



COLORADO
Department of Transportation
Office of the Chief Engineer

TO: SHOSHANA M. LEW, EXECUTIVE DIRECTOR
FROM: MARKO ATAMO, PE, CMA BRANCH MANAGER
CC: STEPHEN HARELSON, PE, CHIEF ENGINEER
DATE: 01/28/2020
SUBJECT: AWARD TO LOW RESPONSIVE BIDDER C.R.S. 43-1-113 (16)
PROJECT: NH 0503-093 (21839) REGION 2 US50 OVERLAY WEST OF TEXAS CREEK

Pursuant to C.R.S. 43-1-113(16), it has been determined that it's in the best financial and economic interest of the State to award Region 2's project NH 0503-093 (21839) to the low bidder APC Southern Construction Company, LLC ("APC").

Project Description: This Region 2 project is located in a mountainous rural in Fremont county on US50 from MP 250.7 to 260.9. The project work includes 10.2 miles of full width asphalt removal and installation, guardrail improvements, and rehabilitation work on three bridge structures. The project was solicited under a design bid build (low bid) project delivery method where only two bids were received with APC being the lowest responsive bidder.

Financial Impact: APC's bid proposal totaled \$7,035,527.04 compared to the CDOT engineer's estimate of \$6,300,000.00. The project risks rejection by Statute since there were only two bidders and their proposals were 111.88% and 112.72% of the engineer's estimate. Region 2 has verified they have funding available for the award of the project to APC.

Cost Analysis: An analysis of the bid schedule revealed that two of the bid line items identified below resulted in the overall CDOT engineer's estimate for the project being over 10%.

Bid Item Description	QTY	Unit	Unit Price Low Bid & Eng. Est.		Total Cost Difference	% Over Eng. Estimate
Hot Mix Asphalt (Grading 5X)	37,383	TON	\$88.64	\$80.00	\$322,989.12	110.80%
Guardrail Type 3	21,232	LF	\$36.91	\$22.00	\$316,569.12	167.77%

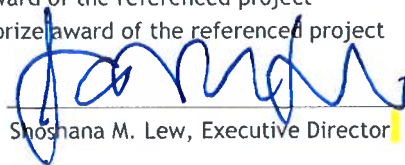
For the above bid items the engineer's estimate used historical data from similar projects with comparable quantities. In verifying APC's bid offer, research revealed that the asphalt material costs were higher than anticipated with the contractor commenting on pricing being subject to current market conditions based on quotes received from their suppliers. APC further mentioned their asphalt pricing reflected historical data on recent projects they have completed in the area. APC also indicated the staining process associated with galvanized guardrail specification resulted in a higher expense for meeting this requirement. Based on the cost analysis and the less than 1% difference in total bid pricing from the two responding bidders, EEMA and Region 2 consider APC's proposed overall bid pricing to be fair and reasonable.

Staff Review & Recommendation: Given the overall project dynamics mentioned above, re-advertisement of the project is unlikely to result in more competition or reduced pricing. The Region 2 Project Management Team's analysis and recommendation to award the project is provided in the attached memorandum to this request. As a result, staff recommends proceeding with the award of the project to APC.

- I recommend award
- I do not recommend award

 Date 01/29/2020
Markos Atamo, PE, CMA Branch Manager

- I authorize award of the referenced project
- I do not authorize award of the referenced project

 Date 01/29/2020
Shoshana M. Lew, Executive Director

cc: Jerad Esquibel, Director, Division of Project Support
RB Simmons, Engineering Contracts
Central Files



COLORADO
Department of Transportation
 Region 2

North Program, R2110
 1480 Quail Lake Loop, Suite A
 Colorado Springs, CO 80906

MEMORANDUM

TO: RB Simmons, Construction Contracts Manager
FROM: John Hall, Resident Engineer
DATE: 27 January 2020
SUBJECT: 21839 Project Award to Low Responsive Bidder, C.R.S. 43-1-113 (16)

This memorandum provides the Region 2 project team request to award project NH 0503-093 (21839), along with an “engineering” discussion on why it is in the best interest of the State to award the project. The primary scope elements for this project are: (1) resurfacing 10 miles of US50 in Fremont County, (2) adjusting/replacing 35,000 linear feet of guardrail along the Arkansas River to latest standards, and (3) repairing three bridge decks. Key discussion includes:

1. The vast majority of guardrail along the corridor is below the 26.5-inch height requirement of current standards. End anchorages are old and fail to meet current standards. All guardrail will be upgraded and end anchorages replaced fully throughout the project area. The highway will be safer and easier to reliably maintain.
2. Resurfacing and bridge work are challenging in mountain corridors. The limited duration of warm summer months means that re-advertising for 2020 construction is likely to bring higher bid prices. Similarly, trying to maintain Summer 2020 construction greatly increases the risk that the project will require winter shutdown and greater costs - in actual dollars along with potential environmental and road user impacts. There is substantial evidence that HMA prices escalate from projects advertised in Fall compared to projects advertised in Winter or Spring.
3. Delaying advertisement a full year is an option, but could also result in higher overall prices for the State. This project is the first of two advertising this year for resurfacing in Fremont and Custer Counties. Having this project awarded will likely provide an economy of scale benefit to both projects - as a single mobile plant could serve both projects.
4. While having multiple projects drawing from the same plant can produce savings, there is a saturation limit along a single contiguous highway. Road user costs, in particular, can become unacceptable. It can be harder to phase overlapping work effectively and can cause unacceptable overall trip delays. US50 in Fremont County is due for two more resurfacing projects in the next three years. Each project includes a reasonable amount of work each summer, and delay of one project could adversely affect the next.
5. We have reviewed the bid tabs, and they do appear reasonable. The low bidder’s HMA price is higher than the Engineer’s Estimate, and was about half of the overrun. The other half of the overrun was guardrail. It was difficult to best estimate guardrail because of two principle factors: (a) the use of better Environmental Stain products is relatively new and higher cost, but with far better expected durability than previous COR-TEN weathering steel guardrail, and (b) the project location and limited width of the work area lessens productivity for installation. NOTE: While CDOT’s Standards and Specifications unit has not formally disallowed COR-TEN weathering on CDOT projects, FHWA has discouraged its use on any locations with salty environments (e.g., heavy de-icing treatments). Region 3, Region 4 and others at CDOT are utilizing Environmental Staining regularly for guardrail in U.S. Forest Service areas.
6. While the apparent low bid is greater than 10% over the Engineer’s Estimate, it is 8.9% over budget - with about half of that attributable to the increase in CE/indirect rates on construction from 20.45% to 26% in October 2019.

Please feel free to contact me at 719-227-3205 if you have any questions or would like to further discuss this request.

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