

DRAINAGE DISTRICT MINUTES
DISTRICT GRANT #5
MARCH 20, 2018

The Story County Drainage District Trustees met in the Public Meeting Room of the Story County Administration Building to present an Amended Engineer's Report (on file in the Auditor's Office) to the landowners in Drainage District Grant #5 and to consider acting on the report's recommendations with input from the landowners in the district. Members present were Rick Sanders, chair, Martin Chitty, and Lauris Olson. Also present were Story County Engineer Darren Moon, Assistant County Engineer Tyler Sparks, Attorney Jessica Reynolds, Sanitarian Margaret Jaynes, and Drainage Clerk Scott Wall, and Project Engineer Kent Rode and his associate Tyler Connelly, both of Bolton & Menk, along with approximately 60 attendees, predominately district landowners (see attached sign in sheets for partial list of attendees).

Sanders called the meeting to order at 6:00 p.m. and introduced county staff and the project engineers. He stated that, under the Code of Iowa, the county supervisors act as drainage district trustees and have sole discretion over what is done in Grant #5. The trustees do not simply impose their will on the district residents. They listen to landowner concerns and comments and the trustees intend to keep tonight's meeting going until everyone has a chance to be heard.

Sanders said Reynolds had come to answer any questions about the legal rights of drainage district landowners. The trustees have fielded a few questions about how drainage districts can become self-governing and Sanders asked Reynolds to talk about that process.

Reynolds said that, under the Code, drainage district control defaults to the Board of Supervisors but Chapter 468.500 describes the process by which district landowners can elect their own trustees to assume oversight of a drainage district. Basically, if over half the landowners petition to elect their own trustees they can assume the responsibilities from the supervisors but they must operate under the same rules as the supervisors – Code of Iowa, Chapter 468.

Sanders said that Story County used to have a district, Marshall-Story #1, under private trustee control but the trustees had turned the district back over to the supervisors when the maintenance of the district grew larger than they could handle. The supervisors immediately began a \$900,000 project to address multiple tile and open ditch issues in that district.

Rode mentioned the right of remonstrance which allows a majority of landowners controlling at least 70% of the lands in a district to block an improvement. Landowners can submit objections, in writing, to Scott Wall but this must be done before the trustees vote to proceed with the improvement.

Ron Jensen asked if the attorney would represent landowners who are their own trustees.

Reynolds replied that no, she would not. The County Attorney serves as council for the county only.

There being no further legal questions Sanders asked Rode to present the information in the report.

Rode said after the original report was presented in March 2017 the trustees directed him to investigate additional options suggested by the landowners during the 2017 meeting and those options are what we are looking at today.

The district currently contains 8,879.21 acres but there are 10,788 acres draining into the district watershed. In addition, during large rainfall events some water is flowing west. For this reason the report

investigates creating a new, west main tile, and a second outlet to serve the area west of the existing district. Rode asked Connelly to go over the 5 sections in the report.

Section 1 is a cleaning and repair of the open ditch south of Lincoln Highway. This part of the project is something the trustees will have to do at some point as the Code requires them to maintain the district to its original capacity.

Section 2 proposes replacing the existing main tile with a 54" tile (Alternate A) or with an open ditch (Alternate B) between Lincoln Highway and 220th Street and section 3 would enlarge and extend the main tile north of 220th Street to better serve the existing properties in the district as well as the north annexation area. The goal is to bring the district up to the currently accepted coefficient of drainage of ½". This simply means the tile can drain ½" of surface water from the district in 24 hours. The current tiles are functioning at about 12% of that capacity. Under the Code of Iowa, railroads are responsible for installing and maintain culverts through their right of way while drainage districts are responsible for tile under a railroad. Creating an open ditch increases district capacity more effectively and economically than installing tile and saves the district the cost of going under the railroad.

Rode said the City of Ames has annexed the area between the Union Pacific Railroad and Lincoln Highway for industrial development and Bolton & Menk feel that the proposed open ditch will provide more capacity for runoff from industrial ground than the alternate proposal of a 54" tile. The open ditch was the recommended option before Rode knew about the annexation because it does have more capacity and is less expensive to install and maintain. The existing culvert under Lincoln Highway meets standards for draining agricultural land but not for urban roadway standards which do not allow for overtopping of the roadway.

Connelly said Section 4 covers the annexation of the west watershed and installation of a new tile to serve that area and to carry its water south, parallel to Interstate 35, eventually out-letting into an open ditch that crosses Lincoln Highway just east of Barilla. The west watershed tile can be installed to carry only the water from the west watershed of it can be extended north into the north annexation area to carry some of that water away from the east part of the district. That would be more expensive however.

Expanding and enlarging the main tile gives the option of adding Branch Tiles to serve specific areas of the district. The branch tiles would only be installed at the request of the landowners they would serve and an assessment schedule would be created for each branch. The optional branch tiles are the subject of Section 5.

