

MEMORANDUM

TO: Programs, Projects, and Operations Subcommittee

FROM: Martin P. Cleveland, Construction Engineer

SUBJECT: Pigeon Jones Creek Dam 11 Decommissioning

DATE: October 1, 2024

In 1998, Dakota County, Nebraska and Papio NRD signed a Road Structure Program Special Project Operation and Maintenance Agreement to replace a bridge with a road structure (aka dam). The Pigeon Jones Watershed Structure No. 11 was built in 1999 by Dakota County and the Papio NRD provided \$75,000 of the \$129,314 construction cost. This dam is in the Pigeon Jones Creek Watershed southwest of Hubbard, Nebraska and referred to as Pigeon Jones Creek Dam 11 or Simmons Road Structure. Enclosed is a location map.

In 2022, the Papio NRD completed the construction of Pigeon Jones Watershed Structure No. 12A (PJ12A), which is located approximately 2600 ft. downstream of the Pigeon Jones No. 11 (PJ11). After the PJ12A structure construction was completed, the PJ12A drawdown valve closed, and PJ12A started impounding water downstream of the PJ11 embankment. Papio NRD staff noticed that water was starting to flow onto the downstream (backslope) of PJ11.

The PJ12A design engineer (Olsson) determined that the permanent (normal) pool elevation 1286.0 ft. above MSL will be 7 ft. above the PJ11 outlet invert of 1279.0 ft. above MSL. The permanent pool of PJ12A would submerge the backslope of PJ11 under 7 ft. of water. PJ11, built as a road structure, was not designed to have a submerged principal spillway or partially submerged backslope.

To resolve the submerged PJ11 outlet situation, it was determined that the existing dam and principal spillway culvert would need to be replaced with a road culvert at an elevation above the PJ12A conservation pool elevation. The PJ11 road structure is owned by Dakota County, and it is part of Odell Ave. An Interlocal Cooperation Agreement with Dakota County for the replacement of Pigeon Jones Creek Dam 11 was approved by the Papio NRD Board on September 14, 2023. The agreement provides for the Papio NRD to be responsible for all engineering and construction costs.

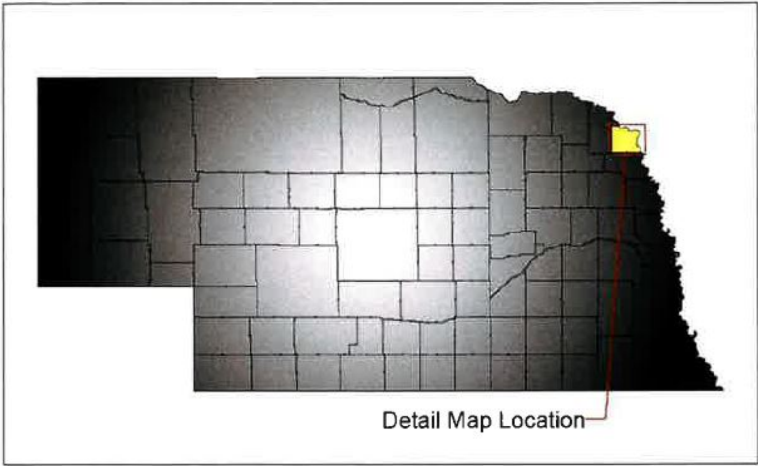
On September 30, 2024, the District opened bids for the construction of the Pigeon Jones Creek Dam 11 Decommissioning Project. The three bids ranged from \$201,607.78 to \$351,862.38. The apparent low bid of \$201,607.78 was submitted by Detlefsen Construction. Enclosed is a bid summary. The Engineer's estimate of the cost of the Project prepared by Olsson is \$300,847.27. An October 1, 2024, recommendation letter from Olsson is enclosed.

Management recommends that the Programs, Projects, and Operation Subcommittee recommend to the Board of Directors that the General Manager be authorized to execute a contract with Detlefsen Construction in the amount of \$201,607.78 for the construction of the Pigeon Jones Creek Dam 11 Decommissioning Project, subject to changes deemed necessary by the General Manager and approval as to form by District Legal Counsel.

