1. Open Meeting
Hardin County Drainage District Chairperson Lance Granzow opened the meeting. Also present were Trustee BJ Hoffman; Trustee Renee McClellan; Hardin County Economic Development Director, Angela De La Riva; Hardin County Environmental Health Specialist, Jessica Sheridan; Lee Gallentine of Clapsaddle-Garber Associates; and Drainage Clerk Denise Smith.

2. Approve Agenda
Motion by Hoffman to approve the agenda. Second by McClellan. All ayes. Motion carried.

3. Approve Minutes

Granzow and McClellan thanked Clerk Smith for providing detailed minutes for the Drainage Meeting with Private Trustees. McClellan stated it is a good record for future reference, of what was discussed at the meeting.

Motion by Hoffman to approve the minutes to Regular Drainage Meeting dated 2-19-20 and Drainage Meeting w Private Trustees dated 2-19-20. Second by McClellan. All ayes. Motion carried.

4. DD 9 - WO 229 - Discuss W Possible Action - Set Date For Bid Letting

It was discussed last week of holding the DD 9 Bid Letting on March 25, 2020 at 10:45 at the EOC building, right before the DD 143 hearing.

Motion by Hoffman to set the date for bid letting for DD 9 WO 229 for Wednesday, March 25, 2020 at 10:45 at the Hardin County Emergency Operations Center, 1031 Edgington Ave, Eldora. Second by McClellan. All ayes. Motion carried.

5. DD 55-3 - WO 201 - Discuss W Possible Action - Notice To RR Of Damaged Box Culvert

Smith stated in previous letters communicating with the Railroad, that the correspondence had been signed by Trustee Hoffman, the letter notifying the railroad of the damaged box culvert has been prepared and is ready for signature. Smith requests clarification as to whom the Trustees would like to sign the correspondence.

Motion by Hoffman delegating signature for DD 55-3 WO 201 letter to the railroad company to Chairperson of the Drainage Board of Trustees, Lance Granzow. Second by McClellan. Motion carried.

6. DD 158 - WO 285 - Discuss W Possible Action

DD 58 - WO 285 Smith states this is a new work order, request submitted by Clint Miller. Miller states there is a ground intake on the west side of the road that has silted in with debris, intake is boiling out and water is flowing overland to culvert, goes through culvert under the road, and water continues overland once it is on the east side of the road. Miller stated it may need intake cleaned out and standpipe installed Miller also mentioned if anyone was on-site they could give him a call for more information.

Motion by Hoffman to have CGA go out and investigate and report back to the Trustees for further action. Second by McClellan. All ayes. Motion carried.

7. DD 165 - Discuss W Possible Action - Canvass Date For DD 165 Special Election
DD 165 Special Election for Private Trustees is set for March 28, 2020. Smith requests date and time to be set for DD 165 Special Election Canvass. Election results are due to Smith Monday, March 30, 2020 at 10:00 am in the Auditor's office.

Motion by Hoffman to set the date and time for DD 165 Special Election as Monday, March 30, 2020 at 10:30 AM in the large conference room at the Courthouse. Second by McClellan. All ayes. Motion carried.

8. Discuss W Possible Action -Wind Turbine Ordinance And Drainage Utility Permit Language & Process

Jessica Sheridan joined the meeting. Granzow stated we can keep this topic on the agenda until final approval of new language is complete. Granzow stated we need to move forward with this.

Hoffman stated he has some information, Hoffman received a phone call from Jacob Handsaker and had a 45 minute conversation with Handsaker about the wind turbine ordinance and drainage utility permits. Handsaker is out of the loop on the current project, where it is located and what the project entails. Hoffman explained the proposed wind turbine project and Handsaker had some good constructive criticism. Handsaker stated they have 4 turbines on their family's property, and they did have issues with their tiles due to the turbines, but luckily they knew how to fix them and did their own repairs. Handsaker stated, that in a drainage district if turbine work were to go across numerous owners properties and through numerous drainage districts, he believes that televising district facilities prior to wind turbine work will be critical. Handsaker stated that dealing with their family, they could communicate easily with the turbine company, but if you have 8 or 10 or even 20 landowners involved, it will be very difficult to ask for repairs, demanding them if they are not addressed, and how do you prove that whatever damage done was the WEC's fault. The turbine itself, the crane walk, or just heavy equipment, can cause damages to tile. Hoffman stated Handsaker was in favor of televising entire facilities. One of the other suggestions made by Handsaker to Hoffman was mandating that the cranes have a GPS unit on them and track their movement every step of the way through a field, and provide a map to the drainage clerk of it's movements. This would eliminate the opportunity for a WEC to say we never crossed that tile that is damaged, this would provide an overlay of exactly where that heavy crane traveled within a district, and will provide a historical record, so the WEC can't say that wasn't us, it was the farmer's own equipment that caused damage. Gallentine agreed that would be a great idea.

