

 office@sdwyo.com
(307) 682-2605
316 S. Gillette Ave. P.O. Box 2767 Gillette, WY 82717

June 30, 2017 Project No. 17001

City of Gillette Engineering Division 201 E. 5th St. Gillette, Wyoming 82716

ATTN: Todd Merchen

RE: Gurley Avenue Overpass

Barrier Rehabilitation

City of Gillette Project No. 17EN08

Dear Mr. Merchen:

Bids were received at 2:30 P.M. on June 29, 2017 for the above referenced Project, with two (2) general contractors submitting bids. Proper bid security in the form of a bid bond in the amount of five percent (5%) of the amount bid was included with each of the Bids. Both of the bid bonds were on the City of Gillette's standard form. A "Certificate of Residency Status" was also submitted with each of the two (2) Bids.

The following is a listing of the Bids received, the commentary on their review, and our recommendations:

A. Bids Received:

Bidder	Base Bid	Alternate 1	Alternate 2
Engineer's Estimate	\$409,879.15	\$168,560.00	\$210,336.00
Van Ewing Construction, Inc.	\$172,876.37	\$50,224.00	\$209,113.00
S&S Builders, LLC	\$320,667.25	\$86,000.00	\$164,908.00

The base bid includes concrete rehabilitation and applying water repellent to the concrete barriers at the Gurley Avenue Overpass. Alternate 1 includes epoxy crack injection to the concrete barriers. Alternate 2 includes repair and epoxy overlay to the bridge deck.

B. Numerical Errors on Bid Forms:

The Bid submitted by Van Ewing Construction, Inc. had a couple of apparent unit price rounding errors:

- 1. Item SP-202.03465 Removal of Concrete Curb on the Base Bid. The Bid quantity (707 cf) multiplied by the Unit price submitted (\$10.04) should equal a total bid price of \$7,098.28, which is slightly different than what was submitted as Bid Price (\$7,098.00) for this bid item.
- 2. Item SP-999.25002 Bridge Deck Epoxy Overlay on Alternate #2. The Bid quantity (3,556 sy) multiplied by the Unit price submitted (\$53.06) should equal a total bid price of \$188,681.36, which is slightly different than what was submitted as the Bid Price (\$188,681.00) for this bid item.

The Bid submitted by S&S Builders, LLC did not have any apparent numerical errors.

C. Apparent Low Bid:

Van Ewing Construction, Inc. is the apparent low bidder for either the Base Bid, or for any combination of the Base Bid plus any or all Alternates. We contacted Trevor Larson and Jake Ewing of Van Ewing Construction, Inc. after the bid and they stated the following:

- 1. They are aware that their Bid is significantly lower than that of S&S Builders, LLC, but they do not believe they have left anything out of their Bid accidently.
- 2. They stated that this type of work would be somewhat new to their company.
- 3. They would like to meet with the Owner and Engineer next week to discuss their Bid.

D. Bid Analysis:

- Structural Dynamics, LLC provided an estimate for the work contained on the schedule. In comparing the Bids and the Engineer's Estimate for work on this schedule, the following was noted:
 - a. Van Ewing's Base Bid was \$237,002.78 lower than (or 42% of) the Engineer's Estimate of \$409,879.15.
 - b. The average of the two Base Bids received was \$246,771.81. The range between the high and low Base Bids was \$147,790.88, or approximately 60% of the bid average. Van Ewing's Base Bid was \$172,876.37, or approximately 30% less than the average. These values indicate a wide disparity in bid amounts.
 - c. Van Ewing's Alternate #1 bid was \$118,336.00 lower than (or 30% of) the Engineer's Estimate of \$168,560.00.

