

Agenda Item: 12.A.

MEMORANDUM

TO: Programs, Projects, and Operations Subcommittee
FROM: Eric Williams, Natural Resources Planner
SUBJECT: West Papio Trail – Giles Road to Millard Project
Bids Received for Construction
DATE: November 2, 2017

On October 31, 2017, bids were opened for the construction of the West Papio Trail Giles Road to Millard project, see attached map. A copy of the bid tabulation is attached along with the recommendation letter from Big Muddy Workshop.

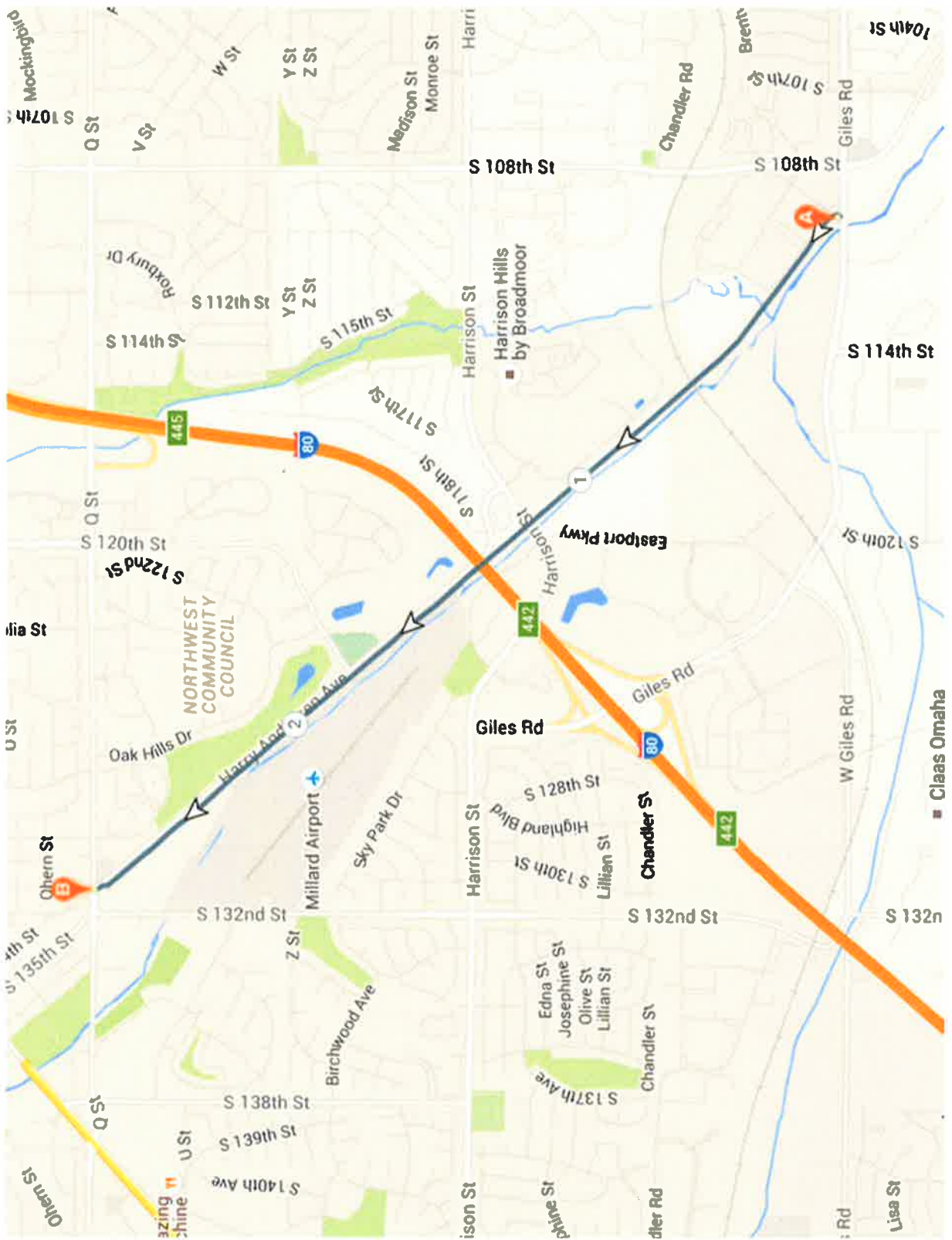
The south section of the existing West Papio Trail runs from 108th & Giles Road, east and south to meet with the Keystone Trail near 36th Street. The north section extends from 137th & Millard Ave to near 168th and Maple. This project, which follows an abandoned Union Pacific Railroad corridor, will close nearly all of the gap between the two existing sections and include the regionally significant undercrossing of Interstate 80. Design work began in the summer of 2016, and was completed by the end of spring in 2017 in time for funding to be included in budgets for the District, and the cities of Omaha and La Vista, and for bids to be accepted this fall.

