MEMORANDUM

TO: Programs, Projects and Operations Subcommittee
FROM: Martin P. Cleveland, Construction Engineer
SUBJECT: Papillion Creek Watershed Structure W-2 Improvements Project Bids (Project 502 W-2)
DATE: December 1, 2009

Attached is a location map and some plan sheets related to the referenced repair project. This 1972 vintage dam is located northwest of Kennard, Nebraska, and has experienced principal spillway pipe joint separation and wet downstream slope. The wet site conditions appear to have caused the pipe joint separation. This project consists of repairing three pipe joints and installing four sand drains in the downstream slope to intercept seepage. The proposed repair project was recommended and approved by the Nebraska Department of Natural Resources, Dam Safety Section. A bid summary is attached for your consideration. The apparent low bidder is Pruss Excavation Company, with a total base bid of $45,169.00. The Engineer’s opinion of probable construction cost is $38,337. The Engineer’s recommendation letter is attached.

This work will be funded via funds included in Project Maintenance General Contract Work (Account 010312 4479). As of November 6, 2009 remaining funds in this account was $2,092,115.70. It is anticipated that this project will be completed in Fiscal Year 2010. In the fiscal year 2010 budget, $50,000 was allocated for this repair project.

It is Management’s recommendation that the Subcommittee recommend to the Board of Directors that the General Manager be authorized to execute a contract for the Papillion Creek Watershed Structure W-2 Improvements, with Pruss Excavation Company, for their total base bid of $45,169.00.
# Summary of Bid Proposals

**Project:** Papillion Creek Watershed Structure W-2 Improvements Project  
**Opening Date:** November 24, 2009  
**NRD Project No.:** 502 W-2  
**Opening Time:** 10:00 a.m.

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>ITEM DESCRIPTION</th>
<th>UNIT</th>
<th>ESTIMATED QUANTITY*</th>
<th>ENGINEER'S OPINION</th>
<th>Thompson Construction Inc.</th>
<th>Pruss Excavation Co.</th>
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<tbody>
<tr>
<td>1</td>
<td>Mobilization and Demolization</td>
<td>Lump Sum</td>
<td>1</td>
<td>3,000</td>
<td>2,000.00</td>
<td>17,225.00</td>
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<td>2</td>
<td>Surveying and Staking</td>
<td>Lump Sum</td>
<td>1</td>
<td>500</td>
<td>2000.00</td>
<td>500.00</td>
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<td>3</td>
<td>Dewatering</td>
<td>Lump Sum</td>
<td>1</td>
<td>5,000</td>
<td>5,000.00</td>
<td>2,000.00</td>
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<tr>
<td>4</td>
<td>Excavation, Common</td>
<td>Cu. Yds.</td>
<td>260</td>
<td>1,040</td>
<td>2,900.00</td>
<td>3,900.00</td>
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<tr>
<td>5</td>
<td>Earthfill, Borrow Compacted</td>
<td>Cu. Yds.</td>
<td>95</td>
<td>522</td>
<td>1,600.00</td>
<td>2,700.00</td>
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<td>6</td>
<td>Drainfill, Sand Drain</td>
<td>Cu. Yds.</td>
<td>92</td>
<td>4,600</td>
<td>10,000.00</td>
<td>4,837.00</td>
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<tr>
<td>7</td>
<td>Drainfill, Drain Outlet Filter</td>
<td>Cu. Yds.</td>
<td>18</td>
<td>900</td>
<td>2,000.00</td>
<td>946.00</td>
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<td>8</td>
<td>Rock Riprap</td>
<td>Tons</td>
<td>20</td>
<td>600</td>
<td>2,500.00</td>
<td>701.00</td>
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<td>9</td>
<td>Crushed Rock Bedding</td>
<td>Tons</td>
<td>10</td>
<td>250</td>
<td>1,100.00</td>
<td>305.00</td>
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<td>10</td>
<td>Plastic Pipe (PVC), 6&quot; Dia. Perforated</td>
<td>Lin. Ft.</td>
<td>250</td>
<td>3,375</td>
<td>4,500.00</td>
<td>1,500.00</td>
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<td>11</td>
<td>Ductile-Iron Pipe, 6&quot;Dia.</td>
<td>Lin. Ft.</td>
<td>40</td>
<td>1,700</td>
<td>1,600.00</td>
<td>1,080.00</td>
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<td>12</td>
<td>Joint Repairing Assembly</td>
<td>Each</td>
<td>3</td>
<td>9,000</td>
<td>5,500.00</td>
<td>2,325.00</td>
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<td>13</td>
<td>Seeding and Erosion Control</td>
<td>Sq. Yds.</td>
<td>1,900</td>
<td>2,850</td>
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<td>6,650.00</td>
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<td>Pollution Control</td>
<td>Lump Sum</td>
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<td>15</td>
<td>Total Base Bid (Add items 1 thru 14)</td>
<td></td>
<td></td>
<td></td>
<td>38,337</td>
<td>47,700.00</td>
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</table>

* Quanities are provided to contractor as information only and it is the responsibility of the contractor to verify quantities. Job is to be bid as lump sum, and no adjustments to quantities will be made.

