



**COLORADO**  
 Department of Transportation  
 Office of the Chief Engineer

TO: SHOSHANA M. LEW, EXECUTIVE DIRECTOR  
 FROM: MARKOS ATAMO, PE, CES BRANCH MANAGER  
 CC: STEPHEN HARELSON, PE, CHIEF ENGINEER *SH*  
 STEPHEN BOKROS, PE, CES UNIT MANAGER *SB*  
 DATE: 08/10/2021  
 SUBJECT: AWARD TO LOW RESPONSIVE BIDDER C.R.S. 43-1-113 (16)  
 PROJECT: STA M086-078 (22166) REGION 2 INTERSECTION UPGRADES

Pursuant to C.R.S. 43-1-113(16), it has been determined that it is in the best financial and economic interest of the State to award Region 2's project STA M086-078 (22166) to the low bidder Arrow Electric Services, Inc.

**Project Description:** This Region 2 project located in Pueblo and Otero Counties for intersection signal improvements at SH96 and Prairie Avenue and at US 50B and Conley Road. The project was solicited under a design bid build (low bid) project delivery method where only two bids were received with Arrow Electric Services, Inc. (Arrow) being the lowest responsive bidder.

**Financial Impact:** Arrow's low bid proposal totaled \$1,233,396.66 compared to the CDOT engineer's estimate of \$1,100,000.00. The project risks rejection by Statute since there were less than three bids received and the low bidder's proposal was 112.13% of the engineer's estimate. Region 2 has verified they have funding available for the award of the project to Arrow.

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

Bid Item Description	QTY	Unit	Unit Price Eng. Est. & Low Bid		Total Cost Difference	% Over Eng. Estimate
WIRING	1	LS	\$10,000.00	\$42,075.00	\$32,075.00	3.0%
2" ELECTRIC CONDUIT (bored)	3,140.00	LF	\$10.00	\$19.50	\$29,830.00	3.0%
REMOVAL OF PAVEMENT MARKING	5,050.00	SF	\$.5	\$5.90	\$27,270.00	3.0%
REIL. OF PAVE. MARK.(GRVE MARK)	5,050.00	SF	\$.75	\$5.90	\$26,007.50	3.0%
DRILLED SHAFT (36")	56.00	LF	\$320.00	\$715.00	\$22,120.00	2.0%

The engineer's estimate for the above bid items was based on historical data from similar projects with comparable quantities. In verifying Arrow's bid offer, their wiring bid supplier material priced in market volatility resulting in higher-than-normal costs to complete the project. The 2" electric conduit (bored) bid pricing reflected multiple work locations along with high material prices and shortage of labor for this specific type of work. The removal of marking/groove marking bid item reflected their current supplier bid prices impacted by material cost increases and labor shortages. The drilled shaft (36") bid offer was also based on limited availability of subcontractors along with a shortage of labor for this type of specific type of work.

The project will improve needed roadway safety at these intersection in Region 2. It is imperative that this project be awarded as soon as possible. Re-advertisement would risk delaying these important safety improvements.

Based on the cost analysis, CES and Region 2 consider Arrow's overall proposed 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 Arrow Electric Services, Inc.

I recommend award  Date 08/11/21  
Markos Atamo (Aug 11, 2021 11:08 MDT)

Markos Atamo, PE, CES Branch Manager

I authorize award of the referenced project

I do not authorize award of the referenced project

 Date 08/17/21  
Shoshana Lew (Aug 17, 2021 11:48 MDT)  
Shoshana M. Lew, Executive Director

cc: Stephen Bokros, Cost Estimating Services  
Markos Atamo, Construction Engineering Services  
Jerad Esquibel, Project Support Services  
RB Simmons, Construction Contract Services  
Records Center