**MINUTES**

**WARRICK COUNTY DRAINAGE BOARD**

**&**

**DEPARTMENT OF STORM WATER**

**June 10, 2019**

Regular Session

Old Historic Courthouse

107 W. Locust St. Suite 303

Boonville, In 47601

812-897-6170

The Warrick County Drainage Board and Department of Storm Water met in regular session with Bob Johnson, President; Dan Saylor, Vice President; Terry Phillippe, Secretary, Jason Baxter, Deputy Surveyor; Steve Sherwood, Director of Storm Water; Morrie Doll, Attorney; and Jennifer Curry, Recording Secretary.

Present in the audience was Glen Meritt, Chris Combs, Nicholas Will, Michael Walsh, Kevin & Jackie Damm, Karen Freeman, Larry Rollison, Arthur Dasis, William Miller, Chris Roach, Don & Martha Fischer, Jill Steinsultz, Brian Hartz, Joe Grassman

**PLEDGE OF ALLEGIANCE:**

President Johnson opened the meeting of June 10,2019 with the Pledge of Allegiance.

**APPROVAL OF MINUTES:**

President Bob Johnson: First, we have the approval of the May 28, 2019 minutes.

Commissioner Terry Phillippe: I make a motion to approve the minutes.

Commissioner Dan Saylor: Second.

President Bob Johnson: Okay, first and the second, all in favor. 3-0

**JILL STEINSULTZ-ALVEY SIGNS-THE WINE DOWN**

President Bob Johnson: Next up, we have Jill Steinsultz with Alvey Signs The Wine Down. Please state your name.

Jill Steinsultz: Jill Steinsultz for Alvey’s Signs, our customer The Wine Down at 8666 Ruffian Lane in Newburgh would like to install a monument sign in the front of their business. They are wanting to put that sign 2-feet from their front of the business from the front parking lot there, which that area there is a public utility easement and the legal drain, do you have these pictures? I gave a view to the East and a view to the West, so you can see the relationship of the other signs that are located in that area.

President Bob Johnson: Okay. Do you have any questions or issues Jason?

Jason Baxter: Yeah, its closer to the top of bank than what we have allowed in the past. If you see on the Premiere Tan that’s the closest sign that we have to the top of bank that measures roughly 25-feet, and that’s about, I measured this one here and its about 20-feet to the top of the bank, we’d like to keep it in, move it back away from top of bank, that’s what I would like to see anyways.

President Bob Johnson: How far back?

Jason Baxter: Well, at least 5-feet which would put them in the parking lot with their sign. Premiere Tan measured roughly 25-feet to top of bank and the proposed sign around 20-feet.

Jill Steinsultz: We’re those stakes in placement at the time of your measurement?

Jason Baxter: Yes Ma’am.

Jill Steinsultz: Okay great, so that gives me an idea on where we’re at too. So, the outside edge of the sign as it is staked right now is approximately, what was your measurement from the ditch there?

Jason Baxter: From the ditch it is roughly 20-feet to the first stake.

Jill Steinsultz: 20-feet?

Jason Baxter: Yes.

President Bob Johnson: So, the 20-foot from the ditch to the steak you’d like to see at 25?

Jason Baxter: Yes.

Steve Sherwood: That’s the closest sign that he’s measured from the existing top of bank is 25-feet that’s what we have been using as the margin. If you look at her area photograph that is attached to your presentation, there is a strip of grass that is located at the East edge of the parking lot, I know they would like it to be more at the center, but that would allow the sign to not enter the parking lot if it was put in that grassed area that the recommended set back by the Surveyor’s Office.

Morrie Doll: Isn’t that a drain?

Steve Sherwood: It’s a platted drainage easement, I don’t have that information.

Morrie Doll: It is a drain.

Jill Steinsultz: I was going to say to that other side, there’s not a lot of level ground in there. So, you’re talking to the…

Morrie Doll: East.

Jill Steinsultz: East, going East there.

Steve Sherwood: There’s an overhead sign depicted in the photograph I believe.

Jill Steinsultz: Right, the billboard sign that’s there.

Steve Sherwood: I don’t know if there is any room in between any existing easement at the East edge of the parking lot from this property? That would save you from losing a parking space by moving 5 more feet to the South that may put it in a couple feet into the concrete.

Jill Steinsultz: Right, which would be more cost to the business owner to remove that concrete then install it.

Steve Sherwood: That’s a possibility may be to meet the set back requirement.

Jill Steinsultz: Even if, I know they kind of were trying to be near the utility that is there for the electrical hook-up, was one of the other reasons for that location so electric is close by. If we moved it a little bit over so we could go in another 2-feet to the parking lot? I mean, we kind of have that 2-foot gap because we were using that utility marker there as a place close for the electric to the sign. So, again, we only need to be 6-feet of that electric source in order to run electric to the sign, so if we would move it just a little bit to the East or the West then push it that last 2-feet to the parking lot, so we would be right against that cement, would that be acceptable?

President Bob Johnson: You say that’s 2-foot right?

Jill Steinsultz: Right, so that steak is 2-feet from the edge of that parking lot, its not 5 but..

Commissioner Dan Saylor: So, you’re worried about losing a parking space, what if you move it to the East?

Jill Steinsultz: Yeah, I think losing, right.

Commissioner Dan Saylor: Move it to the East, cant they leave that end of the parking lot?

Jill Steinsultz: If that area is okay for us to be to that East side of the lot in that area there…

President Bob Johnson: Do you (Jason) have the proposal since you’ve been out there to look at this, or do you think it will be suitable?

Jason Baxter: I just would like it to have at least 25, top of bank.

President Bob Johnson: If she moved it 2-foot in that will leave you 3-foot over, right?