**Bid Bond (5%)**

<table>
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<tr>
<th>Item</th>
<th>Yes/No</th>
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</table>
| Rock Supplier | Yes/No | Yes/Yes  

*Apparent Low Bidder is Pruss Excavation Co.*

**Engineer's Opinion of Cost: $38,337**

64409 MC pb file 502 Site W2
November 30, 2009

Martin Cleveland, PE
Construction Engineer
Papio-Missouri River Natural Resources District
8901 S. 154th Street
Omaha, NE 68138-3621

RE: Rehabilitation of GSS Papillon Creek Watershed Structure W-2, Washington County Recommendation of Award

Dear Martin:

HDR Engineering, Inc. has evaluated the bid forms submitted on the improvements of W-2 and recommends award to Pruss Excavation Co. for a lump sum contract price of $45,169. Based on a lump sum contract price, the lowest responsive bidder was Pruss. The schedule of values submitted by the perspective bidders in the bid form will provide a breakdown to be used in preparing payment applications. Pruss also has provided a bid bond in equal to 5 percent of the total bid price. Pruss has experience with working on construction of embankment structures with the P-MRNRD and with other NRDs.

If you have any questions, please contact me at 399-1082 at your convenience.

Very truly yours,

HDR ENGINEERING, INC.

Troy R. Meyer, P.E.
Senior Civil Project Engineer

NOV 3 0 2009
Legal Description:
Sec 30 T18 N, R11 E

Structure W-2 is located within the jurisdiction of Washington County, NE. Approximately 2 miles North, & 1 mile West of Kennard, NE
DRAIN OUTLET FILTER DETAIL AT PIPE OUTLET

NOT TO SCALE

SAND DRAIN DETAIL

NOT TO SCALE

ROCK RIPRAP GRADATION

ROCK RIPRAPS SHALL BE ARRANGED AND WELL-PLACED AND IN ACCORDANCE WITH THE FOLLOWING GRADATION

MAXIMUM SIZE = 10" LIFE

MINIMUM SIZE = 4" LIFE

NOT MORE THAN 25% GREATER THAN 2 LIFE

GRADATION FOR CRUSHED ROCK BEDDING

CRUSHED ROCK TO BE REASONABLY WELL-SORTED, TIGHT, DURABLE, ENOUGH MATERIAL MEETING THE FOLLOWING GRADATION

MAXIMUM SIZE = 3" LIFE

AVERAGE SIZE = 3/8"

NOT MORE THAN 25% EXITING NO. 4 SCREEN

NOTES:

1. PLACE PIPE CAPS ON THE UPSTREAM END OF THE DRAIN PIPE.
2. STANDARDS TYPICAL INSTALLATION IS PICTURED AS AN EXAMPLE OF THE HORIZONTAL DRAIN INSTALLATION.
3. INSTALL SLIGHTLY SLOPED PIPE ACCORDING TO ADHESIVE DRAIN INSTRUCTIONS.

SAND DRAIN AND DRAIN OUTLET DETAILS
PIPE JOINT REPAIR RING ASSEMBLY

ANGLE & BAR ASSEMBLY DETAIL

CONSTRUCTION EMBOSSES

1. THE STONE SIZE SHALL BE #2 CRUSHED GRANITE. GRADE CONCRETE IS NOT ACCEPTABLE.
2. THE THICKNESS OF THE STONE SHALL BE 8".
3. THE WIDTH OF THE CONSTRUCTION EMBOSSES SHALL BE 12' MARGINAL BUT IN NO CASE LESS THAN THE WIDTH OF SLAB WHERE HOOKS AND BARRELS IS SITTED.
4. FIXED EMBOSSES WILL BE SUNK UNDER THE SLAB AND EMBOSSES 2 PLACED ON SLABS OF STONE.
5. ALL SURFACE HANDY APPLIANCE OR EQUIPMENT TO BE PLACED ON CONSTRUCTION EMBOSSES SHALL BE FENCED ON THE OUTSIDE. IF FIXED IS APPLICABLE, A NON-SCORING CONCRETE FLOOR WILL BE PERMITTED.
6. THE EMBOSSES SHALL BE CENTERED IN A CONSTRUCTION EMBOSSES WHICH WILL PROVIDE TYPICAL IN A NUMBER OF CORRECTED SERIAL NUMBER OF CONSTRUCTION EMBOSSES. THIS MAY REQUIRE DEFORMING THE EMBOSSES WITH TO EMBOSSES, BUT, IS RECOMMENDABLE AND WHERE EMBOSSES ARE NOT ACCEPTABLE.
7. THE EMBOSSES SHALL BE CLEANED TO REMOVE DEBRIS PRIOR TO EMBOSSES OR PUBLIC EMBOSSES, WHEN EXPERIENCED IT SHALL BE DONE ON AN AREA ADOPTED EMBOSSES WITH STONE WHICH ENDS INTO A TYPICAL SERIAL NUMBER OF EMBOSSES.
8. CONSTRUCTION EMBOSSES AND FIXED HANDY APPLIANCE SHALL BE PERMITTED ON ON THE FLOOR.