Swanson asked how the costs are broken down.

Connelly said that can only be determined through the reclassification process. They do have lists of which landowners will be affected by each Section.

Olson said in the report there are estimates for the west main watershed and another for the west main plus the north annexation so we do have estimated costs for each option.

Rode said that is correct but we cannot say how much of those costs will be borne by each parcel of land prior to reclassification.

Sanders said under the current system if we do work at the southernmost tip of Grant #5 everyone pays for that and if we do work in the northernmost tip everyone pays for that. If this project goes forward and the district is reclassified everyone in the district will pay only for work done on parts of the district that they utilize. Story County has already gone through this process in 3 other districts.

Rode elaborated on what Sanders had said and briefly covered the factors (wetness, facility use, proximity, run off) that are considered in the classification process.

Rode said the cost per acre for the open ditch repair is \$49.00. This number includes the north annexation area but not the west watershed which will not benefit from the open ditch. Landowners should be aware that this is an average cost and some people will pay 2-3 times that amount while others will pay much less.

Ron Jensen said that means the guys on the ditch will pay \$100 an acre while the guy 5 miles away will only pay \$10 but the ones on the ditch have to take all the water from the more distant parcels as well as their own.

Rode said it wasn't quite that simple because the lands far from the ditch may have wetter soils which would increase their benefit.

Sanders said that Jensen is correct under the current system but in the districts Story County has reclassified we've seen a more equitable distribution of benefits. Sanders had State Representative Dave Deyoe submit a proposal to the state legislature about 5 years ago to assess drainage districts at a set cost per acre and the proposal was shot down by the Iowa Drainage District Association based on over 100 years of case law. Having been through the reclassification process a couple of times since then Sanders is now a convert to how benefits are assigned under the classification process. He's not saying everyone will be happy when they see their bills but it is a fair and equitable system.

Eric Jensen asked if that meant the trustees had the right to change what everyone pays. Can the trustees change the value of everyone's land? Before, when land was traded everybody knew that they were going to pay \$100 or they were going to pay \$10. Do the trustees have the right to say, "Now we're going to change the rules."?

Rode said the trustees have the right to order a reclassification any time they feel the existing schedule is inequitable. It is Rode's opinion that the existing schedule for Grant #5 is very inequitable.

Sanders said the answer to Eric's question is that yes, the trustees have the right to do that.

Post meeting observation by Scott Wall: Jensen's question sounds as if he believes the trustees are talking about changing the assessed value of his land by changing the rules. What is actually taking place is that the trustees are following the rules of reclassification to review the benefit to drainage for each parcel in the district. This has no relationship to property values.

Rode continued with the average cost of the other options. The east watershed tile improvement, including the open ditch repair, is \$576.00 per acre. That is the cost for Section 2B, the extension of the open ditch to 220th Street and the improvement to the main tile north of 220th Street. This figure does not include the cost of the work under the railroad which would be paid by the railroad.

The branch tile improvements vary widely depending on the length and size of each branch. That cost runs between \$104.00 and \$1,238.00. Any private tile in those areas could greatly change the need for the branch tiles.

For the west watershed area if that tile serves only the west area the cost is \$647.00 per acre.

Chitty asked if there was any benefit to Grant #5 landowners to have the west watershed as a separate district instead of being a part of Grant #5.

Rode said that would require a petition from at least one landowner (more is better) and the posting of a bond sufficient to cover costs if the new district is not approved.

Sanders said the 1,900 acres in the north annexation area are already benefitting from Grant #5. We could go to those people and ask them to create their own district but if they don't their water will still be coming into Grant #5. Because they are already benefitting from Grant #5 they should be brought into Grant #5 and then we can decide if that is enough or if a west main outlet is needed.

Rode said we need to know what the people on the west main want to do. Regardless of that the northern annexation area should be annexed. If the west main wants to extend further north to serve that area that needs to happen now but it will be more costly than the options in the report now.

A landowner asked if that would preclude a separate district for west main.

Sanders said if we annex the west main then yes, it cannot be its own district.

The land owner asked what would happen if the west main is not annexed.

Rode said then they can petition to form their own district but they have to post a bond with the petition.

Olson said the annexation area represents about 20% of the land in the watershed and is currently not being assessed. The way she looks at it 20% of the lands are not paying their fair share now.

Rode said he'd like to cover a few more items in the report before we get deeper into an analysis of the options. The first is right of way (ROW) along the open ditch. Drainage districts maintain ROW along their ditches for access for maintenance. These ROW's are not taxed by the Assessor and the landowners still have full access to utilize the lands within the ROW. Most drainage districts never specified how large that ROW is but, based on construction methods at the time the districts were established they would have needed about 20' on either side of the ditch. With the width of the ditch itself the established ROW is 40' on either side of the ditch centerline for an 80' ROW. With modern equipment the standard for ROW is 100' and that is what Rode recommends the trustees adopt for Grant #5. Landowners will be reimbursed for the additional ROW. Landowners can still use the ROW but do not have to be reimbursed for damages to crops in the ROW.