Jason Baxter: It would be 22 then, from top of bank.

Commissioner Dan Saylor: This is the place where we moved the gazebo.

Morrie Doll: Yes.

Commissioner Terry Phillippe: Say that again Dan.

Morrie Doll: There was a violation previously at this location.

Commissioner Dan Saylor: Previous owner, concreted that out there without any proper channels and they were made to move that.

President Bob Johnson: So?

Commissioner Dan Saylor: So, what if that sign is taken out like that and moved over so just that would be hanging over?

Morrie Doll: Narrow the base?

Commissioner Dan Saylor: Narrow the base.

President Bob Johnson: Well, if they moved this sign 2-foot this direction..

Morrie Doll: You still have 3-feet.

President Bob Johnson: You still have 3-feet.

Morrie Doll: If you took out that part of the base, and you’d let it partially hang over the edge of the cement and partially over the right of way, you’d at least be down a foot and a half and it wouldn’t be at the ground level, so if we had to excavate, you’d theoretically be able to excavate..

President Bob Johnson: If you hung it over the edge of the concrete, you’d still lose the parking spot.

Commissioner Dan Saylor: Do you think that is a parking spot there in the corner? How are people going to park there? If there is somebody in there then. I’m sorry what is your name?

Jill Steinsultz: Jill.

Commissioner Dan Saylor: Jill, do you feel that corner where the pick-up is parked right now in this picture here, do you think this is a legit parking area?

Morrie Doll: Its painted off in a way that its not.

Commissioner Dan Saylor: It’s a corner, so you’re not going to be able to park there.

Jill Steinsultz: I doubt it because I feel like that’s a parking space and that’s a parking space.

Commissioner Dan Saylor: So, if that is moved to the East and that’s hanging over there then that shouldn’t effect your parking.

President Bob Johnson: If we cut out the base here on both sides and hang it over that parking space or that area..

Commissioner Dan Saylor: You see what I am getting at Jason? Would that be acceptable to you?

Jason Baxter: Yeah, she was wanting to stay 6-feet? She said something about 6-feet from the electric.

President Bob Johnson: Why? What is the limitations on 6-feet from the electric?

Jill Steinsultz: If they needed electric it would need to be 6-feet from the sign, that’s just our pathway, again it would need electric to come in and dig line over to the sign.

Commissioner Dan Saylor: Right now you are within, what did she say? Foot and a half 2-feet in there?

Jill Steinsultz: We’re about 2-feet, that steak is about 2-feet over from that.

Commissioner Dan Saylor: What is the width of a normal parking space?

Steve Sherwood: Spacious one is 10x20 it can be as small as 9x18.

Commissioner Dan Saylor: So, lets say 10 so we’re about 8-feet, and there is probably what, 2-feet of conda sticking up there? You could dig that up and put a 9 on it, you’re only a couple feet off the edge of that.

President Bob Johnson: Do you think that would be acceptable?

Jill Steinsultz: So, if we just moved it down to that area that we consider..

Commissioner Dan Saylor: To the East.

Morrie Doll: To the East.

Jill Steinsultz: Right, to the East, that we consider not a parking space.

Morrie Doll: Shift it South.

Jill Steinsultz: Shift it, 2-feet South, I mean, unless we change the construction of the width of that sign to get it down to a possible 8 feet its still about a foot short. Again, coming into this area are we into an easement here if we went behind…

President Bob Johnson: Are you talking about far East?

Jill Steinsultz: Yeah, they probably really not, that’s probably not a good solution because once cars park in those spaces then the sign is not going to be seen in any East/West direction there, so that would probably not be agreeable to the business owner by moving it into that side, because now parking places would be in front of it.

President Bob Johnson: The only thing I can think of in order to meet our constraints here as far as the distance would be move it 2-foot to the South and also maybe cut down the sign size.

Commissioner Dan Saylor: Or elevate it, like Premiere Tan or something.

Morrie Doll: Your foundation would stay off the 25-foot

Jill Steinsultz: So, my question would be on a pole sign would you still be counting the leading edge as, you know, you’re going to measure from the leading outside edge to the drain of that sign still right? We need still 25-feet.

Steve Sherwood: The Northern part of the sign is asking to meet 25-foot from the top of the bank.

Morrie Doll: Did you (Jason) measure Premiere Tan’s sign?

Jason Baxter: I measured the base.

Morrie Doll: Yeah, that’s what I was thinking.

(*all talking at once, can not specifically interpret*)

Morrie Doll: The base is 25 rather than the leading edge because that sign hangs over the pole to the North.

Steve Sherwood: On an elevated sign.

Morrie Doll: On an elevated sign. So, for guidance is the Board telling Avery Sign Company that if they have a base that’s 25-feet off the top of bank that would be acceptable with a Hold Harmless agreement?

Jason Baxter: That’s good with me.

President Bob Johnson: Yeah.

Morrie Doll: Otherwise you need to stay 25-feet off of the monument some way, shape, or form.

Jill Steinsultz: Okay.

Morrie Doll: Does that give you enough information to go back to your customer?

Jill Steinsultz: So, just so I make sure I understand clearly. If it was a pole sign you’re going to measure from the pole out, its not going to be the leading edge of anything?

Morrie Doll: To try and be accommodating and consistent with Premiere Tan.

President Bob Johnson: If you went that direction, how high does this sign need to be off the ground.

Morrie Doll: There’s a height limitation and a zoning code.

President Bob Johnson: No, I mean just to get if off the ground to where it wouldn’t be in the way for Jason’s concerns.

Morrie Doll: Well, the elevated sign is not just to feed off of this is its higher than that, and it’s the zoning code has a maximum height.