Hoffman went on that the technology to do that is not terribly expensive and worst case scenario, you hire CGA to go out and drive a Ranger to follow the crane and pay for an on-site observer the whole time the crane is in the field. Hoffman continued, it probably makes more sense to mandate that the WEC's will use this type of equipment on cranes. Handsaker explained to Hoffman that to assemble and disassemble a crane, is an $800,000 expense, and that they don't tear the crane down each time it needs moved, the WEC's prefer to move the cranes via a crane walk. Gallentine noted they have to bring in smaller cranes to assemble the larger cranes, which leads to more heavy equipment in the field. Hoffman stated that those two things, televising tile prior to turbine construction and GPS units installed on the cranes to map their travel, were make it or break type things to make any ordinance or permitting successful. Handsaker stated having that televised record of the district tile would prevent so many problems in the future and creates a baseline of the current tile condition for future reference.

Gallentine stated the biggest problems that were encountered in Franklin County’s turbine project, were determining the actual tile locations. If we televising ahead of time, we can also locate the tile, and shoot it, then go back and stake out the exact tile location for contractors. By creating an accurate GPS map of actual tile location, that may be more reliable than the hand drawn 100 year old maps. Granzow stated there should be a setback distance between the turbines themselves and district tile, although he is not sure what that setback distance should be. McClellan stated that we don't know how far the vibrations will travel from the turbine site.

Hoffman stated the harmonics are unknown at this time, it is like sticking a tuning fork in a glass of water, you will get ripples in the water, if you stick that tuning fork into a kiddie pool, you will still see ripples, and also in a full size swimming pool, you can still see ripples from those vibrations. Gallentine stated it may be different results in different areas based on age and type of tile, and soil types.
Sherridan stated she had reached out to a researcher who was a mechanical engineer to help determine setbacks from residences for the ordinance, and asked if the researcher had any experience with vibrations from turbines and drainage tile. The researcher did not have experience with that but spoke with his peers who stated that there were many variables at play, like how the tile lies in the ground in regard to the turbine, soil types and many other factors. Gallentine stated that a private tile system may have an influence, for example if a private tile line lines in close proximity to a turbine, and then travels to connect to a district tile, does that amplify those vibrations, much like a kids telephone, with two tin cans and a string tied between.

Hoffman stated there may be much more to this issue than some would lead a person to believe. Gallentine stated he liked the televising ahead of turbine construction, because then you have a baseline and you know where everything is located, and he believes televising should be done after the turbine work is completed, at least in the areas where the turbine company crossed the tiles.

Sheridan had questions about the difference between public and private tiles. Gallentine stated that district tile affects only those landowners in that district, they have a say in how their tile is maintained. If you live outside that district, you would have no input on the tile within that district. Sheridan asks if Granzow's thoughts on setbacks from tile would apply to both district and private tile. Granzow replied we can only regulate district tile, we have no say on what happens with private tile systems. Hoffman asked if there has been deliberations on how far these wind turbine setbacks should be from septic systems. Sheridan stated she did not think it was an issue, although some septic systems may still use old clay tile, the thought was with time and transfer requirements they should all get updated anyway.

Granzow asked the group if we should look at changing our permitting process or have a development plan with the WEC, that would be a special development agreement. De La Riva stated that the televising requirements should be in the agreement. Gallentine stated even if you teleview tiles in advance, he still thinks we need someone on-site doing observation to make sure things don't get broken, Gallentine stated he did not like the option of just trusting a contractor or many subcontractors down the line, to just say we will fix it if we hit it. McClellan agreed and stated she feels there should be someone on-site for observation, and it should be at the WEC's expense. Smith stated we are dependent upon the WEC's honesty that if they hit a tile, that they would actually report that they hit a tile without on-site observation. Granzow stated we have tile that 3' to 4' in size, not small tile. Gallentine stated if a contractor nicks a clay tile, and it is not obvious, from large pieces of broken tile coming up out of the trench, that nicked tile will eventually sit in after it is covered back up by the contractor, which will cause larger drainage problems later.

Gallentine stated it would be great for the utility permit to include language discussed at last week’s meeting for conflict resolution. Gallentine stated that would have been very helpful in our dispute with the IRUA. Gallentine stated that if something is disrupted in the tile, and there is a dispute as to who is responsible for the repair, there needs to be a process that states how it gets remedied, rather than a standoff that ends in legal issues and attorneys. Hoffman stated that those disputes would not be covered by the variance board, and that his fear is the WEC's will just wear us down, with daily requests for changes and time spent on conflict resolution. Granow stated the ordinance says they WECs should have a $50,000 escrow account, used for repairs, and that if funds are used from the account, the WEC would need to replenish the account. Hoffman stated in principle that is how it works until the WEC decides to stop funding repairs. McClellan stated many drainage issues and repairs can exceed $50,000 on one project. Gallentine stated he just thinks going forward there should be some kind of conflict resolution spelled out in the permit, whether that is going to mediation, district court or a panel of 3 independent drainage engineers, just as long as there is a procedure set forth in the permit. Hoffman stated perhaps we should ask attorney Mike Richards, to see what method he would recommend for conflict resolution. Gallentine stated it would be a good idea to bring Richards into the conversation.