There are CRP buffer strips along the open ditch in places. These will be disturbed by construction and need to be replaced when construction is completed. The costs of doing this will be reimbursed to landowners along with crop damages during a completion hearing when construction is finished.

Landowners need to request a certified wetlands determination from the National Resource Conservation Service (NRCS). Bolton & Menk will need copies of everyone's wetland determinations to prevent anyone from being found in noncompliance with wetlands rules which can affect farm program eligibility. Any converted wetlands disturbed by this project will have to be mitigated. Mitigation costs are about \$12,000 per acre.

If the open ditch is extended, permits will have to be acquired from the USDA, Army Corps of Engineers and state and local authorities. Bolton & Menk will guide the district through this process. Rode does not see any issues with accomplishing this.

Sanders said Story County just went through this process in Drainage District Richland #20 and it went pretty well.

Rode brought up water quality. There is a misconception that tiling increases flooding. A University of Iowa Study shows that well drained lands absorb water more efficiently so tiling can reduce flooding from normal rain events. For larger storms it makes little difference if the land is tilled or not. There is very little the district can do to improve water quality but one thing is a WASCOB surface inlet which allows sediments to settle out before water drains into the open ditch.

Sanders said this might be a good place to allow anyone from Iowa State or the Nature Conservancy to speak as he understands there are people here representing those groups.

David DeGues spoke for the Nature Conservancy. He is part of a group called Transforming Drainage which is composed of land grant universities in the upper Midwest and is looking into next generation drainage applications. Dan Jaynes is in attendance to represent the Agricultural Research Service at Iowa State University. They are working on drainage technology that could increase yields by up to 30%. They are all receptive to talking to landowners about how to improve drainage and water quality and reduce fertilizer losses.

Jaynes said one new technology is “smart” drainage which allows landowners to control the amount of water coming off their lands.

Sanders said as Supervisors the board is very interested in water quality issues. Story County is about to become the first Iowa county to assess 100% of their watersheds. As drainage district trustees, however, their priority is to get the water off the land as quickly as possible.

Sanders said the trustees need to hear from those present about all 5 options presented by Rode and, once everyone has had a chance to speak, the trustees will decide what actions to take next in this project.

A landowner asked about the process used to estimate the project costs.

Rode said the estimates are based on similar projects done by his firm in the past. It has been his experience that when projects are bid the estimated cost usually falls in the mid-range between the lowest and highest bids. Depending on final design the actual costs can be plus or minus 10 to 20% of the estimate.

Sanders said the last two projects done by the trustees have been in the plus or minus 10% range.

The landowner asked how the costs are divided between private owners and the county.

Sanders said costs are born entirely by the landowners in the district. Entities like Story County and the City of Ames maintain roads throughout Grant #5 and those roads receive a benefit to drainage so the county and city do have a financial stake in the project.

Nancy Miller asked if the project costs are a one-time cost.

Rode said yes, the estimates are for the entire cost of the project. They can be paid all at once or landowners can opt to spread their payments over a period of 10-20 years as set by the trustees. Rode is recommending that the trustees offer a 20-year payment schedule for this project. The trustees also determine the interest rate which is currently set at 6%. Landowners do not have to take the trustees' repayment schedule. They are free to secure their own financing.

Eric Jensen asked about the 80' ROW. He can do anything but plant corn in that ROW, is that correct?

Rode said no, landowners can use the ROW for crops. They can do just about anything they want in the ROW except for erecting permanent structures or damaging the ditch. If the district needs to work in the ROW they do not have to reimburse landowners for damages to crops within the ROW.

Andy Swanson asked how, 100 years ago, they could not ascertain that the lands proposed for annexation now should not have been included.

Rode said there's no way to know for sure. In some cases he suspects that lands were left off due to strong opposition from the owners. Current technology has greatly improved our ability to determine watersheds. One hundred years ago people on the ground eyeballed the land to determine high and low points where today we use LIDAR. Finally, land use over the past 100 years can alter the topography enough to change watershed boundaries.

Sanders said development is a big driver of topographic change, Interstate 35 for instance.

Ron Jensen said his experience is that the people 100 years ago did a great job. The water in the proposed annexation did not drain into Grant #5 when the district was established but farming practices have altered the land and the flow of water since then. He heard earlier that the trustees' obligation is to maintain Grant #5 as it was.

Sanders said the trustees must maintain the open ditch to its original capacity. The reality is the trustees have to deal with how things are today and today there are 1,900 acres draining into the district that are not sharing in the district costs.

