

**Final Report and Recommendations
Special Experimental Project No. 14 (SEP-14)
Michigan Department of Transportation
Fixed Price Variable Scope Contracting
February 14, 2014**

Project Number: 118843A
Control Section: 77475
County: St. Clair
Location: various streets in the city of Port Huron
Contract Cost: \$100,000

Introduction

The Michigan Department of Transportation (MDOT) was authorized to use fixed price variable scope contracting under the provisions of Special Experimental Project No. 14 (SEP 14) on a Wayfinding Sign project in the City of Port Huron. The purpose of this fixed price variable scope (FPVS) contracting method was to utilize a fixed dollar amount to construct the greatest amount of wayfinding signs for \$100,000. The project was a Local Agency project managed by the city of Port Huron with assistance from MDOT, and was a required action from the Blue Water Bridge Plaza project's Record of Decision.

Bidders and Bid Results

The contract required potential bidders to attend a pre-bid meeting at MDOT's Macomb-St. Clair Transportation Service Center, and three bidders attended. At the meeting, MDOT and the city of Port Huron discussed the project's details and the FPVS contracting method. Most of the questions at the meeting were regarding the construction details of the sign and were not related to the contracting method.

Contractors submitted bids by provided the number of signs they proposed to complete for \$100,000 instead of the traditional bidding methods were a price is provided for a fixed number of signs. Two bids were received on the project. The low bidder submitted 22 locations, while the second bidder submitted 19 locations. One bidder who attended the pre-bid meeting did not submit a bid. MDOT typically has three to five bidders on traditional non-freeway signing projects.

Engineers Estimate

The final engineers estimate included a unit price of \$4,500 for each of the 35 wayfinding sign locations. This resulted in a final engineer's estimate of \$167,500 (including \$10,000 for mobilization) for the project. This amount significantly exceeded the total project budget of \$100,000. The unique artwork, shape, and post style specified for the wayfinding signs did not correspond to any existing MDOT pay item, therefore historical unit prices were not applicable. All 35 sign locations where included in the final bid package.

Reasonable assumptions were made in order to estimate the cost of the wayfinding signs. The final estimated unit price for each wayfinding sign included traffic control, foundation construction, breakaway connections, excavation, turf establishment, concrete cutting, concrete repair and any other work to complete each fabrication and installation of each sign. The derived unit price from the selected Contractor was \$4,090 each for 22 locations, slightly lower than the estimated price.

Design and Bidding Feedback

Direct Contractor feedback indicated that the FPVS was a good process to get the most out of a fixed dollar amount. The Contractors indicated the bidding instructions were clear, and that the estimating for this project was very similar to traditional projects.

Both the Contractors and the city of Port Huron felt that the pre-bid meeting was valuable, especially since none of the Contractors had ever completed a FPVS project.

One Contractor indicated that they spent more time securing the best price for materials due to the FPVS process.

Construction Feedback

The city of Port Huron felt the FPVS worked great during the construction phase. The City did not encounter any extras or overruns.

The Contractor also thought this project worked very well during the construction phase due to cooperation with the city of Port Huron when minor utility issues were encountered and resolved in the field. Recommendations to address this issue on future projects is to clearly identify who is responsible for the costs associated with utility conflicts, and that additional utility exploration would be beneficial for all parties on a signing project in a downtown area.

Evaluation

The overall evaluation of this report is that this project was successful in utilizing all the available funding provided by MDOT and the FHWA to the city of Port Huron. The contracting method allowed the commitments from the Blue Water Bridge Plaza project's Record of Decision to be met without cost overruns to any party. If this method of contracting was not used, the city of Port Huron would have been required to provide local funding for any bid amount over \$100,000 or the number of sign locations constructed under this project would have been less than 22.

Wayfinding sign locations identified in the contract, but not constructed as part of this project, will be considered in future by the city of Port Huron. If installed in the future, these future signing locations will be funded 100% by the city of Port Huron.

Project Information

This project and all contract documents can be found on MDOT's e-Proposal website (<http://mdotcf.state.mi.us/public/eprop/login/index.cfm>). Once registered, enter the e-Proposal website by typing in the user's email address and password. Instructions for "new user registration" is on the left side of this page. Select "July 17, 2013" from the "Lettings" area on the left side of the page. The project proposal and any addenda will be available for downloading from this location.