

Work Plan for Utilizing Job Order Contracting for Preventative Maintenance Projects (SEP-14)

Purpose and Scope

The Missouri Department of Transportation (MoDOT) submits this work plan for review and approval to evaluate the use of Federal-aid for Job Order Contracts (JOC) to address preventative maintenance and preservation activities for bridge, asphalt pavement, concrete pavement, guardrail and guard cable repair. Currently, only the bridge preventative maintenance JOC contracts are federally funded. With approval of this work plan, MoDOT will use Federal-aid for all the above referenced JOC contracts under the Federal "alternative contracting" SEP-14 program.

Introduction

Since 2010, MoDOT has utilized an innovative contracting mechanism called Job Order Contracting for use on preventative maintenance type projects, including asphalt and concrete pavement repair, guardrail and guard cable repair and bridge maintenance repair. Job Order Contracting is a procurement process that allows MoDOT to award fixed price construction contracts with indefinite delivery and indefinite quantity at individual work locations throughout the project limits.

Scope

JOC projects are programmed in MoDOT's Five-year Statewide Transportation Improvement Program (STIP). Program amounts for projects range from \$100,000 to \$1.5 million. Locations are identified based on the history of repair and preventative maintenance needs for various routes.

The JOC bid proposals contain a catalog of pre-established fixed unit prices for material, equipment and labor for various items of work to be used for completing each Job Order. The contractor bids adjustment factors for the expected overhead and profit and any additional business and construction related costs for performing the various types of work identified in the contract. There are three different Adjustment Factors: a Normal Work Adjustment Factor, Nighttime Work Adjustment Factor and Weekend Work Adjustment Factor. The Adjustment Factor for Normal Working Hours includes work conducted from 6:00 a.m. to 7:30 p.m. Monday through Friday. The Adjustment Factor for Nighttime Work includes any work conducted from 7:30 p.m. to 6:00 a.m. Monday through Thursday. The Adjustment Factor for Weekend Work includes any work conducted from 7:30 p.m. on Friday through 6:00 a.m. on Monday, night or day, or a Holiday. Adjustment Factors include business and construction related costs

as defined below. It is the responsibility of the contractor to verify the fixed unit prices provided in the contract and to modify their bid for the Adjustment Factors accordingly.

Business Costs. Business related costs consist of profit, overhead costs, subcontractor profit and overhead, taxes, finance costs, and other costs including but not limited to;

- (a) insurance, bonds and indemnification
- (b) project meetings, training, management and supervision
- (c) project office staff and equipment
- (d) employee or subcontractor wage rates that exceed prevailing wages
- (e) fringe benefits, payroll taxes, worker's compensation, insurance costs and any other payment mandated by law in connection with labor that exceeds the labor rate allowances.
- (f) business risks such as the risk of low than expected volumes of work, smaller than anticipated Job Orders, poor subcontractor performance, and inflation or material cost fluctuations.

Construction Costs. Construction related costs include but are not limited to;

- (a) personnel safety equipment
- (b) security requirements
- (c) excess material waste
- (d) daily and final clean-up
- (e) costs resulting from inadequate supply of materials, fuel, electricity, or skilled labor
- (f) costs resulting from productivity loss
- (g) working in extreme and adverse weather conditions
- (h) any other discreet items of work required to complete a particular Job Order.

Job Order Contracts are awarded based on the lowest responsive bidder. To date, approximately seventy JOC contracts have been awarded and fifteen JOC contracts were extended to allow for a total two-year contract term. See Attachments for the history of JOC projects since 2010 and example contract language for a Bridge Maintenance JOC contract.

The JOC process was developed in collaboration with Industry. MoDOT held pre-bid meetings throughout the State to educate the contracting community and solicit contractor input on the new process. Overall, there was good contractor attendance and input at the meetings. MoDOT actively solicited input from Industry on establishing the fixed unit price lists for all JOCs. Since development in 2010, MoDOT Bidding and Contract Services (BCS) Section conducts an annual internal MoDOT meeting to discuss lessons learned from previous year's on-call contracts. If necessary, contract language is modified to incorporate improvements for the next year's contracts. The BCS section

also updates the fixed costs to reflect the current market value. In the event the fixed costs change significantly, the BCS section coordinates with Industry to ensure Industry concurs with the revised fixed costs.

In summary:

- JOC contracts are competitively bid. The bid proposal includes the fixed pre-priced activities. The contractor's adjustment factor is applied to all prices in the catalog.
- The cost for each activity is priced by multiplying the fixed price in the bid proposal by the quantity.
- The amount of each Job Order is the sum of the cost the activities multiplied by the contractor's adjustment factor.
- Overall, JOC contracts eliminate the ability for contractors to unbalance the bid.
- JOC contracts provide reasonable value to the tax payers. JOC projects compare favorably and economically to time and material contracts and traditional design contracts.
- JOC contracts provide a timely response to identified preservation and maintenance needs as the time frame for each job order is eliminated and design time truncated.
- JOC contracts can be limited in scope. The scope of work for each JOC can be used to limit the types of asset the contract can be applied to.
- Federal legislation allows all preventative maintenance activities that extend the service life of a highway facility 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.

