

DRAINAGE MINUTES
DISTRICT GRANT #5
JANUARY 31, 2017

The Story County Drainage District Trustees met in the Public Meeting Room of the Story County Administration Building in Nevada, IA to receive the Engineer's Report (on file in the Auditor's Office) examining conditions in Drainage District Grant #5. Members present were Rick Sanders, chair, and Martin Chitty. Also present were Story County Engineer Darren Moon, Conservation Director Michael Cox, and Drainage Clerk Scott Wall, Project Engineer Kent Rode and Brayson Benne from ISG, landowner Dennis Smith, and two other members of the public.

Sanders called the meeting to order at 9:00 a.m.

Rode went over the findings in the Engineer's Report. This project began with a request from a landowner to look at annexing lands to the north of the existing district that were surface draining into Grant #5. A meeting on March 22, 2016 led to a petition for an engineering study of the district with this report being the result.

The report breaks the district into three sections. Section 1 is the existing open ditch, which runs south from Lincoln Way to the end of the district. Section 2 is the area between Lincoln Way and 220th Street to the north. Section 3 is the area north of 220th Street.

ISG surveyed the entire length of the open ditch and there are numerous issues including sloughing banks, trees, beaver dams, and siltation that interfere with the ability of the ditch to move water out of the district. This portion of the project would be a repair while the proposed work in Sections 2 and 3 will be improvements.

The main tile in Section 2 has a coefficient of drainage of only 1/16" and that is assuming it is functioning as designed. Current standards call for a minimum of 1/2". ISG proposes improving the drainage to a 1/2" coefficient by replacing the existing main with a 54" tile (Option A) or by extending the open ditch (Option B). In both options the improvement will commence at Lincoln Way and run north to 220th Street. There is a significant obstacle to overcome in Option 2 - the Union Pacific railroad. They have eight tracks covering about a 400' width. Installing a new tile under the UP would be a district expense. Installing a 54" culvert for an open ditch would be a railroad expense. The existing main is 24" where it crosses the railroad and there are two culverts under the railroad as well.

Sanders asked for clarification on drainage coefficients.

Rode said the coefficient is the amount of water the district can drain in one day. A 1/2" coefficient can drain a 1" rain from the district in 2 days. A 1/16" coefficient can drain a 1" rain in 16 days.

Sanders said the area in Section 2 is within a pending annexation by the City of Ames that will be completed by the end of this March at the latest. The land is intended for industrial development, which could have a large impact on how this project is designed.

Rode said the drainage needs of industrial areas is significantly different from the 1/2" coefficient recommended for agricultural land.

Rode said Section 3 includes all lands north of 220th Street. The tile in this area will also be improved with a 48" tile to provide a 1/2" drainage coefficient and it will be extended north beyond the end of the

existing tile to provide access to the landowners at the top of the district, including the areas to be annexed.

Finally, there is an option (Section 4) to add branch tiles or incorporate existing private tile as a district facility depending on the desires of the landowners.

Sanders asked if the existing open ditch has the capacity to take additional drainage. It seems to run full a lot of the time now.

Moon said the ditch has been cleaned twice since he started with Story County and siltation is a continuing problem in this district.

Rode said studies have shown that enlarging drain tile does not increase the amount of water in open ditches. Because the tiles are continually draining the land there is more capacity in the land to absorb water during heavy rains. The tile increases the rate at which water is removed from the district but evens out the flow and reduces peak and low flows.

Moon said the culvert under Lincoln Way is probably undersized. Lincoln Way has been overtopped with runoff on a few occasions. The area north of Lincoln Way is so flat the water has a lot of room to spread out before it overtops the road.

Sanders said that at a previous meeting there was talk of creating a new drainage district instead of annexing more land into Grant #5.

Rode said no petitions to create a new district have been received since the earlier meeting. There is a tile in the proposed annexation area that directs water west and south away from Grant #5 but the surface water drains into Grant #5. If Grant #5 is enlarged and improved that tile should be cut so Grant #5 will take all the water in the proposed annexation area. This would probably alleviate some existing drainage issues in Story County's conservation areas east of Interstate 35.

Sanders asked Rode if, looking 10-15 years out, it makes more sense to really beef up Grant #5 or would a new drainage district lessen the need for improvements to Grant #5 by directing surface water away.

Rode said he does not believe a new district would significantly reduce the load on Grant #5.

Page one in Appendix C of the report contains a cost summary. Those costs are further broken down in the following pages. Rode went into the breakdown of those costs in some detail. ISG recommends repairing and extending the open ditch, improving the existing main and branch tiles, acquiring a formal easement along the open ditch, annexing additional lands into Grant #5, and reclassifying the district.

Sanders said this project will be as complicated as anything he has seen in his time with Story County and adding the pending annexation by Ames adds to that complexity. He expects this project to take a significant length of time with multiple hearings to gather information from stakeholders.

Sanders said because the trustees are obligated to maintain the district to its original capacity, at a minimum the open ditch will have to be repaired. The estimated cost for that part of the project is \$531,000.

Rode said the repair would be the minimum the trustees can do. That portion of the project could proceed before the rest of the work.

Chitty moved, seconded by Sanders, to accept the Engineer's Report on Drainage District Grant #5. Motion carried unanimously (MCU).

Sanders said the next meeting should be an evening meeting with the landowners. He sees it being informational only with no financial decisions being made until there is some consensus from the landowners on what direction they want to go. Ames should also be involved in this process as soon as possible.

Rode said a public hearing cannot take place sooner than 40 days from today, which would be March 14. He said an attorney should be involved in the process, particularly due to the Union Pacific railroad being a part of this district. He is not comfortable with where the trustees are with the UP in Drainage District Richland #20.

Sanders suggested Tuesday, March 28 as a possible meeting date. He reiterated that this meeting should be informational only. He does not want the landowners coming in with the idea that the trustees are going to decide to spend \$4,000,000 that evening. The first meeting will just be to answer landowners' questions and concerns and gather input.

Chitty asked if the City of Ames would be involved in the March 28 meeting.

Sanders said he expected to meet with Moon and the City of Ames earlier than that to let them know what is happening in this area. What Ames wants could have a large impact on the direction and the cost of this project.

Chitty moved, seconded by Sanders, to hold a public hearing on the Grant #5 Engineer's Report the evening of Tuesday, March 28 at a time and place to be decided. MCU.

Sanders said he is thinking of a larger location for the March 28 meeting, possibly the Community Building at the County Fairgrounds. He asked if everyone in the district would receive notification.

Wall said letters will be sent to all landowners currently in the district and to all landowners in the areas proposed for annexation. If Sanders and Moon meet with the City of Ames Wall would like to know who at the city should also receive notification.

Sanders said he would request that County Attorney Jessica Reynolds be involved in this as well.

Chitty moved, seconded by Sanders, to adjourn. MCU. Meeting adjourned at 9:55 a.m.

Respectfully submitted,

Scott T. Wall