule

- NJDOT has identified the activities that will be included in the CTC.
- NJDOT at its own expense will retain a consultant to prepare the CTC. Once finalized, NJDOT 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 advertising by December, 2015 and award by March, 2016.
- ITS facilities will be grouped based on technology type and geographic location.
- The JOCs will be administered in accordance with NJDOT's ITS device maintenance procedures using the manufacturers' recommended procedures and intervals.

## Evaluation

NJDOT will review and evaluate the following during the pilot JOC program:

- Time to complete the JOC 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 and Quality of work delivered.
- Comparison of cost, quality and schedule aspects of JOC with the traditional method of bidding one large contract for ITS preventive maintenance contracts.

## Other Items of Interest

- Can the benefits of the JOC contracting mechanism be quantified? What can be measured?
- In what ways can JOC be compared to traditional contracting which will effectively identify positive and negative impacts of both types of contracting?
- Is the contracting community willing to accept JOC for ITS work?
- What other transportation activities could be effectively contracted through JOC?

## Reporting

- NJDOT Bureau of Mobility and Systems Engineering will submit an annual status report to FHWA that addresses the schedule and cost efficiencies associated with this delivery method.
- NJDOT Bureau of Mobility and Systems Engineering will submit a final evaluation report to FHWA within four months after completion of the pilot program.