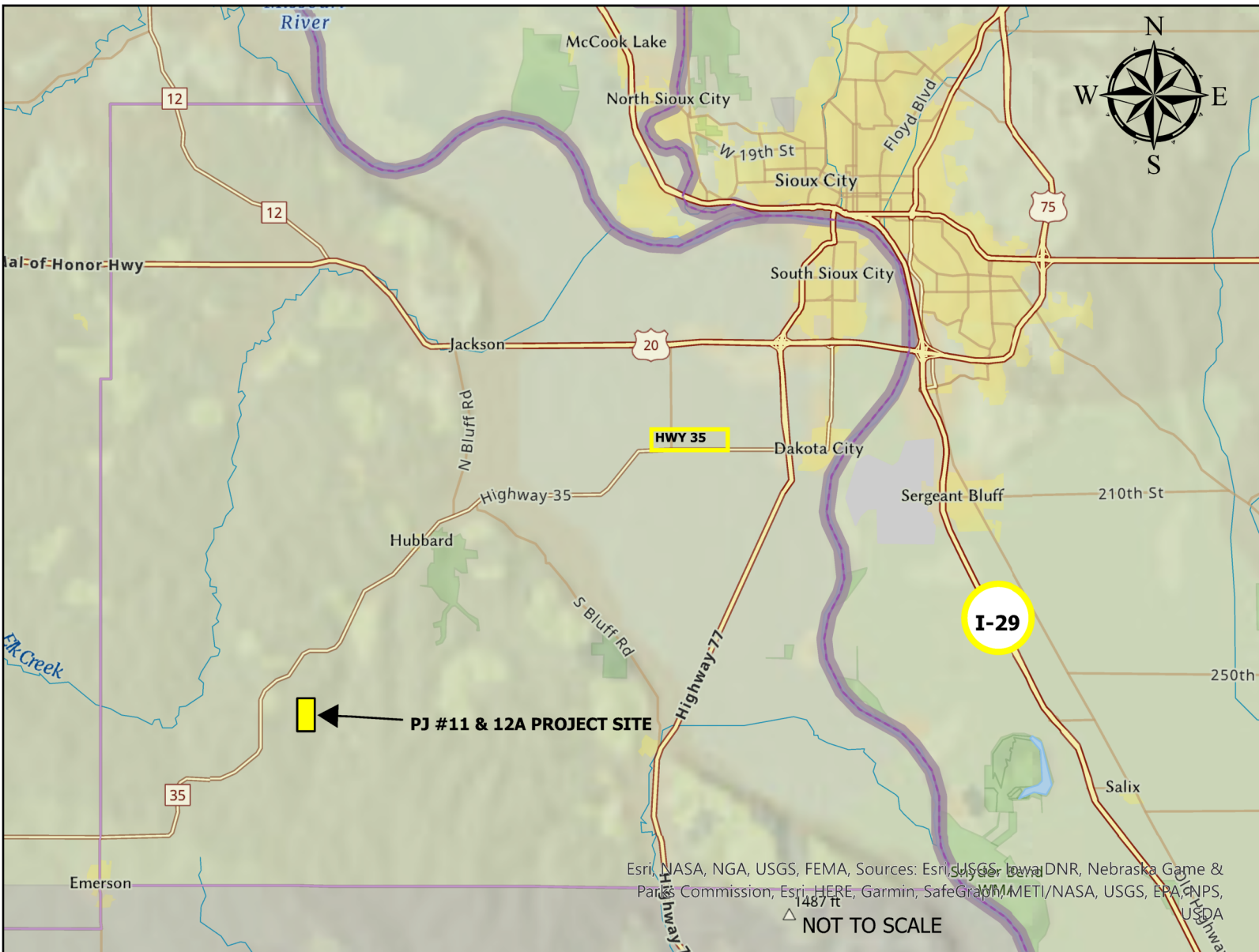
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**PIGEON / JONES DAM SITES
11 & 12A LOCATION MAP**

NEBRASKA



DAKOTA COUNTY



Pigeon-Jones Watershed - Dakota County, NE

Dam Sites 11 & 12-A



Pigeon-Jones
Dam #11

Pigeon-Jones
Dam #12A

Odell Ave

Odell Ave

240th St

240th St

Pigeon
Creek

O Ave



Date: 8/10/2023



October 1, 2024

Papio-Missouri River NRD
Attn: John Winkler
General Manager
8901 S 154th Street
Omaha, NE 68138

Re: PJ-11 Dam Decommissioning
Near Hubbard, Nebraska
Olsson Project No. 023-06174

Dear Mr. Winkler:

Three bids were received for construction of the Pigeon Jones Decommissioning project on September 30, 2024. Per the attached tabulation, bids ranged from \$201,607.78 to \$351,862.38. The low bid of \$201,607.78 submitted by Detlefsen Construction was \$150,254.60 lower than the second lowest bidder and was under the Engineers opinion of cost of \$300,847.27 by \$99,239.49.

Detlefsen Construction has performed work for the P-MRNRD previously in the construction of PJ12-A and therefore is known by NRD staff and by Olsson. Based upon conversations with NRD staff regarding past history and capabilities, it is of our opinion that the PJ-11 Dam Decommissioning project is well within the capabilities of Detlefsen Construction and therefore our recommendation that we award Detlefsen Construction the above-referenced project for a price of \$201,607.78.