Jill Steinsultz: It does, I am trying to remember what Warrick County is I cant remember. I think its 75 feet.

Morrie Doll: Does that give you enough information to have a full conversation with your client?

Jill Steinsultz: I think so.

Morrie Doll: We have a really big agenda with a lot of people in the room if we could…

Jill Steinsultz: Right, because we’re not gonna get a resolution with the way it stands.

Morrie Doll: We need more information for your customer.

Jill Steinsultz: Alright, thank you very much.

President Bob Johnson: Thank you.

Commissioner Dan Saylor: Thank you.

**KEITH RIDGE COURT**

President Bob Johnson: Next we have Keith Ridge Court, new subdivision drainage approval.

Glen Meritt: Glen Meritt with Cash Wagner, I am the engineer on the project.

Chris Combs: Chris Combs, I am the owner.

Glen Meritt: I’d be happy to answer any questions anybody has on the drainage plan.

President Bob Johnson: Jason, are you familiar with this? Steve?

Jason Baxter: Yes.

Steve Sherwood: Jason any comments first?

Jason Baxter: Nope, I am good with it.

Steve Sherwood: Jason and I reviewed it, I also looked at it with Phil Baxter I had them submit a revision which addressed all the issues we raised at the last site review meeting, including a concrete line ditch to handle and maintain slope on the South side of Wilma…

Morrie Doll: Road number 1.

Steve Sherwood: Road number 1 which is Wilma Way, so retention basin I believe is already constructed and the calculations meet our minimum design criteria.

Morrie Doll: So, you are recommending approval?

Steve Sherwood: We recommend approval.

Commissioner Dan Saylor: I make a motion to…

President Bob Johnson: Hold on a second, do we have anybody for or against this plan what-so-ever? Okay, I recommend a motion.

Commissioner Dan Saylor: I make a motion to approve the drainage plan for Keith’s Ridge Court.

Commissioner Terry Phillippe: I will second that.

President Bob Johnson: All in favor? 3-0

Steve Sherwood: Glen, if you would just bring us four complete sets of plans, it changed 3 of the sheets in here but I didn’t see that C-109 sheet that is in the original.

Glen Meritt: It did not change, that’s fine.

Chris Combs: I think our next one is Magnolia..

President Bob Johnson: We got another one before that one.

**BEARD PLACE**

President Bob Johnson: Next up we have Beard Place, requesting no drainage plans.

Mark Chamness: Mark Chamness with Chamness Land Surveying representing the owner Steve Beard.

President Bob Johnson: Jason, are you good?

Jason Baxter: I’m good with it.

President Bob Johnson: Mr. Sherwood?

Steve Sherwood: I believe its their large lots that sits on 2.5 acres and I believe the Surveyor’s Office recommends no drainage improvements accordingly which is in the following of subdivisions of that size.

President Bob Johnson: Anybody for or against it in the audience? Take a motion.

Commissioner Terry Phillippe: I make a motion to approve.

Commissioner Dan Saylor: Second.

President Bob Johnson: All in favor. 3-0

Mark Chamness: Thank you.

**MAGNOLIA PLACE**

President Bob Johnson: Gentleman. We have Magnolia Place, reduction of drainage swale.

Glen Meritt: Glen Meritt with Cash Wagner.

Chris Combs: Chris Combs, owner.

Glen Meritt: Again, I’d be happy to answer any questions anybody has. We basically are trying to reduce the swale from the original approved plan, it was a 7-foot wide top of bank to top of bank 1-foot depth, and there’s a couple foot of fall from the back of the patio down to the property line and just with the building being constructed we’re trying to limit the disturbance in that rear yard and there’s not a lot of water, its basically one building on half the back South half of the building running to this swale and its split, 70% is running to the West and 30% is running to the East. We are wanting to reduce that swale depth to a ½-foot and then the width change from 7-feet to 4-feet to, like I said, limit the disturbance. I submitted calcs to the County Surveyor’s Office showing that the 50 year storm is handled inside that half of swale.

Commissioner Dan Saylor: The runoff is only from one lot you say?

Glen Meritt: Well, no, one building, it’s a 6-plex building, so it has 6 units in that particular building, so it would be 6 lots.

President Bob Johnson: Jason, do you have anything to add?

Jason Baxter: Yeah, on the reduction we’re talking about a concrete ribbon to keep the swale, being that its only 6-inches deep, to catch it before it comes out to get it to the drain.

Chris Combs: Well, it’s all going to be sodded, I mean, there’s such a small amount of water there anyway, I think its going to be overkill to be that you’re going to have sod it over there. I mean, I would have a problem with that, putting it in there for no more than what you have to work with.

Steve Sherwood: What’s the proposed length for that swale for that section Glen, and the proposed slope? I don’t have that information.

Glen Meritt: 169 linear feet, at 0.7, that’s the West 70%. Basically, four lots are draining to the West to an existing area drain which goes into the chamber system.

Steve Sherwood: There is a 2-foot platted public electrical easement on the South line in adjacent that to the North is the 13-foot wide underground chamber system and drainage easement, is that correct?

Glen Meritt: Yes.

Steve Sherwood: The fence is basically built at that easement or maybe a half a foot to the North of that.

Glen Meritt: The fence on the back side..

Steve Sherwood: We had talked about preparing a cross section drawing so the Commissioner’s can visualize the 7-foot wide drainage swale reduction down to a 4-foot, that still wont provide an issue with those underground chamber systems will it?

Glen Meritt: No, say the top of the rock of the chambers 407.75 and lowest point in that swale is the area drainage is 409.8 and then it goes up from there, the high point of the swale is up at 410.98, so I mean minimum we have 2-foot of cover over the top of rock which is only a foot.

