Work Plan Special Experimental Project No. 14 (SEP-14) Idaho Transportation Department Fixed Budget/Best Value Contracting A 12(039)- SH-21, Bridge Deck Preservation February 17, 2010

A. Introduction

The Idaho Transportation Department (ITD) proposes to utilize fixed price best value contracting under the provisions of Special Experimental Project No. 14 (SEP 14) for the use of innovative contracting practices.

Bridges along SH-21 are in need of deck preservation in order to extend their life. In this work plan it is proposed that as many decks will be preserved as possible using this method of contracting.

B. Definitions

Contract time- Date, number of working days or calendar days allowed to complete the contract.

Critical Path- The series of activities in a project schedule that will take the longest total amount of time to complete.

Working Days- Any day except Saturdays, Sundays and State recognized legal holidays on which weather or other conditions not under the control of the Contractor will permit activities on the critical path to proceed for at least 5 hours of the day. Activities shall include but not be limited to: engineering, surveying, permitting, submittals, approvals, procurement, fabrication and construction.

C. Purpose

The purpose of this fixed budget best value contracting method is to utilize a fixed amount of dollars available under this project to place an epoxy overlay on bridge decks along SH-21 to obtain the greatest amount of specified work. Work associated with the candidate bridge decks are considered to be consistent with very similar scopes, therefore, lending ilself to this method of contracting.

D. Scope

This work will consist of preparing the surface of the concrete decks and applying an epoxy and aggregate overlay. The application process is preceded by shot blasting and vacuuming the decks to clean and remove any loose material. Additionally, a concrete waterproofing system, Type C (Silane), will be applied to the bridge parapets. Both the parapet side adjacent to traffic and the tops of the parapets will be sealed.

The bid schedule will consist of one item: Epoxy overlay by the square yard. The contractor will provide the square yards of bridge deck that he can overlay. inclusive of all necessary work such as traffic control. environmental best management practices, mobilization, pavement markings etc.

The contractor is required to complete the deck work on Bridge Key # 15769- Boise River near Diversion Dam but can choose from the rest of the bridges in the following table that he plans to overlay and provide the total square yards of these bridges including Bridge Key # 15769 as his bid item. He will also provide the number of days required to do the work.

Bridge Key #	Route	Mile Post	Description	Plan Area (SY)
15769	SH-21	3.13	Boise River near Diversion Dam	6922.0
12826	SH-21	24.34	Mores Creek; Dunnigan Creek	864.8
12831	SH-21	27.25	Mores Creek; Spencers Cabin	547.1
12840	SH-21	29.67	Mores Creek; Minneha Creek	326.0
12856	SH-21	31.26	Mores Creek; Thorn Creek	340.2
12860	SH-21	33.08	Mores Creek; Mckinley Gulch	322.7
12865	SH-21	33.25	Mores Creek; Big Gulch	228.1
12871	SH-21	35.38	Mores Creek; New York Gulch 1	381.1
12876	SH-21	35.57	Mores Creek; New York Gulch 2	381.1
12915	SH-21	90.81	Chapman Creek	575.5

E. Schedule

The first phase includes advertising the fixed budget best value project, determining the low bid contractor, and awarding the project. The following tasks will be completed:

- 1. ITD will advertise the projects within two weeks of available funds.
- 2. Contractors will bid the projects by providing the square yardage that can be overlaid, including required Bridge Key # 15769, given the fixed budget. Partial completion of bridge decks is not acceptable. The contractors will also be asked to provide the total contract time in working days to complete the bridges. The low bidder is required to complete the bridges within his proposed contract time or liquidated damages will be assessed.
- 3. The project will include a capped contingency amount that can be utilized for unforeseen conditions. The contractor's bid must take into consideration all costs to do the work including overhead and profit.
- 4. Bids will be opened publicly and the contractor with the lowest fixed unit price defined as the lowest price per square yard, will be the lowest responsible bidder. The lowest fixed unit price is determined by dividing the fixed budget by the square footage bid by the contractor. In the event that there is a tie of lowest fixed unit price, the lowest responsible bidder will be determined by the least amount of working days to complete the bridges.
- 5. ITD anticipates awarding (issuing Notice to Proceed) for this project within 90 days of when the funds become available.
- 6. The next phase is project construction. The time allowed for this phase of the project will be the contract lime submitted by the lowest responsible bidder as determined in item 3 above. Time accounting will start within 15 days of the issuance of the Notice to Proceed.

F. Evaluation

In order to evaluate the success of this innovative contracting method, ITD will measure two metrics:

- Additional square yards completed with this project that wouldn't have been completed under typical
 contracting based on the fixed budget. There is an expectation that economies of scale wilt maximize
 available funding.
- Industry reaction which will be measured by comparing the number of bidders on recent similar bridge contracts to the number of bidders on this contract.

G. Reporting

ITD will prepare and submit initial and final reports on this project to FWHA. The initial report will be prepared at the approximate time of award of the contract. The initial report will include reporting on the metrics defined in section F. Evaluation.

A final report will be submitted to FHWA upon completion of the contract and final ITD acceptance. The final report will contain an overall evaluation of the project along with any suggestions and recommendations for improving the process