Jensen said there would be a lot fewer people involved if the drainage could be restored to what it was originally. If the lands north of Grant #5 could be made to drain back to the west they would outlet in the stream near Barilla. That would reduce pressure on Grant #5 where it drains under the RR. There are only three places now where water can go under the RR. Barilla, the Grant #5 surface flow, and West Indian Creek. Those openings under the RR are there because that is where the water went when the RR was built. Now is the time to put things back the way they used to be and we'd have a lot more depth and much better drainage than we do now.

Sanders said that is what the proposed west branch does. It directs water away from the main tile and ditch. This is why the trustees asked the engineer to amend the report a year ago.

Jensen said we need to get the water back to where it was originally going. There used to be a Clarion soil ridge in 1939 that is gone today. He wants to see that ridge restored.

Rode said that in the report the west annexation plans call for a tile that stays on the west side of the north/south road east of Interstate 35. That tile will flow to the creek by Barilla. The north annexation area will direct water to the existing/improved Grant #5 facilities.

Randy Collings said he was concerned that storm water from Ames' proposed industrial area will be far in excess of what the ditch can handle. If the industrial area is built out we'll have to widen the ditch all the way south.

Sanders said there are representatives from the City of Ames including Municipal Engineer Tracy Warner who can speak about runoff from city developments. Sanders said Ames runoff standards for dealing with

retention and runoff of storm water are much more stringent than anything the trustees can put in place. He asked Warner to talk about what Ames' plans are for the industrial annexation.

Warner said Ames intends to extend water, sanitary sewer, and storm sewer lines into the eastern industrial annexation so developers can hook into those utilities. Ames adopted new storm water regulations in 2014 that regulate flood control and water quality by keeping the water on site long enough for sediments to drop out. Runoff from developed areas should be no more than they were from Iowa land before it was converted to agricultural use. This will reduce runoff to less than what exists right now.

Warner said one recently annexed area in in the proposed west watershed – the commercial site at the intersection of Interstate 35 and 13th Street where a regional shopping center had been proposed several years ago has a 12" water line that will be impacted by the proposed tile. She is also concerned about the impact of the drainage improvements to existing drainage facilities on planned city utilities along Lincoln Way in the eastern industrial area.

Olson said a list of questions and answers between Warner and Rode indicates to her that the city can work with the district to resolve these issues.

Warner said she thinks there need to be a lot more questions and communications between the city and the district. John Hall is also here tonight representing Ames Economic Development.

Hall said he appreciates the opportunity to be here and to talk about what is now the Prairie View Industrial Subdivision. They have a major concern with Section 2 of the report because the extension of the open ditch will impact what they think is the most valuable property for industrial use. He doesn't know what should be done but wants their concerns known.

Sanders said he acknowledges Hall's concerns but they are already dealing with a district tile in that location right now.

Olson said she wanted to follow up on a comment Warner made about cost to developers. Once the district has decided on a project and the costs were known for a particular parcel those costs will not change if the parcel is developed. Is that correct?

Rode said the new assessment schedule is typically done at the end of the project. A preliminary schedule can be done but it will not match the final schedule.

Warner said as the city tries to attract developers for the site those developers want to know up front what their costs will be before they purchase any property.

Holm echoed Warner's comments. To be able to market the land effectively they need to know any costs associated with a given parcel up front and as soon as possible. Prospective buyers need to know if there is going to be buried tile or an open ditch on the property they are interested in. Will there be existing infrastructure they will have to move or build around that will add to their development costs?

Sanders said in order to get a handle on what any future costs will be the trustees have to make some decisions on how they want to proceed with this project. Until we know if we are going to extend the open ditch, annex the northern area, drain the western watershed, there is no way we can come up with even preliminary benefits to drainage. Rode can't start on the reclassification without knowing what is going to be done in the district.

A landowner said with the talk about a 54" tile versus an open ditch he wants to know more about the Code section that says what the railroad has to pay for. He represents Lincolnway Energy and they own a rail spur adjacent to the Union Pacific tracks.

Rode said his understanding of the Code is that it simply says railroad.

Sanders said the culvert would be \$415,000. It would be interesting to know what proportion of that amount would fall to Lincoln Way Energy. Because the culvert will be a single unit under multiple tracks this is something we should look into more from a legal aspect.

A landowner asked if the open ditch could be re-routed from where the main tile lies now to follow the existing roads and not cut through the middle of the area Ames has annexed.

Rode said they have to follow the natural course of drainage because the railroad will only pay for a culvert that follows the natural course of drainage.

Can we move the ditch towards 580th Ave south of the railroad, leaving the culvert in the same location the main tile occupies now?

Rode said that would be doable so long as the crossing of the railroad is not moved.

A landowner said the land in the western watershed is not a legal district. Can the trustees go in there and say, "We're going to make this a district to take the pressure off of Grant #5?"

