



**JACOBSON-WESTERGARD
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"Bettering Iowa since 1970"

June 28, 2023

Winnebago County Board of Supervisors
c/o Kris Oswald, Drainage Clerk
126 S. Clark St.
Forest City, IA 50436

Re: Drainage District No. 92 Construction Issues... **Continued**
Winnebago County, Iowa
JWA PROJECT NO: E22075

Dear Board Members and Landowners:

This letter is a follow-up to the letters dated June 7th and June 23rd, 2023 and discussions during the June 13th and June 27th Board meetings regarding the Drainage District No. 92 (DD92) project to replace approximately 440 feet of 48" diameter cement culvert with an open ditch channel. Three alternatives to the original project design have been discussed, and a decision has not yet been made on how to proceed. There is a desire for additional landowner input, and another meeting will take place on July 10th, 2023 to discuss the future of the project. We are hopeful a decision will be made at that time. Landowner input is encouraged.

To aid the evaluation of alternatives we have condensed and summarized each alternative in the table below. The estimated costs represent the total project cost, including construction, engineering, etc.

Alt. #	Name	Description	Estimated Cost
Original	Standard Open Ditch	Replace existing 48" dia. culvert with standard open ditch	\$90,000 ¹
1	60" dia. RCP Culvert	Replace existing 48" dia. culvert with larger pipe	\$235,000
2	Abandon project	Fill partially excavated ditch and continue to utilize existing 48" dia. culvert	\$25,000
3	Modified Open Ditch	Widen channel and flatten ditch banks in areas of fine sand (north), and move channel away from the road.	\$105,000
		Add riprap to one ditch bank	+\$25,000
		Add 100 ft of 60" RCP if channel in narrow section ends up not being feasible	+\$33,000
		Overall range of potential cost	\$105,000 - \$163,000 ²

¹: Amount reflects bid price. Engineer's report initial estimate was \$119,000 when project was approved.

²: Upper cost estimate includes riprap on both banks (5 ft in height, 400 ft in length), and 100 ft of 60" dia. RCP.

We recommend that Alternative #3 - Modified Open Ditch be pursued. Decisions on the measures necessary to help the channel hold up would need to be made as the channel is dug. Unfortunately, we cannot guarantee the long-term outcome of this alternative, but our goal would be to find the best balance of cost vs. protection provided and needed in order to maximize the probability of success. If this alternative is deemed too costly and/or risky, we recommend that the project be abandoned.

Sincerely,

JACOBSON-WESTERGARD & ASSOCIATES, INC.

Collin J. Klingbeil, PE

Cc: Larson Contracting
Scott Meinders, Winnebago County Engineer
Robert Schwartz, Executive Director of the Winnebago County Conservation Board