DD 22 LANDOWNERS MEETING December 16, 2019, 9:00 AM

12/16/2019 - Minutes

1. Open Meeting

Hardin County Drainage District Board of Trustees Chairperson, Renee McClellan, opened the meeting. Also present were Trustees, Lance Granzow and BJ Hoffman; Landowners, Royle Duncan, Jo Duncan, Randy Madden, Paul Peterson, Don Peterson, Danielle Peterson, John Liittschwager, Randy Silvest, and Greg Hanson; Jeremy Maas with Gehrke, Inc.; Heather Thomas with Clapsaddle-Garber Assoc. (CGA); Brent Klaiber, Jason Klocko, Jim Sweeney with Forterra; and Drainage Clerk, Denise Smith.

2. Approve Agenda

Hoffman moved, Granzow seconded to approve the agenda as presented. All ayes. Motion carried.

3. Introductions/Attendance

Introductions were made and attendance verified.

4. DD 22 - Discuss W/ Possible Action - Request For Landowner Input The Trustees requested this meeting with landowners to discuss a request from the contractor for an extension on the December 1st completion date, issues with tile quality and overflow connections from original main to new main tile.

5. Comments/Discussion

Heather Thomas of CGA provided an update. Substantial amount of work on the project has been completed and a request for additional work on the project has been made. Forterra is present, at the Trustees request, because of issues in the field with concrete pipe quality, issues with some of the pipe fitting together in the field and some of the pipe was rejected. Thomas stated that Gehrke did a great job working with CGA during the difficult period when pipe was being rejected, Forterra did send a rep out to confirm that pipe was out of round and some bells had been grouted and possibly been taken off of another project and not fitting together. Pipe diameter was inconsistent when measured vertically and horizontally, and would not seat themselves when in the field.

Hoffman noted that this is why we utilize CGA in the field, to ensure that quality checks occur and are remedied sooner than later. McClellan noted that there has been a history with pipe quality issues on other projects utilizing Forterra, and that quality checks within Forterra should be in place.

Forterra rep, Jason Klocko stated that they were aware of minor issues, and since then they have made equipment updates, and the pipe that ended up on the job site was produced prior to their updates. It was not supposed to leave the Forterra yard but unfortunately it did. Klocko stated that there should not be any other issues going forward, and that Forterra has revamped their equipment for pipes from 15" diameter up to 36" diameter. Granzow inquired if there were any additional costs to the contractor or landowners. Maas of Gehrke stated that he has not settled up with Forterra yet, but that there would be no additional costs to the landowners due to bad pipe. Granzow was concerned that Forterra had updated equipment since the Radcliffe project, which also had issues, and now Forterra has updated again. Klocko stated that some issues on the Radcliffe project was caused by their haulers and loaders.

Granzow stated he would not put pipe in the ground with defects. Landowner Paul Patterson expressed concerns over the use of green pipe, which may be going out of round. Forterra stated it was not green pipe, but defects were in older pipe caused by worn equipment. Thomas noted the bid was let in 2018 so 16 months has elapsed from bid letting to now. Patterson noted that there should be no breakage with careful unloading. Forterra stated this was not due to unloading issues. Thomas noted that it caused some frustration, when the pipe did not fit together, while working in a wet, deep trench box. Thomas thanked the Forterra reps for coming.

Thomas stated the project has substantial completion, and will have Gehrke come back in the spring to address some clean up issues and seeding due to frozen ground conditions, notably on Ryerson's yard, and there is one spot that still has a hole that needs repair. Thomas requests approval for repair to the private tile that ran longitudinally with the new tile, and are estimating 300' to 400' feet at \$9.00 per foot, for a total of \$3,600.

Thomas reviewed the change orders that have been approved. The first change order eliminated a reducer for a savings of \$442, one additional spot repair added \$1,184 to the project, when spot repairs were estimated they were overrun a bit, in case when you open up the tile in the field you may have to run an extra section of pipe to get it closed up. They were conservative when they went out to bid and have underrun estimates by \$17,992. Exploratory exploration costs of \$1,749 were incurred when investigating, as old pipe had more zigs and zags upon opening it up. The 30" tile that went through Travis Ryerson's front yard, went through the leach field to his septic system, that cost to repair will be less than \$4,000 to repair, final costs for that are not in yet. There was some added 3" rock to the project at a cost of \$24 per ton, and they do not have a total in for that yet. Those changes were approved throughout the project and were approved by the Trustees. Thomas noted that these charges were very reasonable and common on projects like this. Thomas stated they look to be about \$5,500 under bid, and still have final quantities to get but anticipates an additional \$4,900 less than that, so roughly \$10,000 in all under the original bid cost.