Sanders said no. What the trustees can do is annex land into Grant #5 if that land is draining into Grant #5. They do not have the authority to create a new drainage district on their own. Because the lands in the northern annexation area currently drain into Grant #5 and because, in high water events, some of that water drains into the west watershed the trustees can annex the west watershed into Grant #5 and improve the tile there to better serve those residents.

Rode said there are 976 acres in the west watershed that would be served by a west main. There are also properties to the north that could be served by an extended west main tile. Surface flows in the upper watershed would still go into the eastern side of Grant #5 and would still be a part of that watershed. Because these lands would surface drain one way and tile drain another all the lands in this area would be best served by being made part of Grant #5.

Margaret Jaynes felt it was important to note that during this project there is a chance that illegal septic system hookups to the Grant #5 tile could be discovered. If that is the case the owners of those systems would have to bring them into compliance with the law at their own expense.

Olson said Jaynes had printed out a map of potential, non-conforming septic system locations if anyone would like to look at it after the meeting.

Dennis Smith used Connelly's maps to illustrate where the western tile lies. If we could extend the West tile into the northern annexation area that area's water would only have to travel two miles before out letting into the creek by Barilla. That makes more sense to him than directing the upper watershed water into the existing Grant #5 in which the outlet is 7 miles away. Smith said this will help the city too because they have to get their surface water through the RR where there is an opening (north of Barilla).

Sanders asked if Smith was suggesting pulling all the water in the northern annexation to the west side.

Smith said that's the way the water used to go.

Rode said that could be done but the costs would be higher than what the report is recommending.

A landowner said the tile in the western watershed is only an 18" and it is overloaded now. There should not be more water directed towards that tile.

Rode said the report looked at extending the west watershed tile and found that the amount of water it could redirect from the east watershed was not enough to cause a significant reduction in tile sizes on the east side. The district would spend more money extending the west tile into the upper watershed without realizing significant savings in the tile improvements on the east side.

The landowner said his farm north of Ketelsen Marsh is already too wet. Directing more water west will just cause more problems for him.

Sanders said what he is hearing from those present is in favor of looking at increasing the amount of water flowing west from the upper watershed towards Barilla to see if that reduces the amount of tile necessary in the eastern side of Grant #5. He thinks he's hearing support for annexation, reclassification, and a focus on draining the upper watershed into the western watershed mentioned in Section 4 of the Amended Report.

The landowner north of Ketelsen Marsh said he would prefer to see the improvements in the eastern section of Grant #5 carried out and the western watershed left as it is so there isn't more water coming through him.

Sanders said that is just the opposite of what he is hearing from everyone else.

Swanson asked if the trustees go with Section 4 how do they ascertain what effect that has on assessments in the lower part of Grant #5 when the money is being spent in the upper part? Does just the west pay for the water going west.

Rode said there would be a reduction to the east main schedule to take the work in the west main into account.

Ron Jensen asked if the open ditch would still have to be cleaned if the west watershed is annexed and takes some of the water that currently goes east. He doesn't believe the ditch needs to be cleaned, just repaired.

Rode said there is silt in the existing ditch along with some minor meandering and other items that should be repaired. He recommends that the ditch be repaired regardless of what else takes place in Grant #5.

Jensen said the first half mile of Lincoln Way will silt in within half a year of being cleaned. The ditch was cleaned in 1991, didn't need it then, and silted in again right away. Also, the county engineer at the time proposed a style of inlets to the ditch that wasn't workable and they all had to be repaired later.

Sanders said let's be clear about the possibilities. You can probably buy a little time by working on the north and west watersheds first but Grant #5 has a lot of issues throughout the district and they aren't going away. If we try to go back to the way water flowed 100 years ago that may reduce the amount of water flowing through the system now and give us a better idea of what we have to deal with but there are still issues that will have to be addressed sometime. The only real question is the sequence in which things are happen because sooner or later all those things will have to be done.

A landowner said we can clean the ditch any time but once the City of Ames starts building up their industrial area it will be too late for the district to do things the way it wants to do them.

Rode said the City of Ames has plans for a sanitary sewer that would run along the north side of Lincoln way to serve the industrial area. The plans as they are now would conflict with our proposed open ditch extension. If we delay and the sewer goes in it will impact what the district can do later. It is cheaper and easier to do the full project now than it will be later.

Holm said the end of the sewer line will be 590th Ave. If the open ditch can be rerouted along 590th that would be advantageous for Ames intentions and avoid the sanitary sewer and city water lines.

Warner said now is the time to communicate and work out these details. Ames already has final plans for their sanitary sewer and the district needs to work with that.

Sanders said all he is concerned with is moving the water from north of the RR to south of Lincoln Highway and as long as we can accomplish that, how we do it is secondary to getting it done.

Rode said that is correct but a rerouted ditch is a longer ditch and that will add to the cost. Now is the time to address these issues before any construction takes place.

Jensen said if the existing 24" tile is replaced by a 54" tile don't think there won't still be water running over the surface of the ground.