Thank you,

A handwritten signature in blue ink, appearing to read "Dan Lightbody". The signature is fluid and cursive, with a prominent loop at the end.

Dan Lightbody, P.E.

PIGEON JONES CREEK DAM 11 DECOMMISSIONING



| CONTRACTOR | | | | Detlefsen Construction Laurel, NE | | North Ridge Excavating, Inc. Homer, NE | | Oban Construction, Inc. South Sioux City, NE | | Engineering Estimate | |
|--|--|------|-------|--------------------------------------|---------------------|---|---------------------|---|---------------------|----------------------|-------------------|
| Item No. | ITEM | UNIT | QTY. | Unit Price | Extension | Unit Price | Extension | Unit Price | Extension | Unit Price | Extension |
| 1 | Mobilization | LS | 1 | \$5,000.00 | \$5,000.00 | \$19,320.00 | \$19,320.00 | \$20,000.00 | \$20,000.00 | \$22,481.57 | \$22,481.57 |
| 2 | Construction Staking | LS | 1 | 1,000.00 | 1,000.00 | 5,500.00 | 5,500.00 | 5,000.00 | 5,000.00 | 2,500.00 | \$2,500.00 |
| 3 | General Clearing and Grubbing | LS | 1 | 1,000.00 | 1,000.00 | 1,679.39 | 1,679.39 | 7,500.00 | 7,500.00 | 4,000.00 | \$4,000.00 |
| 4 | Excavation and Earthfill | CY | 3,277 | 7.34 | 24,053.18 | 29.42 | 96,409.34 | 27.60 | 90,445.20 | 5.00 | \$16,385.00 |
| 5 | Shoreline Fill | CY | 210 | 9.52 | 1,999.20 | 30.72 | 6,451.20 | 49.60 | 10,416.00 | 5.00 | \$1,050.00 |
| 6 | Removal and Disposal of Existing 48" CMP and 60" Riser Inlet | LS | 1 | 8,000.00 | 8,000.00 | 5,000.00 | 5,000.00 | 11,250.00 | 11,250.00 | 5,000.00 | \$5,000.00 |
| 7 | Polymer Coated 96" CMP Culvert Pipe | LF | 180 | 480.55 | 86,499.00 | 517.71 | 93,187.80 | 516.00 | 92,880.00 | 856.00 | \$154,080.00 |
| 8 | 96" Flared End Section | EA | 2 | 9,500.00 | 19,000.00 | 11,123.52 | 22,247.04 | 12,460.00 | 24,920.00 | 3,000.00 | \$6,000.00 |
| 9 | Class B Riprap | TN | 303 | 68.00 | 20,604.00 | 88.51 | 26,818.53 | 87.60 | 26,542.80 | 90.00 | \$27,270.00 |
| 10 | Erosion Control Blanket | SF | 8,274 | 0.30 | 2,482.20 | 0.61 | 5,047.14 | 0.62 | 5,129.88 | 0.55 | \$4,550.70 |
| 11 | Temporary Wattles | LF | 650 | 8.70 | 5,655.00 | 5.34 | 3,471.00 | 4.65 | 3,022.50 | 4.00 | \$2,600.00 |
| 12 | Seeding (P-MRNRD Seed Mix A-Brome) | SY | 920 | 1.36 | 1,251.20 | 1.10 | 1,012.00 | 1.50 | 1,380.00 | 1.50 | \$1,380.00 |
| 13 | Pipe Bedding | TN | 674 | 36.00 | 24,264.00 | 74.99 | 50,543.26 | 74.00 | 49,876.00 | 75.00 | \$50,550.00 |
| 14 | Traffic Control | LS | 1 | 800.00 | 800.00 | 2,420.00 | 2,420.00 | 3,500.00 | 3,500.00 | 3,000.00 | \$3,000.00 |
| | TOTAL BASE BID: | | | | \$201,607.78 | | \$339,106.70 | | \$351,862.38 | | 300,847.27 |
| Substantially Complete On or Before: | | | | December 31, 2024 | | December 31, 2024 | | December 31, 2024 | | | |
| Complete and Ready for Final Payment On or Before: | | | | March 31, 2025 | | March 31, 2025 | | March 31, 2025 | | | |
| Addendum No. 1 | | | | X | | X | | X | | | |
| Addendum No. 2 | | | | X | | X | | X | | | |
| Addendum No. 3 | | | | X | | X | | X | | | |
| Bid Guarantee: | | | | X | | X | | X | | | |
| Remarks: | | | | | | | | | | | |