- d. The average of the two Alternate #1 Bids received was \$68,112.00. The range between the high and low Alternate #1 Bids was \$35,776, or approximately 53% of the bid average. Van Ewing's Alternate #1 Bid was \$50,224, or approximately 26% less than the average. These values indicate a wide disparity in bid amounts.
- e. Van Ewing's Alternate #2 bid was \$1,223 lower than the Engineer's Estimate of \$210,336.
- f. The average of the two Alternate #2 Bids received was \$187,010.50. The range between the high and low Alternate #2 Bids was \$44,205, or approximately 24% of the bid average. Van Ewing's Alternate #2 Bid was \$209,113, or approximately 12% more than the average. These values indicate a closer grouping of the bid amounts.
- g. The sum of (Total Bid) of Van Ewing's Base Bid, Alternate 1, and Alternate 2 prices is \$432,213.37; or \$356,561.78 (54.8%) less than the Engineer's Estimate sum of \$788,775.15.
- h. The average of the two Total Bids received was \$501,894.31. The range between the high and low Total Bids was \$139,361.88, or approximately 28% of the Total Bid average. Van Ewing's Total Bid was approximately 14% less than the average. These values indicate a closer grouping of the bid amounts.
- 2. The following is a review of some of the factors contributing to the difference between the Engineer's Estimate of costs and the low bid received:
 - a. The price from Van Ewing Construction, Inc. for the Base Bid Mobilization was \$3,300, which is \$46,700 lower than (or 6.6% of) the Engineer's Estimate of \$50,000.00.
 - b. The price from Van Ewing Construction, Inc. for the Base Bid Removal of Concrete Unsound was \$10,121.30, which is \$46,878.70 lower than (or 18% of) the Engineer's Estimate of \$57,000.
 - c. The price from Van Ewing Construction, Inc. for the Base Bid Concrete Repair Material was \$29,900.30, which is \$46,099.70 lower than (or 39% of) the Engineer's Estimate of \$76,000.
 - d. The price from Van Ewing Construction, Inc. for the Base Bid Concrete Repair Material was \$58,876.75, which is \$55,078.25 lower than (or 52% of) the Engineer's Estimate of \$113,955.00.
 - e. The price from Van Ewing Construction, Inc. for the sum of Alternate #1 Contract Pay Items was \$50,224.00, which is \$118,336.00 lower than (or 30% of) the Engineer's Estimate of \$168,560.00.

f. The unit prices used in the Engineer's Estimate were based upon a recent and similar City of Gillette Gurley Overpass project from 2015 (15EN10). However, the reference project considered was of smaller overall scale and was completed using different construction methods than anticipated for this project. The 2015 project required elevated work from a manlift, while the current project will mostly consist of at-grade work from the bridge deck. DOT pricing was considered using similar projects, but most of the projects considered were of differing scale and/or used different repair materials. Due to these factors, the differences in actual pricing vs. the Engineer's Estimate do not necessarily indicate bid irregularities.

E. Recommendations:

Van Ewing's Base Bid and Alternate #1 bid are much less than the other bid received and are also much less than the Engineer's Estimate. Therefore, it is our opinion that awarding the Base Bid and Alternate #1 bid work offers significant value to the Owner. Van Ewing's Alternate #2 bid was comparable to the Engineer's Estimate. Therefore, it is our opinion that the Van Ewing pricing for this work is reasonable.

There was a relatively large disparity between the Van Ewing pricing for the Alternate #2 work and the other bid received. However, it is unlikely that significant savings could be realized by the City by delaying the Alternate #2 work and bidding it as a separate project in the future. Bidding this work as a separate project would incur unit pricing increases due to loss of economy-of-scale, and would also result in additional engineering, mobilization, bonding, and overhead costs, which would likely negate much or all of the potential cost savings.

Based on the completeness of the bid and value for the Owner, we recommend that a contract be awarded to the low bidder, Van Ewing Construction, Inc., for the Base Bid and Alternate #1.

Regarding Alternate #2, we understand that the City wishes to have Structural Dynamics, LLC perform an investigation of the bridge deck for possible delaminations of the existing silica fume overlay. If significant deck delaminations are found in this investigation, the repair of these delaminations could have significant impacts on the scope, cost, and schedule of the Alternate #2 work. Therefore, we recommend that the Alternate #2 work not be awarded at this time, and further recommend that the bridge deck delamination investigation be completed before the Alternate #2 work is considered.

Depending upon the results of the deck delamination investigation, it may be possible to either award the Alternate #2 work as a change order to the original agreement, or to re-bid the Alternate #2 work as a separate project. These alternatives can be discussed further at a later date.

If you have any questions concerning this Project, please contact us.

Structural Dynamics, LLC

Philip P. Hohn, P.E. Senior Engineer