Sanders said potential buyers should be aware of the water issues they will face in this area.

Warner said developers in Ames have to account for surface water that flows onto their properties, not just the water from their property when they design retention facilities.

Olson asked if the city was aware of the existing district facilities when they planned the location of their utilities.

Warner said the city designed their infrastructure for the existing conditions not for a 54" tile or an open ditch. They were not aware of the district plans when they were doing their design work.

Miller asked who pays for the water retention requirements.

Holm said the private developers are responsible for meeting Ames' water retention ordinances.

Sanders said Ames' industrial annexation area is changing, like it or not. We have to be able to work with and accommodate those changes so we have something that will last another 50 years. Sanders asked Rode for his thoughts so far.

Rode said the open ditch needs to be repaired. That is a shall under the Code. The people served by the district tile have a drastically undersized tile as do the people in the west watershed. If the landowners want the water in the upper watershed to go to the west that's fine but it's cheaper to go to the east. Regardless of which way the water goes, something needs to be done with the water.

Ron Jensen said he'd like to see the ridge that existed in 1939 put back. At the start of the meeting it was stated that the trustees have to keep the district the way it was designed.

Rode said that statement refers to the district facilities, not to the land. Land is changing all the time through erosion, development, etc. The location of the tiles may need to change as well.

Smith and several others said Rode had done extensive work on moving the water to the southeast. What if they put that much effort into moving more water to the southwest?

Rode said they looked at that and it was more expensive.

Connelly said because of the standard tile sizes available, routing more water to the southwest will not reduce the infrastructure costs in the southeast. The size of tiles needed for this project go up or down in size 6" at a time. A 6" reduction in tile size is not significantly cheaper than what they are proposing but it will drop the coefficient of drainage below the 1/2" that is recommended regardless of what is done in the west watershed. You would be saving a little money on the east, spending a lot more on the west, and reducing the capacity on the east below what is optimal.

Smith asked what would happen if you put a 54" tile on the west as was proposed for the east.

Connelly said it is not a question of the size of the tile on the west, but a question of how much water can be diverted to the west and that is limited unless you add some sort of spur or extension from the west and extend it into the northern watershed to take that water to the west. There are options that would let you decrease the size of the east tile by extending and increasing the size of the west tile but it will take more engineering and will only address subsurface flows.

Olson said if more of the water in the north is taken to the west will that alleviate the issues in Ames' industrial annexation area.

Rode said it could reduce some of the tile flow to the west but not enough to change what he thinks is needed through the industrial annexation area.

Chitty moved, seconded by Olson, to accept the Amended Engineer's Report as presented by Rode. Motion carried unanimously (MCU).

Sanders said he feels the report should be further amended to investigate the effects of moving more water to the west and to give Bolton & Menk more time to coordinate with the City of Ames in design work on both the district's and city's infrastructure.

Olson said she was in the same place as Sanders. She'd like to see more details on moving water to the west but would also like to move forward on annexation and a preliminary reclassification.

Chitty thinks in an ideal world a new district should be created in the west watershed but doesn't believe that is realistically possible. He is in favor of annexation and reclassification and believes that more water will have to go to the southeast. He would like to see how moving more water to the west affects the east side. We should start with another look at the west watershed.

Jensen said he will pay the largest share of any project that is done in Grant #5 and he hasn't talked to anyone who is in favor of this project. If the trustees are representing the landowners they should have a show of hands to see if there is any support for the project.

Sanders said he believes we still need more information before the trustees can decide on how to proceed with making any \$5,000,000 decisions.

Connelly pointed out that any and all land owners have the right to object to any improvement simply by putting that objection in writing and handing it in to Wall or the trustees.

Jensen said there's been a lot of discussion about costs but no one can tell him what individuals are going to pay. Everyone can be certain that they will pay a lot – more than they paid for their farms in some cases. He hopes that the landowners are not left out of the meetings between the district and the City of Ames.

Rode said there is no good way of knowing what the costs will be without a reclassification. He's done preliminary reclassifications in the past but before that can be done they have to know what the project is going to be.

Sanders said that is where he thinks the trustees are headed with further amending the report. Don't think that the report is going to be amended and come back with a new \$681,000 option for the west watershed. It is going to be more than that. If the report is further amended we are pushing this project back another year. By the time the report can be amended the landowners will be in the field so nothing can happen until fall then construction will probably not take place until 2019, probably in the fall of 2019.

A landowner asked how work done by Ames and Nevada over the next year might impact what the district wants to do.

Sanders said he does not believe Ames can do anything to change the flow of the water that exists in the district right now. Anything new, the city will have a lot to say about it. As soon as the district starts proposing changes to what is there now Ames is going to want to weigh in on that.

