Final Report Special Experimental Project No. 14 (SEP-14) Michigan Department of Transportation Fixed Price Variable Scope Contracting November 13, 2017

Project Number: 113423A Control Section: 84922

Project Scope: Installation of Environmental Sensor Stations and Camera Installations

Location: Various locations in the North Region

# Introduction

In 2015, MDOT received approval to utilize the Fixed Price Variable Scope (FPVS) contracting method for the installation of active warning systems (AWS), Environmental Sensor Stations (ESS) and CCTV closed circuit television cameras at traffic signal locations (TS) along various trunkline routes within MDOT's North Region. The purpose of using the FPVS contracting method was to gain more value by installing additional sites than if the traditional Design-Bid-Build process was utilized.

## **Contract Information**

This contract can be found on MDOT's e-proposal website by clicking on the following link: <a href="http://mdotcf.state.mi.us/public/eprop/login/index.cfm">http://mdotcf.state.mi.us/public/eprop/login/index.cfm</a>. Once registered, enter the e-proposal website by typing in the user's email address and password. Instructions for registering new users are on the left side of this page. Select the letting date (March 9, 2016) from the "Lettings" area on the left side of the page. The project plans and proposal, and contractor inquiries and responses will be available for downloading from this location.

MDOT has also developed a guide of the development of FPVS projects. This guide is incorporated as an appendix to MDOT's Innovative Construction Contracting Guide which is publicly posted on MDOT's website.

### **Project Overview**

The project work includes the installation of up to 12 ESS sites, 2 AWS and 7 TS locations. Each site includes items such as detection equipment, cabinets, power, communications, and other miscellaneous devices to provide a working system.

### **Project Development**

The project was divided into four sections for contractors to bid on. Contract documents were included to define the work included in each Section and provide clear bidding instructions.

Section 1 included the work needed to install AWS 1 and 2; ESS sites 1 through 10; TS 1 through 5. This was the minimum amount of work that could be bid, and bids could be submitted at any price.

Section 2 included the work needed to install AWS 1 and 2; ESS sites 1 through 10; TS 1 through 7, and bids were required to be less than or equal to \$1,486,000. Bids greater than this dollar amount would be considered non-responsive.

Section 3 included the work needed to install AWS 1 and 2; ESS sites 1 through 11; TS 1 through 7, and bids were required to be less than or equal to \$1,486,000. Bids greater than this dollar amount would be considered non-responsive.

Section 4 included the work needed to install AWS 1 and 2; ESS sites 1 through 12; TS 1 through 7, and bids were required to be less than or equal to \$1,486,000. Bids greater than this dollar amount would be considered non-responsive.

Contractors were only allowed to bid on one Section, and the selection of the contractor was based on the following criteria:

- 1. Work completed: The selected contractor will be the one that can complete the most work.
- 2. Price: If two or more contractors are tied after applying criteria 1, the tied contractor's price will be considered. The contractor with the lowest price will be the selected contractor.
- 3. Best and Final Offer (BAFO): If two or more contractors are tied after applying criteria 2, MDOT will request a BAFO from the tied contractors. The contractor with the lowest price will be the selected contractor.
- 4. Random Selection: If two or more contractors are tied after applying criteria 3, MDOT will draw a name from a container to determine the selected contractor.

#### **Bid Results**

The total number of bidders for this project was 1. The low bidder bid on Section 1 at a price of \$1,656,610.47. The low bid included the installation of AWS 1 and 2, ESS sites 1 through 10, and TS 1 through 5. The ESS system will operate as planned without the additional units.

There were no other bidders.

## **Industry Reaction**

Since only one bid was received and it was for the minimum amount of work, MDOT did not benefit from using the FPVS contracting method on this project.