Steve Sherwood: The reason why the Surveyor is asking for the concrete swale is we looked at reducing the depth of the ditch from 1-foot to a ½-foot the area to the South still has to drain North to get into the swale, which is one of the complaints we had from a Mr. Dobbs that resided out in Countrywood.

Glen Meritt: We aren’t changing the elevation of the existing ground at the property line I mean, that lots very flat so if it does drain to the North..

Steve Sherwood: It’ll still have to get into that, we’re just worried that we don’t want it to exceed the ½-foot depth capacity and the water get back out, and the reason why he is asking for the 0.7% concrete swale just for that portion just to make sure we have a fixed ditch bottom that we know will hold and take that water that way. I think in your packet you have photos of rooftop drains that will channel off the patios into that easement too.

President Bob Johnson: Is this what you are speaking of?

Steve Sherwood: Yes.

Glen Meritt: I guess my whole point is that, I mean, that swale was originally approved as a 1-foot deep 7-foot wide which is fairly typical, and I mean, we are reducing that down to 4-foot trying to limit the disturbance and again because that water shed is so small there is only four back yards and 4 halves of that 6-plex building that are draining back there, I mean, the concrete ribbon doesn’t really, in my opinion, does anything for that drainage, its going to increase that amount of water I can probably drop it down to a 4-inch deep swale if we put a concrete ribbon in it, because that will go up to a 0.013 instead of a 0.035 so it’s going to almost triple what that thing will carry.

Steve Sherwood: We understand that, The Board’s point why wasn’t the original swale built to begin with?

Glen Meritt: I don’t have the answer to that particular question.

Chris Combs: I mean, the way the buildings ended up working out with the elevations with the paths...

Glen Meritt: I mean, there’s a little bit of a depression back there right now there’s not a real defined swale, as I would call it, along that South property line there now. Like I said, it is very flat on the adjoining property on the South as well.

Commissioner Dan Saylor: So, Chris or Glen, is there houses currently on 64, 63, 62, 61, 60, and 59?

Glen Meritt: Correct, that building is considered.

Commissioner Dan Saylor: Okay, it is there, is that this here?

Glen Meritt: Yes.

Commissioner Dan Saylor: So, help me understand this, so this water, you’re wanting to shorten up this here right?

Glen Meritt: Not necessarily shorten it, shortening it up from what you see there, as you can see there is a slope coming off the back side of those fences down to that South property line. We originally had that 7-foot wide swale, a larger swale, when I went out there and looked at it after I got the original email and talked to Chris, there’s no reason for this big of a swale to be put back in here there’s not that much water that drains to it, so let’s go with a smaller one and knock it down in half. I ran through the drainage calcs and the 50-year storm worked for a ½-foot depth. Instead of making that just 3 to 1 or 4 to 1 coming off that fence we shouldn’t have to adjust that slope coming off of that fence a whole lot its just going to be that last 4-foot to cut a trapezoid channel in there.

Commissioner Dan Saylor: You’re talking about right in here.

Glen Meritt: Yes, to get it to fit.

Commissioner Dan Saylor: So, what are you going to do about the utilities sitting in there? Or is it going to run to the North of those utilities?

Glen Meritt: Yes, it will be a little North of the utilities actually. The property line is a little bit, maybe a foot into that grass when I was out there last.

Commissioner Dan Saylor: So, Chris, are your down spouts is that all going…

Chris Combs: There’s 3 down spouts on that building coming back out there.

Commissioner Dan Saylor: That go back out there or does it go into your system?

Chris Combs: It goes into the system but what we got is that we are actually dumping that water into the sodded back yards to where it disperses and its not in a pipe all the way to the back…

Commissioner Dan Saylor: So, its sheet flowing more or less

Chris Combs: Correct.

Glen Meritt: Yes, it’s a sheet flow to that area, that’s the majority of..

Chris Combs: When the neighbor that complained that got excited about it we had a whole one end of the building graded waiting for sod and then they forecasted 2-inches of rain, then I had it all prepped for sod at the end of the front of the building and the people moving in, so I ran some temporary pipes on top of the ground, ran it all back to the chamber system, dumped it all in there, then he got all excited thinking I was going to dump all the pipes back there in the back, which we don’t have any pipes in there along the back of that. The whole idea while Glen and I were doing that was to disperse that water into the back yards and the sod then let it drain out.

Commissioner Dan Saylor: Let it sheet flow out.

Chris Combs: Exactly, because there’s not that much water, half of it goes to the front then out into the street.

Commissioner Dan Saylor: So, does any of this water end up in your retention system?

Chris Combs: The chamber system is right under the same area.

Commissioner Dan Saylor: But, does this all flow on top of this or does it eventually seep through?

Glen Meritt: It eventually goes to an area drain #526 is located at the downstream end of swale #10 and that’s where it enters the chamber system.

Steve Sherwood: It’ll drain into that area drain there.

Chris Combs: So, how we have it designed it with the swale when we take it to the area drains straight into this routing chamber system the whole area is going to be sodded, so we aren’t going to be getting water going to the neighbor, its going to stay on us in that swale to the open inlet that’s there that you guys approved the designed part of the chamber system.

Commissioner Dan Saylor: So, how much dirt will be coming out of this area here to make your….okay so you cant take out much because you have to flow it there.

Steve Sherwood: You say your piping all the gutter drains into the drain?

Chris Combs: No.

Glen Meritt: What he was saying originally, because when they put the sod down the down spouts ran out closer to the property line and that what he got concerned about.

Commissioner Dan Saylor: Temporary piping?

Chris Combs: On a temporary basis, that’s when the guy called complaining that we were running pipe on top of the ground dumping water towards it.

Glen Meritt: So, yeah those downspouts will come out at the building.