Warner concurred. She also said if more water is shifted to the west that affects the city as well. In response to a question about surface flows that exist today she said the city has not begun doing surface flow analysis. That has to wait until a developer comes in with a proposal then the city can investigate how each proposal will affect the flow of water over and around the proposed improvement.

Chitty asked if Grant #5 annexes the west watershed and puts a bigger tile there and Ames develops the commercial site east of Interstate 35 and north of 13th Street will the city want to tie into the tile with their storm water.

Warner said that needs to be part of what the city looks at as the site is developed. FEMA is redoing their maps and that is something the city will need to account for as well.

Chitty asked if that was a yes or a no.

Holm said, hypothetically, if the city discharges to the tile the volume of that discharge will be less than it is with the current, agricultural, use of the land.

Sanders asked if anyone objects to doing more study before the trustees make a final decision on how to proceed with this project.

Ron Jensen said he doesn't think the engineer is working for free. He thinks we already have plenty of facts and figures in front of us. He believes the land should be put back to the way it was when the district was established by recreating the ridge that existing in 1939, directing the water in the north towards the west watershed area and not improving the Grant #5 facilities. The ridge only needs to be 3 or 4' to make the water go back west.

Sanders said the trustees can't legally do that without an engineering study recommending that course of action. If we do direct the engineer to further amend the report then yes, it will cost more money. There are three options tonight. They are: 1. Move forward with doing all or part of the options in the report. 2. Stop the project now and do nothing. 3. Acknowledge that this is a good report but that it needs to go a little bit farther and direct the engineer to amend it.

Jensen said he can get all the free information we need. Any good contractor will tell you how much tile you need to drain a given area without an engineer.

Sanders said that can't happen without a change in state law.

Jensen said we could be spending money for another 2 or 3 years before anything happens. The trustees need to get the answers from the people they are representing.

Olson asked what Jensen wanted as far as being kept in the loop – quarterly updates, monthly updates?

Jensen said he wants to know if the district can rebuild the high ground that used to separate the north annexation area from Grant #5 but no one can give him an answer. We could redirect the water for \$2,500. How much more engineering do we have to pay for?

Sanders said he is going to ask for two legal opinions following tonight's meeting. First, how much of the cost of the culvert under the railroad does Lincolnway Energy have to pay and second, can the district legally reinstall a ridge that they think existed in 1939. That still doesn't absolve the district of the legal requirement to hire an engineer for a project of this size.

The Story County Attorney responded to Sander's request for legal opinions on March 23. "Under Iowa Administrative Code 701-76.1(434) the Union Pacific and Lincolnway Energy Railroads will share in the cost of improvements." In the case of the presumed ridge that once separated the north watershed from the original Grant #5 the attorney "recommends "no" as the natural course of water appears to have been established in its present state for at least the past eighty years. Any attempt to move it would necessarily require diverting the flow to a different location and onto other owners' lands. This involves a dominant/servient analysis that may not be beneficial to the district (responsibility for sending water across another's land). It also raises the significant question of whether or not the railroad would pay for the crossing, since it is not at their place of choosing and not the "natural" flow location. It would put us in a dispute with the railroad about what constitutes natural flow."

A landowner in the west watershed said he would like to see the water in the north annexation area directed away from the west watershed, improve the east side of Grant #5 to handle that water, and reduce the flow of water in the west to the point where the existing west tile can handle it.

Sanders said in that case the district would not annex the west watershed so no work would be done there but he doesn't think the majority consensus is to ignore the west watershed.

A landowner said Warner had mentioned FEMA involvement. Is FEMA going to come in and tell the district what it can and can't do?

Warner said FEMA is only concerned with maintaining flood zone maps. Work done in the flood zones needs to be permitted by the USDA, DNR, Corp of Engineers, etc. but not by FEMA.

Olson moved that the trustees direct Bolton & Menk to take into account the feedback from tonight's meeting and further amend the report to reflect what was discussed here.

Chitty seconded the motion with the understanding that there is no perfect answer. The trustees are not faced with any good choices right now and Chitty doesn't want to spend any more money and, with Ames wanting to develop their industrial area, he feels the door is closing on the district being able to do what it wants to do. It may already be too late.

Sanders said the choice before us tonight is to either continue with the study or do nothing and he hasn't heard anyone in favor of doing nothing. Sanders called for a vote on Olson's motion. MCU.

Miller asked about a time frame for the new additions to the report.

Rode said the trustees need to consider requesting wetlands determinations for Grant #5 and the annexation areas and get those to Rode or Wall.

Olson moved, seconded by Chitty, to direct Rode to send a letter to landowners in Grant #5 asking that they have wetlands determinations done for their properties and get copies of those determinations to Rode or Wall. MCU.

Sanders said he thinks we need to move forward on annexation as well.

Rode said the trustees could annex the upper watershed now but there is no district facility in the west watershed and that area should not be annexed until it is known that it will be included in the project.

