Contract No. 001-012

"Warwick Dam – Modification & Rehabilitation (State Water Commission Project No. 0240)"

Submitted by Eddy County Water District

Principal Investigator: Travis S. Peterson

Directives C, A, B & D

PARTICIPANTS

Sponsor	Cost Share
ND State Water Commission	\$ 110,150
ND Game & Fish Dept.	\$ 30,000
Upper Sheyenne Joint Water Resource Board	\$ 35,000
Ramsey County Water Resource Board	\$ 1,000
Devils Lake Basin Joint Water Resource Board	\$ 1,000
Eddy County Water Resource Board	\$ 40,002
Subtotal Cash Cost Share	\$217,152
North Dakota Industrial Commission	<u>\$ 55,000</u>
Total Project Cost	\$272,152

Project Schedule – 9 months Project Deliverables:

Contract Date − 4/1/2014 Status Report: August 31, 2014 ✓
Start Date − Status Report: May 1, 2015* ✓
Completion Date − 2/15/2015 Status Report: December 31, 2015*

Final Report: July 1, 2016* ✓

OBJECTIVE/STATEMENT OF WORK:

The primary purpose of the Warwick Dam modification and rehabilitation is to repair the Warwick Dam and reduce and stabilize erosion to the river channel. The resulting benefits will be significant in that: fish habitat will be enhanced due to the fish passage; water quality will improve due to reduced erosion; soil conditions will be improved or maintained due to reduced erosion; access for sportsmen to the Warwick Dam area will be improved due to these repairs to the Dam and the river banks; and fishing, both upstream and downstream, should improve as a result of the fish passage. The Dam repairs will also make the Warwick Dam safer for recreational users and sportsmen.

Repair of the existing dam will be done by installing sheet piling and rock rip-rap. This is a Water Commission project. The OHF dollars will be used to fill the gap that is needed between what has already been raised and total costs of the project—provide a portion of the local share.

STATUS:

Original Request was for \$95,002. Awarded amount was \$55,000 with stipulations that the OHF funding cannot be used for engineering or legal fees. <u>Contract 001-012</u> - Executed. There was no change to the project as a result of the partial funding.

9/2/2014 - As of today's date, no on-site work has taken place. Some materials (sheet piling) have been acquired. The successful bidder, Harvey Sand & Gravel, intends to start (and complete) this project yet this fall. As I understand it, it is necessary to shut down the Devil's Lake west-end outlet prior to commencement of construction. So, it is necessary for us to coordinate the closure of the west-end outlet with the schedule of HS&G.

5/8/2015 - Except for the purchase of some sheet piling, construction work has not started. The Devils Lake west end pumps didn't shut down soon enough last November. By the time they were shut down, the contractor started on a different project and freeze up was upon us. We thought we might get started this spring due to lack of snow cover and decent conditions, but were informed that there can be no work within the river channel during the fish spawn - April 15 to June 1. So nothing happened this spring. We are hopeful that with Devils Lake elevation being down to nearly 1450' we might have an opportunity to begin construction this summer (if the west end pumps shut down); but if not then this fall before freeze up. Because of the uncertainty of the schedule an extension has been granted on this project and an amendment is being processed. (*indicates where there were changes to the contract)

Amendment has been fully executed.

2/2/2016 - Final report submitted. It states:

The existing Warwick Dam located on the Sheyenne River was in poor shape with a significant amount of erosion around the south abutment and the south river bank and some erosion around the north abutment. The project involved the installation of sheet piling to repair and protect the existing south abutment and then sheet piling was installed along the south bank to help prevent further erosion of the south river bank. Clay material was hauled in to help repair the erosion along the south river bank and then rock riprap was installed over the clay to help prevent future erosion of the south river bank. Rock riprap was also installed along the north abutment to help prevent future erosion.

Rock riprap and boulder and rock barbs were installed in the river from the dam sill downstream to help fish passage in the river channel.

The project turned out very well despite numerous setbacks over several years due to high river flows, freezing temperature and challenges with permitting.

Except for landscaping and seeding in the spring of 2016, the Warwick Dam Rehabilitation and Modification is complete.

This contract is now considered closed.

Updated 2/8/2016