Steve Sherwood: The intent of the original ditch and the revised ditch will all drain into this area drain?

Glen Meritt: Correct.

Chris Combs: Correct.

Glen Meritt: That area drain is actually going to be lowered just a little.

Commissioner Dan Saylor: Will this up here be higher here than this?

Steve Sherwood: Yes, it does, it drains to the same common property line, that was Mr. Dobb’s concern.

Commissioner Dan Saylor: What was his concern, that this water would be coming up hill?

Steve Sherwood: Yes, its kind of flat, its not much height to it.

Morrie Doll: I thought I heard earlier that behind this 6-plex, 30-40% of the water flows West and the other..

Glen Meritt: 30 goes to the East and 70 goes to the West basically

Morrie Doll: Thank you. So, 30% goes to the East and is there another collector at the East there?

Glen Meritt: Correct, there is an area drain at the East and West ends of this building.

Chris Combs: There’s also county drainage that goes South also and catches water.

Morrie Doll: So, 30% of the water will go to the East to a collector, 70% of the water behind this building will go to the West so it splits, so you’re not going to have a 100% going the entire distance at one point in time.

Chris Combs: That’s the reason we don’t feel like the concrete ribbon is necessary, its a complete overkill and a big cost.

Commissioner Dan Saylor (*speaking to Steve Sherwood*): So, even if we get a 100 year rain, and that fills up a little bit…

Steve Sherwood: That was Jason and I’s concern.

Commissioner Dan Saylor: So, it still needs to drain.

Chris Combs: Correct.

Commissioner Dan Saylor: Its not going to stand on anybody’s property.

Steve Sherwood: As you can see around the entire perimeter, there’s similar drainage swales that are designed around the entire perimeter, some have yet to be constructed some, I think are, we ran into one that wasn’t.

Chris Combs: Fortunately, this is the only building that we run into an issue with, everything else is constructed and then when the grade ended up that’s why we came back to you to get a formal approval of the variation of what we originally approved. Everywhere else all of our swales onto the East are going to work fine, as well as the North side of this.

Steve Sherwood: That was the only reason Jason and I mentioned was to put some type of a fixed bottom even though its less than 200-feet and you’re going to reduce it from a 1-foot depth to a ½-foot depth, is to make sure the bottom is fixed and it will flow that way. Grass swales or earthen swales tend to settle or fluctuate. Glen mentioned earlier, if you were going to make it a concrete you could reduce the slope even more than 0.7.

Commissioner Dan Saylor: Who maintains this Chris?

Chris Combs: The homeowners. The homeowners actually own and mow their grass behind their unit. Each individual PUD, individual unit within their unit maintain everything from the ground to the sky, their a townhome and not a condo.

Commissioner Dan Saylor: So, are there are gates on every one of them? There’s a legal easement done by the attorney that everybody has the right to go behind there to get to their units and all that.

Morrie Doll: So, the question is, does anybody think the calculations do not work with the 6-inch swale on a 4-foot right a way?

Steve Sherwood: If everything operates the way he’s designed with the watersheds arraigned to it, his calculations say it will pass a 50 year storm, keep it in the design ditch.

Glen Meritt: Correct.

Steve Sherwood: Correct, which is what our specifications call for.

Morrie Doll: That’s our standards of the County, Mother Nature seems to be giving us a lot more than that.

Steve Sherwood: We get storms that are larger.

Morrie Doll: But, those are the legal standards.

Steve Sherwood: Yes, and the next presentation will be about storms that will exceed.

Morrie Doll: Yes, whether that standard needs to be considered. So, there isn’t an issue before The Board questioning the functionality of what they are proposing, the question is are you going to require it to have this concrete ribbon. How many feet, 169? 169-feet, in such a reminisce how wide?

Steve Sherwood: About 12-inches, typically.

Glen Meritt: Vanderburgh we typically use 18, but its been a while.

Steve Sherwood: We just approved 12 for the previous subdivision for Keith’s Ridge earlier in this meeting. My question is can you still build the 7-foot would it get into the stone or the underground chamber system, is there a reason why 7-foot..

Glen Meritt: No, it doesn’t have anything to do with the cover over the top of that chamber system, like I said the swale elevation. I lowered that area drain I believe 2/10 based on the elevation on what we saw when we out there I think it was 410 we dropped it to 409.8. The only reason is because there is a pretty significant slope coming off the back side of those fences, I mean, its tight and to put a 7-foot wide swale in an area that half a foot depth one can handle the 50-foot..

Morrie Doll: How could you mow it?

Chris Combs: That’s what I’m saying..

Morrie Doll: How can the homeowners mow it, I mean, this is going to be maintained by 6 different people?

Chris Combs: That’s why I said there is no reason.

Commissioner Dan Saylor: That would be my concern is that no one is going to mow it. So, Steve, if we approve this, this change, will that dump anymore water on the people to the South?

Steve Sherwood: According to the engineers calculations, in theory no. This is a situation that Surveyor’s Office and Stormwater want to avoid, we don’t want to be called out there for this and as Mr. Combs stated we wont be maintaining it its in the private restrictions if I heard him correctly.

Chris Combs: That is correct. It will actually be dumbing less water onto them because right now the sheet flow drains currently towards it.

Glen Merritt: There is a little bit of a depression, I wouldn’t call it a swale there now, so some of these bigger rain events it could’ve jumped that grass area and got onto his property. I mean, all down there with that 169-feet, again, there is not much of a drop, basically where they cut out the grass more than anything and there is maybe 2 or 3-inches.

Chris Combs: So, we went through there and stripped everything out because every person that buys from me gets total new sod front and back everything is all brand new sod. So, my guys went down there with a sod cutter and cut a nice clean edge to where we could butt up next to the neighbor, then we got the hard rain, that’s when he called up here complaining that water standing, well we didn’t get a chance to get done.