Additional work requested was for overflow connections, there were times when it appeared that the old tile was running well and new tile was empty or that the new tile was running well and old tile was empty. Concerns were raised at that time that things were not working correctly. This was caused because there was still some blockage in the 2011 tile that had not been replaced yet. Landowner Randy Madden had raised concerns that if the original main collapses that water is not connected to the new tile in very many spots. The question was raised as to what could be done to address this possibility in the future. It had been discussed that a better way to connect the old and new tile systems would be possible if over flow connections were added between the two systems. Four locations were identified for potential overflow connections, it would not take water from one tile and put it into the other, if the water got high enough in one of the tile, it could over flow into the other, and vice versa. Thomas stated the 16" original main is above the new 30", and they could provide a 12" link between them, providing some overflow connection. CGA requested a price from Gehrke to do this work, at a price of \$33,300 for four locations, work has not been authorized at this point. Thomas asked if the district Trustees and landowners were interested in this option and opened the conversation up to them. Because this is overflow, it could be done as part of this existing contract, and would not consider it an improvement, which would avoid new regulations and hearings.

Thomas stated that locations were north of 200th St, the old tile and new 30" tile were close together so that would be one possible location, going north on the east side of C Ave, just northeast of Randy Silvest's house, the old 16" main tile crosses over the top of the new tile, so that is a potential location, going further north the 30" tile ties into an existing structure, and there the district tile goes into an east leg and a west leg, heading west at the next manhole between Randy Madden's and Randy Silvest's farm, there would be another potential overflow location, and on the east leg on Marvin Krause's ground where there is already some of this structure built in because the 16" tile there now was not flowing and silting in, when we connected to it in this project, CGA went north of this to the next manhole for the 4th overflow connection. Only one had been installed on Greg Hanson's with the original project.

Thomas stated that the old 2011 project took everything from upstream and dumped it into the new system. The new locations have elevation differences, and that the proposed overflows would not be used unless it was very high flow and something happened that one tile would be very full and the new one would have capacity. Thomas stated that under high water flow water would get into both tiles at the proposed overflow connections. The 2011 project calculation's intent was to use both systems but wasn't sure if the math added up as to how they actually went through both systems, and thinks that these connections will restore that intent of the 2011 Engineer's report.

Landowner Madden asks if we need some or all of these connections. Thomas stated the proposed locations are based on elevations and capacity on the lower end may not help with overflow on the upper end, and that is why the structures were spaced out, and one on each west and east leg. Madden asked about the condition of the old clay tile, Thomas stated it is what you expect for 100 year old tile, and noted there is lots of functioning old tile still left in the county. Thomas noted spot repairs were done as needed,

especially in Randy Silvest's land and some spot repairs on old tile may be needed in the future.

Landowner Royle Duncan asked about standpipes on old lines. Thomas stated that the old hickenbottom standpipes were switched out to beehive standpipes, and the riser is now a 24" riser, which would allow for a camera to go down the standpipe for televising should it be needed in the future, which provides access without having to dig up the tile. Contractor Maas noted that they have a flat grate intake with straw waddles, every road crossing has a 12" beehive on one side and the other has a 30" intake, beehives are all on new tile, the old has orange intakes. Thomas stated on heavy rain, you may still see some bubbling up, tile is sized to drain a 1/2" of rain per day, but if you get a heavy 4" rain it will take some time for the system to catch up.

Madden had concerns about snowplows damaging the hickenbottoms and getting sheared off by snowplow wings. Granzow stated he would address concerns with Secondary Roads about the hickenbottom drains. Thomas noted that the ground level inlets would be posted and flagged.

McClellan asked what the time line would be for the new overflow installation. Thomas stated the contractor struggled through the wettest season on record, and would like to give the system some time to work and drain off excess water. Thomas stated it would not be this year and maybe not even next spring, it may be fall. Maas stated the conditions this year were some of the worst he has ever seen. He stated that the water table is so high it makes work extremely difficult. He is more than happy to do it but he needs dry conditions to haul rock in, and he wants to wait till next fall to prevent crop damage and compaction.

Maas stated that two of these connections are in concrete boxes which are difficult to work in, Thomas stated she thought this is the best way to connect on two of the proposed connections, the structure allows for 4 tile connections, in addition if there is problems in the future, giving visual access at the new structures is much better than digging up tile. Madden stated he didn't feel all 4 proposed locations were necessary. Royle Duncan agreed, and asked if we could we do two upper and equalize the upper area are the lower connections necessary. Thomas stated that in the future, more people may connect to the new tile, possible private tile connections would impact the flow. Thomas stated the main equalizations would happen on structures 4 and 6, Thomas stated there are intakes in the ditches, and will function if they remain clean and open.

Thomas stated the connections could be voted on individually to approve one, some or all, or none at all. Granzow asked if the top 2 structures, locations 4 and 6, if anyone opposed those two. Discussion of costs about the tile connections in the concrete box locations centered around which type of connections were less costly. Thomas stated that two of the structures were concrete boxes, and two were not. Madden asked for Contractor Maas's opinions.

Maas stated he personally would not do the crossovers, only because the theory is correct but he does not thinks the old 30" concrete will blow up into the old one. Maas stated, the structures will take some pressure off, he recommended the two manholes but not the crossovers.