Proposal

MoDOT is requesting approval to use federal funds to fund JOC contracts for scheduled bridge, pavement, guardrail and guard cable preservation and maintenance activities under the SEP-14 "Alternative Contracting" program. The following provides the criteria for the program:

- FHWA 1273 will be included in all JOC contracts.
- Each JOC contract will be included in MoDOT's STIP.
- Federal funding can be applied to the JOC contracts.
- Each JOC 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.

Evaluation and Measures

MoDOT developed guidelines for MoDOT's Engineering Policy Guide at [Engineering Policy Guide - Job Order Contracting](#) as a tool for the Districts to use in designing and administering the JOC contracts consistently Statewide.

MoDOT will continue to evaluate the effectiveness of the JOC concept to meet the bridge, pavement, guardrail and guard cable preservation needs. Continued annual meetings will be conducted with both MoDOT Design and Construction Divisions to modify and improve the contracts, as necessary. In the event significant changes are necessary, those changes will be coordinated with both Industry and the Missouri FHWA Division Office.

Some additional specific areas of interest are:

- Staffing requirements for the oversight and administration of the JOC contracts,
- The contractor's ability / willingness to prepare job order proposals in a timely manner,
- The thoroughness of the construction task catalog. Are all the necessary fixed cost items included in the bid proposal?

These areas will continue to be monitored to ensure JOC contracts are the most cost effective and efficient procurement method to meet MoDOT's needs for contracted preventative maintenance.

Attachment A: Job Order Contracting Summary

2010

Job No.	Route	Contractor	Contract Type	STIP Budget
J4P2273	Major Rtes.	Chester Bross Const. Co.	Asphalt Repair	\$500,000
J2I2162F	Interstate	Chester Bross Const. Co.	Asphalt Repair	\$1,000,000
J2I2162G	Interstate	Freeman Concrete Const. LLC	Concrete Repair	\$1,000,000
J4P2300	Various	Comanche Construction, Inc.	Bridge Repair	\$500,000
J6I2171	Various	R.V. Wagner Inc.	Bridge Repair	\$1,000,000
J2I2162K	Interstate	Concrete Strategies LLC	Concrete Repair	\$500,000
J2I2162L	Interstate	N.B. West Contracting Co.	Asphalt Repair	\$1,000,000
J2I2162M	Interstate	N.B. West Contracting Co.	Asphalt Repair	\$1,000,000

2011

Job No.	Route	Contractor	Contract Type	STIP Budget
J2I2163B	I-29	Herzog Contracting Corp.	Asphalt Repair	\$250,000
J2I2163C	I-29 & I-229	Herzog Contracting Corp.	Asphalt Repair	\$250,000
J2I2163D	I-35	Herzog Contracting Corp.	Asphalt Repair	\$250,000
J2I2163E	I-35	N.B. West Contracting Co.	Asphalt Repair	\$250,000
J2I2163F	Interstate	Chester Bross Const. Co.	Asphalt Repair	\$1,000,000
J2I2163G	Interstate	Freeman Concrete Const.	Concrete Repair	\$1,000,000
J2I2163H	I-70	Chester Bross Const. Co.	Asphalt Repair	\$250,000
J2I2163I	I-70	Chester Bross Const. Co.	Asphalt Repair	\$250,000
J2I2163J	I-70	Chester Bross Const. Co.	Asphalt Repair	\$500,000
J6P2356	Non-Interstate	Pace Construction Co.	Asphalt Repair	\$500,000
J6P2356B	Non-Interstate	Lamke Trenching & Exc.	Concrete Repair	\$500,000
J2I2163K	Interstate	J L Brown Contracting Ser.	Concrete Repair	\$500,000
J2I2163L	I-44 & I-55	Pace Construction Co.	Asphalt Repair	\$1,000,000
J2I2163M	Interstate	Pace Construction Co.	Asphalt Repair	\$1,000,000
J2I2163N	I-44	APAC-Missouri, Inc.	Asphalt Repair	\$200,000
J8P2252	Major Rtes.	APAC-Missouri, Inc.	Asphalt Repair	\$100,000
J8P2253	Major Rtes.	APAC-Missouri, Inc.	Asphalt Repair	\$200,000
J2I2163O	I-44	APAC-Missouri, Inc.	Asphalt Repair	\$200,000
J2I2163P	I-44	Willard Asphalt Paving, Inc.	Asphalt Repair	\$200,000
J2I2163Q	I-44	Willard Asphalt Paving, Inc.	Asphalt Repair	\$200,000
J2I2163R	I-44	N.B. West Contracting Co.	Asphalt Repair	\$200,000
J2I2163S	I-55 & I-57	Fronabarger Concreters, Inc.	Concrete Repair	\$125,000
J2I2163T	I-55 & I-57	APEX Paving Co.	Asphalt Repair	\$125,000
J2I2163U	I-55 & I-155	Fronabarger Concreters, Inc.	Concrete Repair	\$125,000
J2I2163V	I-55 & I-155	APEX Paving Co.	Asphalt Repair	\$125,000
J1P2200	Various	Superior Rail System, LLC	GR/GC	\$300,000
J4P1910	Various	Superior Rail System, LLC	GR/GC	\$332,000
J4P1914	Various	Collins & Hermann Inc.	GR/GC	\$1,388,000
J5M0098	Various	Mar-Jim Contracting, LLC	GR	\$200,000
J6M0173	Various	Collins & Hermann Inc.	GR	\$702,000
J6M0174	Various	D & S Fencing Company	GR	\$225,000
J6M0175	Various	D & S Fencing Company	GR	\$350,000
Various	Various	D & S Fencing Company	GC	\$175,000