Steve Sherwood: Well, I mean I don’t think the developer wants to go through the trouble and expense of building a whatever height modular wall to maintain a 7-foot drainage easement, or drainage swale inside the 13-foot easement. He has portions of the modular wall to the West but it for specific reasons to small areas.

President Bob Johnson: Terry?

Commissioner Terry Phillippe: I’m good with it, I’m not sure, me being the new guy on the board here the concrete ribbon I understand the logic on putting that in but what I don’t understand it would permeate turf better than it would permeate concreate and maybe help out on that aspect.

Chris Combs: The concrete ribbon the water cant go through the concrete and get into our chamber system, and any water that would hit that…

Steve Sherwood: The majority of site is supposed to go into the underground chambered system to begin with. As we said earlier this swale drains to that inlet to get into the system anyhow. Boards pleasure.

President Bob Johnson: Anything else? So, what would you like to do here Mr. Saylor?

Commissioner Dan Saylor: I just don’t think its, we got an open drain down here it would be to the West of it…

Morrie Doll: And to the East.

Commissioner Dan Saylor: And to the East, its not like the water doesn’t have anyplace to go, its going to go with the path with least resistance it should be at the end of the drain.

Glen Meritt: That box I believe you are eluding to is right at the high point where I’ve got the 70/30 break in the swale.

Commissioner Dan Saylor: I’m worried about if this was 30-50-feet if its….Chris, what is the distance from the end of the house to the fence? What are the back yards depth?

Chris Combs: 12-feet.

Commissioner Dan Saylor: 12…so what is this length here? 7-feet, 8-feet?

Chris Combs: Should be more like 15.

Steve Sherwood: 15-feet from the fence to the property line.

Glen Meritt: The chamber system is pretty close to the fence.

Commissioner Dan Saylor: So, in this picture that chamber, that grate that is right in here, and the next one is at the end of the fence?

Chris Combs: Its where you see that utility box that drains the other one going this way, this is the peek, it goes that way and this way and all the water goes into the chamber.

Commissioner Dan Saylor: Okay, well I’m good with it.

Morrie Doll: Is there a motion?

President Bob Johnson: Make a motion.

Commissioner Dan Saylor: I make a motion to approve the reduction of the drainage swale for Magnolia Place.

Morrie Doll: As to the recommendation is it with or without the ribbon?

Commissioner Dan Saylor: Without the ribbon.

Morrie Doll: Ok.

Commissioner Terry Phillippe: I will second that motion.

President Bob Johnson: All in favor 3-0

Glen Meritt: Thank you very much.

Chris Combs: Thank you.

**TANGLEWOOD- LOCHMUELLER GROUP**

President Bob Johnson: Next up we have Tanglewood Lochmueller Group, drainage study.

Steve Sherwood: Nick will be presenting the drainage study, for those in the audience who may have arrived late, there is a sign in sheet on that table on the wall between the doors and a handout of the presentation if you do not have a copy. Mr. Will.

Morrie Doll: And it will be televised, so they can see it.

Nicholas Will: Yes, in general the handout that was provided out there is going to be up on the screen just so everybody can see it. I am Nick Will with Lochmueller Group, I also have Mike Walsh here with me he can answer any questions later on if need be. I did want to let you guys know…

President Bob Johnson: Can you please come up and stand at the podium.

Steve Sherwood: He’s getting on that microphone there because he will have to work the PowerPoint presentation, but he can go back and forth.

Morrie Doll: Is that mic on?

Jennifer Curry: Yes, it is on.

Nicolas Will: Can you hear me okay.

Commissioner Dan Saylor: I just want to ask the audience, can everyone see that TV okay? Do we need to kill the lights out there for the glare? Ok, go ahead.

Nicholas Will: Also, at the end if you guys have any comments they ask that you come up and state your name and make your comment into the speaker, also, there is a comment sheet that’s over here by the packet that you can make a comment afterwards and provide it to Lochmueller Group on there, there is an email address or physical address and fax number if you guys want to make a comment after if you don’t have time or don’t feel comfortable doing it here, and then we will provide that to the Board as well.

Nicholas Will: So, the County had asked us to look at a drainage study for Tanglewood Ditch last fall, and since that time we’ve completed a preliminary topographic survey, we’ve done field site reviews, we’ve met with County officials, and we completed a draft study that was available for your review up here at the County. The study begins at Fuquay Road, and heads West approximately 1,300-feet to the Tanglewood Subdivision, in this subdivision a previous project and study was completed at that location, so that is where the project ends is at the Tanglewood subdivision.

Steve Sherwood: Just for the record, Mr. Will, your firm is the one that did the Tanglewood project down stream immediately down stream of this one, you’re basically doing the upstream portion and working it back up stream.

Nicholas Will: Correct. So, the need for this study was brought about in part due to some of the recent flooding that has occurred specifically at the Pleasant Ridge Drive, Fuquay Road intersection, as well as flooding along Pleasant Ridge Drive and along Fuquay further to the South. In your pack you can see that we highlighted some drainage issues out here so, after we did a field review, got with County and heard their concerns, then did some preliminary hydraulics, we were able to come up with these four locations you can see in the packet there. Drainage issue #1 that we picked out was at the intersection of Pleasant Ridge Drive and Fuquay Road, these photos were provided to the County by property owners and then we put them in the presentation here. Photo #1 is actual flooding over the top of Fuquay Road during a storm that happened back in June of 2018. Photo #2 would be the debris that was left over from the roadway flooding along Pleasant Ridge and then actually some water that was in a garage approximately 200-feet West of the intersections. Part of the reason for this flooding is because of the existing culvert that crosses the road, it is an existing 60x38-inch corrugated metal pipe that appears to be undersized, in addition to that there’s a ditch immediately down stream that appears to be undersized as well, take a quick look at the packet or the screen, photo #2 you can see that ditch is full, now, this is not during that June storm, this was November of 2018 when we were at a field site review on it, and the storm event was not the same as the June, but you can see the ditch is full and it wouldn’t take much more for it to come out of those ditch banks there.