Thomas stated the reason these were brought to your attention, was to give either tile an outlet into the other system if issues arise. McClellan inquired about function of the old tile, Maas stated the old tile has some large gaps, which leads to sucking in dirt, and larger holes, but the old tile repairs went well. Thomas stated many of the issues were due to this being the wettest year on record since they began keeping records. McClellan stated the landowners can choose which ones they want to install. Don Peterson stated we should give the system time to work, and no predictions for next year's weather, and if we do 4 and 6, and do the others later on, and by doing the two upper connections it may take pressure off the lower end of the system. Don Peterson recommends doing locations 4 and 6.

Thomas stated costs for the number 4 and 6 locations would be approximately \$23,000, costs for all four would be \$33,000 as the other two locations do not require drilling into a concrete box and are simpler connections. Maas wanted to make sure this would not hold up the retainage on his original bid, and that if it would old up the retainage on his original bid to add 5%. Thomas stated the Trustees have the option to release a good portion of the retainage and they will need to hold on to something for the new project to go on, for instance a a minimum of \$500. Maas stated they would need to hold onto some funds for seeding

and will ask for some minor cleanup. Thomas will make a recommendation for retainage when they have the final quantities in.

Maas noted there may be a couple more tile repairs out there, he reassured Randy Silvest that he would get back to them. Maas has a one year maintenance obligation.

It was noted that the assessment would not be completed until after all work is complete, with new work being completed by November 30, 2020, and after the completion hearing and all invoices are turned in for the project. Smith will verify dates.

Hoffman motioned to approve items number 4 and 6 per the bid price from Gehrke and to the engineering specifications provided by CGA. Seconded by Granzow. All ayes. Motion Carried.

Right now there is a December 1, 2019 completion date and CGA is recommending an extension on completion dates, CGA is recommending May 31st as a completion date for original project work, clean up and seeding, and November 30th, 2020 as a completion date for the two new crossovers (number 4 and 6). Then completion hearing would follow. Maas would like warranty to begin on May 31, 2020 date.

Hoffman motions to extend completion date to May 31, 2020 and the newly approved project work to November 30, 2020 and the warranty will begin May 31, 2020, upon completion. Second by Granzow. All ayes. Motion approved.

Landowner Randy Silvest inquired about the work being done in his field, and the driveway that was put in by his field. Randy would like Maas to remove the driveway, Maas stated it was on his punch-list to complete. Thomas stated the work in Randy Silvest's field is a separate project.

Thomas requested a formal approve on Maas repairing tile at \$9.00 per linear foot on Anderson's farm, this was a clay tile that was dug up, and weaved in and out of their diggings. Maas will plow in a 6" tile to repair.

Hoffman motioned to approve the replacement of the damaged tile on Anderson's farm at \$9.00 per linear foot. Second by Granzow. All ayes. Motion carried.

Thomas requested direction from the Trustees as to if they would like CGA to do full time inspection on the installation of the two crossover joints. Right now they are within a few thousand dollars of their original estimate on their fees, but additional work will cause them to go over that estimate. Maas stated he did need CGA to stake out the locations for the new overflows.

Motion by Hoffman to have CGA oversight for staking items 4 and 6 previously approved today. Second by Granzow. All ayes. Motion carried.

Randy Silvest asked why there were wood stakes across from his place. Maas had Garret stake out the new 6" tile just approved. Thomas stated she was waiting on an update from contractor on Randy's work order.

Maas stated he wanted to thank the landowners for working with him and considering how far the weather put them behind. Maas thanked Randy Madden for his assistance. Maas stated if there were any issues with tile he may have missed to please go through the correct work order process, and make CGA aware of the issues as well so they can document where the issues are. Landowners should contact the Drainage Clerk, who will send CGA out to locate and verify.

There was discussion about the old tile removed and how new tile was connected, it was agreed that there should be follow up on this at the completion hearing. Granzow would like to know what was removed from the 2011 project. Madden asked for direction if one would want to connect to this new tile. Maas recommends the use of of a small square hole with a chop saw, and he has used a quick setting grout, that smooths out well with the tap tees they are using. Madden stated he would like there to be more communication with other contractors, who have made large chop saw holes in cement tile that do not seat

well and allow debris into the tile, that this is a better method. CGA noted that Gehrke did a fabulous job connecting private tiles in this project, and the connections were tight and smooth. Thomas stated it would be a great idea to find a way to store how and where those private tile connections were made somewhere in the DD files, for future reference. Thomas stated the conditions they gave Maas were to use a goal flow dual wall tap tee with the following conditions: the connections do not protrude into the pipe where it could potentially restrict flow or camera access, the hole cut in the rcp pipe is neat, the grout is smoothed out and adequately seals and holds the connection, the joint is soil tight and granular bedding is used to support the connection. Maas stated the name of the grout was called WaterStop and would seal a hole while water flows on it.

Landowners asked if this project would be televised after completion, it was stated that this would not be televised upon completion as that was not part of the original bid. John Liitschwager inquired if there would maps available of the new work, Thomas stated that there will be new maps with GIS locations available at the completion hearing.

The Trustees thanked everyone for coming to the meeting and sharing their thoughts on the project.

6. Other Business

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