Attachment A: Job Order Contracting Summary

2012

Job No.	Route	Contractor	Contract Type	STIP Budget
J2I2164B	I-29	Herzog Contracting Corp.	Asphalt Repair	\$250,000
J2I2164C	I-29 & I-229	Herzog Contracting Corp.	Asphalt Repair	\$250,000
J2I2164D	I-35	Herzog Contracting Corp.	Asphalt Repair	\$250,000
J2I2164E	I-35	Chester Bross Const. Co.	Asphalt Repair	\$250,000
J2I2164G	Interstate	Realm Construction, Inc.	Concrete Repair	\$1,000,000
J4P2332	Non-Interstate	Realm Construction, Inc.	Concrete Repair	\$980,000
J2I2164F	I-70	Superior Bowen Asphalt Co.	Asphalt Repair	\$1,000,000
J4I1854	Non-Interstate	Superior Bowen Asphalt Co.	Asphalt Repair	\$490,000
J2I2164Q	I-44	Willard Asphalt Paving, Inc.	Asphalt Repair	\$200,000
J2I2164P	I-44	Willard Asphalt Paving, Inc.	Asphalt Repair	\$200,000
J2I2164N	I-44	APAC-Missouri, Inc.	Asphalt Repair	\$200,000
J2I2164O	I-44	APAC-Missouri, Inc.	Asphalt Repair	\$200,000
J3P2223	Various	Collins & Hermann Inc.	GR	\$135,000
J3P2224	I-70	Collins & Hermann Inc.	GC	\$250,000
J6I3006	Various	Collins & Hermann Inc.	GR	\$350,000
J6I3007	Various	Collins & Hermann Inc.	GR	\$225,000
J6I3008	Various	Collins & Hermann Inc.	GR	\$700,000
J6I3009	Various	Collins & Hermann Inc.	GC	\$450,000
J6I3010	Various	Freedom Fence, LLC	Fence	\$325,000
J8P2238	Various	Collins & Hermann Inc.	GR/GC	\$250,000
J8P2241	Various	Collins & Hermann Inc.	GR/GC	\$175,000
J1P2223	Various	Superior Rail System, LLC	GR/GC	\$300,000
J4P1994	Various	Superior Rail System, LLC	GR/GC	\$350,000
J4P1995	Various	Collins & Hermann Inc.	GR/GC	\$1,574,000
J5P3000	Various	Superior Rail System, LLC	GR/GC	\$550,000
J9P2236	Various	Collins & Hermann Inc.	GR/GC	\$500,000
J9P2238	Various	Collins & Hermann Inc.	GR/GC	\$450,000

Existing 2011 Job Order Contracts Extended Thru 2012

Job No.	Route	Contractor	Contract Type	STIP Budget
J2I2163H	I-70	Chester Bross Const. Co.	Asphalt Repair	\$250,000
J2I2163I	I-70	Chester Bross Const. Co.	Asphalt Repair	\$250,000
J2I2163J	I-70	Chester Bross Const. Co.	Asphalt Repair	\$500,000
J6P2356	Non-Interstate	Pace Construction Co.	Asphalt Repair	\$500,000
J6P2356B	Non-Interstate	Lamke Trenching & Exc.	Concrete Repair	\$500,000
J2I2163K	Interstate	J L Brown Contracting Ser.	Concrete Repair	\$500,000
J2I2163L	I-44 & I-55	Pace Construction Co.	Asphalt Repair	\$1,000,000
J2I2163M	Interstate	Pace Construction Co.	Asphalt Repair	\$1,000,000
J8P2252	Major Rtes.	APAC-Missouri, Inc.	Asphalt Repair	\$100,000
J8P2253	Major Rtes.	APAC-Missouri, Inc.	Asphalt Repair	\$200,000
J2I2163R	I-44	N.B. West Contracting Co.	Asphalt Repair	\$200,000
J2I2163S	I-55 & I-57	Fronabarger Concreters, Inc.	Concrete Repair	\$125,000
J2I2163T	I-55 & I-57	APEX Paving Co.	Asphalt Repair	\$125,000
J2I2163U	I-55 & I-155	Fronabarger Concreters, Inc.	Concrete Repair	\$125,000
J2I2163V	I-55 & I-155	APEX Paving Co.	Asphalt Repair	\$125,000