Three bids were received and the range of bids was \$2,711,707.01 to \$3,092,145.10, with the low bid from Valley Corporation. Bids included two alternates for the Oak Hills North Drainageway crossing: (1) Re-use the existing timber bridge, (2) Remove and replace with a new trail bridge. The structural team from JEO has reviewed the existing structure and determined it to be serviceable. Based on the historic nature of the trail corridor as the former Transcontinental Railroad location, and the very similar prices between the two alternatives, Big Muddy Workshop has recommended Alternate No. 1 to preserve and improve the existing bridge. The bid from Valley Corporation including Alternate No. 1 was \$2,712,822.38. The engineers estimate for the construction including Alternate No. 1 was \$2,873,428.40.

Big Muddy Workshop has examined the bid items for all bidders and reviewed the work history for Valley Corporation to confirm they are able to construct the project according to specifications. Preliminary work is anticipated to begin in winter of 2017, with substantial completion by September 2018.

- **It is recommended that the Subcommittee recommend to the Board that the General Manager be authorized to execute a contract with Valley Corporation for construction of the West Papio Trail – Giles Road to Millard Project for the bid amount of \$2,712,822.38, subject to changes deemed necessary by the General Manager and approval as to form by District Legal Counsel.**

West Papio Trail, Giles Road to Millard





BID TABULATION

Owner:	Papio-Missouri River Natural Resources District 8901 South 154 th Street Omaha, NE 68138	Landscape Architect:	The Big Muddy Workshop, Inc. 4502 S. 42nd Street Omaha, NE 68107
Project:	West Papio Trail – Giles Road to Millard Omaha and La Vista, Nebraska	Bid Date/Time:	October 31, 2017 10:00 a.m.
		BMW Project No.:	0830

BIDDER	BID BOND RECEIPT	ADDENDA #1 RECEIPT	BASE BID TOTAL	BID ALTERNATE NO. 1 TOTAL (Re-Use Exg. Bridge)	BID ALTERNATE NO. 2 TOTAL (New Pedestrian Bridge)	BASE BID WITH BID ALTERNATE NO. 1 TOTAL	BASE BID WITH BID ALTERNATE NO. 2 TOTAL
K2 Construction	Yes	Yes	\$ 2,154,222.45	\$ 639,291.10	\$ 625,664.80	\$ 2,793,513.55	\$ 2,779,887.25
M.E. Collins Contracting Co., Inc.	Yes	Yes	\$ 2,352,823.70	\$ 739,321.40	\$ 714,376.90	\$ 3,092,145.10	\$ 3,067,200.60
Valley Corporation	Yes	Yes	\$ 2,056,256.40	\$ 656,565.98	\$ 655,450.61	\$ 2,712,822.38	\$ 2,711,707.01
Engineer's Estimate			\$ 2,197,583.60	\$ 675,844.80	\$ 692,253.45	\$ 2,873,428.40	\$ 2,889,837.05



BIG MUDDY Workshop

INCORPORATED
Landscape Architecture : Master Planning

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November 1, 2017

Mr. Eric Williams, Natural Resources Planner
Papio-Missouri River Natural Resources District
8901 S 154th St
Omaha, NE 68138-3733

Dear Eric:

Bids were received and opened on October 31, 2017, for the West Papio Trail – Giles Road to Millard project. A total of three bids were received as indicated on the attached Bid Tabulation form. Valley Corporation provided the lowest Base Bid with a sum of \$2,056,256.40. The final Engineer's Estimate for the Base Bid was \$2,197,583.60.