Commissioner Dan Saylor: Do you remember what the rainfall totals were and the time period on that particular storm?

Nicholas Will: Not off the top of my head right now, but I can get that information for you. Immediately down stream of that as it turns the corner and heads South you can see the ditch kind of opens up a little bit and it is not quite as bank full as that location is, so we feel like the existing culvert and then the ditch immediately down stream was undersized part of the problem here. Location #2 is the existing 48-inch pipe at the upstream end of the Tanglewood Ditch, that’s approximately 500-feet South of the intersection, that is actually the Tanglewood Ditch where that starts, like I said there is a 48-inch corrugated metal pipe approximately 15-16-feet at the upstream end of it which actually makes a 90 degree bend and makes its way into the Tanglewood Ditch. Couple items to note here, our analysis did show this pipe over topping as well during low storm events like the 25-50 year, but if it doesn’t there’s a good chance that there’s enough room on the upstream end for the water to back up into yards before it would ever over the top of the road. Apparently, it did over top of the road last year with that heavier rain event, also down stream of this you cant very well in the picture, because there water in the trees, but the survey did pick up an erosion scour hole at the downstream end of that structure as well. Drainage issue #3 approximately couple hundred feet upstream from that 48-inch pipe is a 60-inch corrugated metal pipe that crosses the driveway along Tanglewood Ditch, as you can see in some of the pictures on the upstream end there’s signs of erosion and there’s been some placement of concrete blocks to kind of help minimize that erosion, as well as photo #2 you can see the existing corrugated metal pipe the bottom of it is rusting out and there’s some erosion that is starting to get underneath of it. Photo #3 is the downstream end, it looks like there has been some temporary shoring done to kind of help hold up the embankment around the driveway and its also eroded, so again, we feel like this structure probably undersized for the amount of water that is going to it. Location #4 is just the Tanglewood Ditch in general, and what we call the unnamed tributary to that Tanglewood Ditch which runs up to the intersection of Pleasant Ridge and Fuquay, so we went out there and did a field review and looked at existing conditions and noted there are several locations where there has been erosion, bank erosion, there’s a lot of tree growth in the ditch that could cause some potential issues in the ditch itself. We don’t feel like this is necessarily the sole cause of flooding that’s happening up stream at the road at this time, but for the grades it could become an issue.

Nicholas Will: So, that is kind of existing conditions, then we looked at proposed alternatives for these locations and in general the real alternative part is the intersection of Fuquay and Pleasant Ridge Drive our issue locations #2 and #3 we feel are pretty straight forward as far as just replacing those culverts with a structure, placing rip rap at the downstream end of it would help erosion. Where we came into the multiple alternatives is the intersection itself we felt like the pipe is undersized, there is almost 114 acres of watershed draining to that structure where the actual structure leads directly into Tanglewood downstream in that 48-inch pipe has got 75 acres, so, and the ditch immediately downstream in that 48-inch pipe is bigger and is more adequate to handle all of that water that is draining that direction. We looked at alternatives at the Pleasant Ridge Fuquay intersection, one of them would be putting a bigger structure underneath Fuquay that would drain into that ditch downstream, that would require improvements to that ditch immediately that is downstream at that culvert. Constructability issues come into play, we are limited on covered height so the structure would be so tall and the road sits basically on top of it, so if we were to put a bigger structure in there, we would actually have to raise the road which would increase construction cost with that alternative. If we improve the ditch downstream there’s a chance we will have some property owner impacts. Alternative #1 was to actually replace the structure underneath Fuquay with a similar sized structure as well as putting an additional structure along Fuquay Road approximately 500-feet long that would drain into that essentially splitting the flow, so there would still be water going into the existing channel, but splitting the flow half of it would go in the other direction and would elevate the flooding at the intersection. Alternative #2 is something similar only we wouldn’t replace the existing structure, we would just put it all in one structure and run it South along Fuquay and outlet it out to the Tanglewood Ditch directly. We did some cost alternative analysis on those two alternatives and the problem with putting it all in one structure is you need a big structure, it ends up being a big box culvert and it doesn’t double the cost, but it is significantly higher than splitting the flow. So, our preferred alternative is to split the flow as part of this study, to me it would be the preferred alternative, of course the draft study would have to be finalized but that is the preferred alternative due to cost benefit.

Steve Sherwood: If you would, clarify for The Board and the audience, you shot physical grade and surveyed all this and done hydraulic studies, preliminary, to back up these alternatives.

Nicholas Will: Yes, that is correct. We did it for the 100-year storm even is what we designed for.

Steve Sherwood: That was my next question, it will please the Board to hear that it is being designed for a 100-year storm event.

Nicholas Will: I had a few notes there at the end, one was that it is being designed by the 100-year event, also I kind of overlooked the issue #4 where we discussed the general cleaning out of the ditch because we can see this being done with the project, or later as far as that goes if we wait until later, there’s a chance you might be able to minimize some of your permitting requirements with the recommendation that that will actually be turned into a legal drain from Tanglewood Subdivision to Fuquay, because its our understanding that currently there is not enough documentation to prove that it’s actually a legal drain in that section of it, but if it was then it would give you guys more rights to….