Sheridan stated what it would look like if we just state the WEC must replace any tile they travel over. McClellan asked what other county's permits look like. Gallentine stated that Franklin County required the WEC's to locate tile when they were boring underneath it with their equipment to lay electric lines, and then we had to provide the WEC with the elevation of the tile, then the WEC would provide CGA with the elevation of the boring, and CGA had to verify that they cleared the district tile when boring, and then CGA watched during crane walks. Franklin County did not require any televising, either before or after work was done. Gallentine stated after the fact Franklin County has requested CGA to come back out, because after you watch the crane walks and the ground is compressed and then it springs back up when the crane is
removed, they would like CGA to dig up the tile at a crane walk location and near a crane walk location, but 
CGA does not have a baseline as far as televising to know what damages were done.

Granzow stated if we teleseve and locate tile, it will not require them to dig it up to give an elevation, 
because we would already have that from the locating process. Granzow stated that is what we need to 
know to have the WEC contractor bore under district facilities. Granzow asked if still want to continue to 
have the WEC bore under district tile. Gallentine stated that there is no reason we would want to change 
that requirement, he went on that the only impact it would have on the WEC is that they would have to 
begin their bore descent sooner, as there is a limited amount of flex in the WEC's cabling, that would just 
mean they go deeper for a little bit farther. Gallentine stated once they start boring, it doesn't really matter, 
it may just take a little longer. Sheridan asked if the WEC would bore their lines in or trench them in. 
Granzow stated they will trench it until they have to bore under tile or other utilities. Gallentine stated that in 
Franklin County, they trenched it all, except for those areas, so hey will bore a conduit under those areas, 
then they will stop and feed their cables through the conduit then continue on with the trenching. and that is 
where will have televising afterwards to make sure they didn't break though the tile while boring.

Gallentine stated that in Franklin County, there was a last minute change in the route and the WEC 
contractor clipped a tile, they called CGA and informed them they hit a tile. Gallentine stated the contractor 
could have very easily not notified us. Hoffman stated that this company proposing work in Hardin County, 
does not have a track record of work done in Iowa. Gallentine stated that this project in Franklin County, 
was contractor White who was working for Eluant, which are both big players that have been around for a 
long time. Hoffman stated we don't know who their contractors or sub contractors will be. McClellan asked 
if this was the same WEC that had the turbine site by Radcliffe, Smith stated that King with RWE stated 
that the majority of their recent work was in Illinois and other areas of the Midwest. Gallentine stated that 
even the two turbine projects in Franklin County are not owned by the same company, one is owned by 
Alliant and the other is owned by Mid-American. Gallentine stated that the newspaper stated this project 
would utilize feeder lines into Franklin County, but they are not related projects.

Granzow stated his biggest concerns is he does not want an added cost down the line to the landowners of 
Hardin County for this turbine project. Gallentine stated it is hard enough to maintain drainage systems that 
time decays, we do not need to accelerate it. Granzow asked if we want Mike Richards to get involved at 
this point. McClellan stated it might be worth our while to see what experience Mike Richards has with wind 
turbines, and to conflict resolution with utilities. Hoffman stated it would be worthwhile to have a drainage 
study session for 2 or 3 hours and have him here along with Gallentine to discuss these issues. Sheridan 
stated that their Zoning Commission would be having another work session before they present their 
recommendations on the ordinance, hopefully in a couple of weeks they will be ready to present to the 
Supervisors. Gallentine stated he did not bill the county for the Private Trustees meeting last week, and 
would not bill the county for the next work session as it is just valuable knowledge gained in moving 
forward.

Granzow asked if we could set a date and time to have Mike Richards come in and work with us, although 
he doubted Mike would have an opening to come visit with us in less than a week. Gallentine noted he will 
not be able to attend next week's drainage meeting, but would be available by phone for the meeting. 
Granzow stated that anyone who has concerns about the Drainage Utility Permit can contact the Drainage 
Clerk, Denise Smith so that those concerns could be shared at the next Drainage Meeting.

McClellan asked if we could have Richards available to meet with the Trustees on March 25th at 1:00 pm 
after the DD 143 Hearing. Smith will send Richards a copy of the Franklin County Turbine agreement, the 
draft of theHardin County Ordinance and the Hardin County Drainage Utility Permit.

Smith asked on an unrelated topic, if we need attorney Richards involved in the DD 56 Hearing. Granzow 
stated we could ask Richards if he is available by phone for the DD 56 Hearing.

Motion by Hoffman to have Clerk Smith reach out to attorney Mike Richards to request his availability to 
attend a Drainage Work Session on March 25th at 1:00 pm and to attend, either in person or by phone the 
DD 56 Hearing, April 1, 2020. Second by McClellan. All ayes. Motion carried.
9. Other Business

10. Adjourn Meeting
    Motion by McClellan to adjourn. Second by Hoffman. All ayes. Motion carried.