In addition to the Base Bid, separate bid amounts were provided for channel and bridge improvements at the Oak Hills Crossing North drainage way. Bid Alternate No. 1 included work associated with re-use of the existing bridge over this channel. Bid Alternate No. 2 included work associated with removal of the existing bridge and replacement with a new pedestrian bridge. As you know, one of these alternate bid items will need to be accepted, in combination with the Base Bid items, in order to complete this trail segment. Although Valley Corporation provided the second lowest bid for both Bid Alternate No. 1 and Bid Alternate No. 2, they did remain the lowest bidder overall when either one of the alternates were combined with the Base Bid. Valley Corporation's total for Bid Alternate No. 1 was \$656,565.98 and their total for Bid Alternate No. 2 was \$655,450.61, for a difference of \$1,115.37 between the two alternate bid items.

Our design team has prior experience working with Valley Corporation on past projects and believe they have the qualifications to adequately perform the work of this project. Therefore, we recommend awarding the West Papio Trail – Giles Road to Millard project to Valley Corporation. Due to the historic nature of the existing bridge at Oak Hills Crossing North, we believe there is value in retaining this existing structure and improving it for trail use. Our subconsultant, JEO Consulting Group, has reviewed the condition of the existing bridge and believes this structure will provide an acceptable remaining service life upon completion of proposed improvements. A copy of

JEO's findings is included with this letter. Based on these findings, and assuming that maintaining the existing character of this historic bridge is important to the NRD and project stakeholders, we recommend that Bid Alternate No. 1 be accepted to re-use the existing bridge in combination with the Base Bid work, for a total construction contract cost of \$2,712,822.38.

Please let me know if you have any questions or require any additional information.

Sincerely,

Brian Pecka

Brian Pecka, ASLA
Senior Project Manager



MEMO

To: Eric Williams, Papio-Missouri River NRD
Thru: Brian Pecka, BMW
From: Julie Ogden/ John Petersen, JEO
Date: October 31, 2017
Subject: Oak Hills Crossing North Bridge

The recent erosion at the Oak Hills North Bridge site did not damage the structure itself or reduce the life expectancy over what it was prior to the additional erosion (see inspection notes at the bottom of this memo). The re-use of this bridge would be the same as what it was at the start of this trail project. The existing supports within the limits of the channel would continue to impact the flows but with the addition of the sheet pile walls, grouted rock riprap, the erosion issues should be addressed.

The alternate design to install a new bridge would provide for a longer service life than the existing bridge since it will be a new structure. New structures have an estimated service life of 75+ years but by replacing the existing bridge, you lose the character and historic aspects of the existing trail bridge. The new bridge would not include any interior supports which would open up the channel area more than the existing, however based on our studies of the area, the flow of the channel is the same for either option.

The selection of the alternate (existing bridge vs. new bridge) should include consideration for how the NRD envisions this trail aesthetically. If it is the boards desire to maintain as much of the existing character of the railroad, then using the existing bridge at this location in place would provide that at an acceptable estimated service life (based on the information we currently have). If the Board is not against updating this one location to look more like other trails in the area, then awarding the alternate for a new bridge would provide a longer service life and it could be negotiated with the contractor to retain the members of the existing bridge to be used in another way on the project. From an engineering standpoint, either bridge will provide an acceptable remaining service life and allow for the passage of storm water flows under the trail.

INSPECTION 10-17-17:

I originally inspected the bridge known as Oak Hills Crossing North on 9/12/16. At that time, it was noted that the flow control structure downstream of the bridge has failed and is causing the flow under the bridge to erode the south bank downstream of the structure. The erosion was beginning to remove a portion of the south approach to the bridge.

On 10/17/17 I re-inspected the bridge. After comparing the photos taken at both inspections I found that the erosion downstream of the bridge has not gotten any worse, but the south approach has now been completely undermined and has collapsed allowing the backwall timbers to fall into the bottom of the channel. There was some erosion on the south bank upstream of the structure that may not have been noted before, but is evident in the original pictures. The erosion upstream and downstream has worked toward each other and attacked the area under the approach causing it to fall away leaving a gap at the end of the bridge.



The plunge pool that is below the grouted riprap (upstream of the bridge) has undermined the riprap some more and the end of the riprap has collapsed.

The structural integrity of the bridge does not appear to have been affected by the additional erosion except for the south backwall timbers collapsing. This is of little consequence since the proposed construction plans include installing sheet pile backwalls and wingwalls.