Miller said she's heard a lot of talk about engineering costs but no numbers. How much have we already spent on engineering for this project?

Rode and Wall both said they didn't know but Wall said he can get those figures tomorrow.

Engineering costs from the start of this project in November 2015 through February 28, 2018 are \$90,703.61. This information was forwarded to Miller and the trustees on the morning following this meeting.

Miller asked if the engineering costs were a fixed bid.

Rode said no. Under the Code engineers are appointed by the trustees and they are paid on an hourly rate plus time and materials.

Sanders said let's talk time frame.

Rode said there is going to have to be a lot of coordination with the City of Ames.

Sanders asked if we should get back together in the fall, after the crops are harvested.

Rode said that will be sufficient time.

Warner said Ames plans on getting their sanitary sewer constructed in the upcoming season but they will work with Rode on what the district needs.

Sanders said we will get back together in the fall and everyone will be notified of the time and date as they have been in the past.

Rode said the trustees could establish the existing ROW along the main open ditch tonight.

Sanders asked if we have any ROW.

Wall said there is an assumed ROW of 80'.

Rode said the board could formalize that 80' ROW in a motion tonight then come back at a later meeting and expand the ROW to 100'.

Sanders said his preference was to wait to see where the trustees are going with this project before moving forward on the ROW.

Jensen said he thought the open ditch should just extend north under the railroad and stop there instead of continuing north to 220th Street.

Sanders said the idea of a culvert was more attractive when only the railroad would pay for it but is less attractive when it could shift some of the cost to a private landowner in the district. With the City of Ames' concerns about an open ditch this aspect of the project is subject to change. Sanders said the trustees just finished a project in Richland #20 where they did exactly what Jensen is proposing. An open ditch was extended under the railroad and stopped on the other side.

Chitty moved, Olson seconded, to adjourn. MCU. Meeting adjourned at 9:20 p.m.

Respectfully submitted,

A handwritten signature in black ink that reads "Scott T. Wall". The signature is written in a cursive, slightly slanted style.

Scott T. Wall

DRAINAGE ATTENDANCE SHEET
Drainage District Grant #5
March 20, 2018

Name	Address	Owner/Tenant
Rick Hawbaker	1468 West A Ave Nevada, IA	MGR
Dave DeGuz	TAL 505 5th Ave, Suite 930, Des Moines, IA	N60
Tracy Holland	24477 600th Ave Nevada, IA	owner
Jay Cruise	236298 600th Ave Nevada	owner
Tyler Sparks	837 N Ave Nevada	County
Bob Ringgenberg	1911 Northcrest Circle Ames	owner
Allen Thompson	1502 Glendale Ames	
Rosalie Thompson	1502 Glendale Ames	owner
Cindy Hildebrand	57439 250th st. Ames	owner
John Clough	61526 260th St, Nevada	owner
Tracy Warner	515 Clark Ave Ames, IA	City of Ames
John Hall	304 Main St Ames, IA	AEDC
Lee Mason	LWE 59511 Lincoln Hwy Nevada, IA	LWE
DARREL BOLL	LWE 59511 LINCOLN HWY NEVADA IA	LWE
Martha Clifford	3909 Brookdale Circle, Ames	owner
David & Jana Ballantyne	24912 610th Ave, Nevada, IA	50201-0105
Nancy Miller	23584 600th Ave Nevada	

DRAINAGE ATTENDANCE SHEET
Drainage District Grant #5
March 20, 2018

<u>Name</u>	<u>Address</u>	<u>Owner/Tenant</u>
DAVID JENSEN	59595 250 th ST	OWNER
Randy Collings	58853 250 th ST	OWNER
Carol Collings	58853 250 th ST NEVADA	OWNER
David Mens	614 W 18 th St. Nevada	OWNER
MICHAEL MEETZ	20267 580 th AVE NEVADA	OWNER
Jeff Taylor	55750 170 th ST Ames, IA	Owner
Eric Jensen	58176 210 th street Nevada Ia	owner
Andy Swanson	64905 190 th St Nevada	Other
Dale Swanson	19509 630 th avenue Nevada	OWNER
Randy Bretke	58570 Lincoln Hwy, Nevada	Owner
Linda Miller	57816 220 th Ames, IA	owner
Jim & Roxanne Freel	23801 600 th AVE Nevada, Ia.	owner
Tim Meyer	2363 AVE Nevada Iowa	Owner
Jodd Flynn	65297 Rich St Nevada, Ia.	Tenant
Thonda Sylva	NEVADA	
Nathan Voight	1238 Cherokee St. Nevada	owner
Steve Bruns	25199 County Club Nevada	
MATT MARDESEN	1209 6 th ST NEVADA IA	OWNER/REP
Chris Lloyd	26606 610 th NEVADA IA	owner
JUSTIN VETTER	23941 590 th AVE. NEVADA, IA	owner/mgr