Steve Sherwood: Just to clarify, the existing Eastern end of the current legal drain for Tanglewood Ditch is the East line of the Tanglewood Subdivision just East of Brownwood Drive in the cul-de-sac it is not a legal drain from that point East to Fuquay Road and beyond. You say also that cleaning of the ditch there would probably will move forward with any ditch work, you will involve the US Army CORP of Engineers or DNA or both permitting requirements to move forward and cleaning out the ditch is not disturbing the bottom of the ditch it is just reworking the sides above the ordinary high water mark, is that correct?

Nicholas Will: That is correct Steve, yes. Cleaning would be regrading above the ordinary high water mark, flatten the back slopes a little bit, and then cleaning the brush off the sides down through there. There’s a couple spots that have eroded, it would be good to get some rip rap and put in a couple of these places.

Steve Sherwood: Because of the requirements, we cannot touch or disturb the bottom of the existing ditch, is that correct?

Nicholas Will: Yes that is correct, well, you can but you will get into mitigation type..

Steve Sherwood: Different issues involved…

Nicholas Will: Different mitigation and cost issues that come along with it.

Commissioner Dan Saylor: Are there any blockages in there now?

Nicholas Will: The last time we were out there, there was a tree towards the end but I believe, Steve correct me if I am wrong, you guys actually went out…

Steve Sherwood: It would be right before it enters the Tanglewood Sub there was a tree partially obstructing, I contacted the property owner to the South, the allowed us to get on the property and the Stormwater crew did remove the tree from the embankment, where it failed and blew over in the wind storm rain storm.

Nicholas Will: A couple side notes with this alternative with us proposing this along Fuquay Road, there is apparently no existing road right a way along Fuquay, so we’d be looking at proposing at least perpetual drainage easements along Fuquay and its currently showing an offset the culvert itself approximately 35-feet off the center line, the purpose of that is because there is existing overhead, electric, as well as sanitary sewer that are closer to the roadway, so this would actually be moving this outside of that. Again, just to try and help minimize those utility relocation costs, so those details will need to be worked out and more of a final phase when we actually coordinate with the utilities to make sure that we…

Steve Sherwood: So, there is a sanitary sewer line exists along the East side of Fuquay Road, and then we aren’t sure about any kind of utilities because we didn’t do that type of investigation yet.

Nicholas Will: Yes, well there is existing water and gas along the West side, which is part of the reason we will avoid that side as well as the residence, the houses are closer together on the West side of the road than they are on the East side of the road there’s a bit more room to work and grow right there. Again, the storm sewer will be completely enclosed, it wouldn’t be an open ditch out there that’s why its such a long pipe going through there along Fuquay Road. In general, that pretty much wraps up our study at this point we are open for questions from The Board and or the public at this time.

Morrie Doll: The split approach is an estimate of $425,000?

Nicholas Will: Yes, that is construction cost.

Morrie Doll: And the, elliptical pipe on the East side of Fuquay would be $700,000 estimated.

Nicholas Will: Alternative #2 is $700,000 and that is the bigger box culvert.

Steve Sherwood: The box culvert and not an elliptical concrete pipe.

Morrie Doll: Okay.

Nicholas Will: Yes, so the alternative #1 is an elliptical concrete pipe, 60x30-inch pipe and that would be the same size that crosses at Fuquay that comes along Fuquay as well.

Steve Sherwood: Does The Board have any questions for Mr. Will?

Commissioner Dan Saylor: Mr. Will, if you go with the option #1 the split, do I understand that in a 100-year storm you think the houses located at the corner of Fuquay and Pleasant Ridge starting at Fuquay Road, the house that faces Fuquay and then the first house that faces the Pleasant Ridge and then there is a second house that says “chambers”, do you think those three houses in a 100-year would they see water in their yards?

Nicholas Will: They should not see water in their yards backing-up from the ditch that is coming, no there should not be from this channel. Once we properly size the structure under Fuquay at that intersection, there should not be water backing up into their yards, because we’d be removing enough of that water out of that ditch and that culvert away from the properties.

Commissioner Dan Saylor: On the June 12, 2018 storm that delivered approximately 8-inches of rain in a half hour or less, that’s over a 100-year event, Pleasant Ridge Drive was the drain. I was there, I was standing on Pleasant Ridge in the water, and I just always felt like we were getting too much water to that point upstream from it.

Morrie Doll: East of Fuquay.

Commissioner Dan Saylor: East of this, East of this structure, split structure, so that water was all the way down, you don’t even have a house on this it looked like a river coming through there it was all coming out through to Pleasant Ridge Drive. There’s nothing on this plan that retains that water, so you’re saying this design would be able to handle that pipe of water?

Nicholas Will: The 100 year-storm, yes, for a 1000-year storm I’m not sure we can design for that.

Commissioner Dan Saylor; Well, and I don’t know what 8-inches of rain is in less than a half hour I don’t know what that equates to.

Morrie Doll: A lot.

Commissioner Dan Saylor: So, I know there are certain things you cant build for, you just have to be reasonable, but that is just my concern is that that’s a storm we may not get 8-inches of rain in a half hour, we seem like we get 4-6 in pretty common times. I guess that is my concern, if you feel this alternative the one split method design would eliminate those houses and even really the house across the street, the Bedwell house, because they have water in their garage too, just because the street can handle the drain. The Bedwell house had water in the garage, the Monroe house I don’t know if they actually got water in the house, are they here? The Monroe house?

\**Gentleman in the audience speaking away from podium-can not interoperate*\*

\* *Gentleman approaches the podium*\*

Steve Sherwood: If you could please state your name and address for the record.

Kevin Damm: Yes, Kevin Damm 1766 Fuquay, it flooded my pool, my garage, I mean I was under water.

Commissioner Dan Saylor: See, I didn’t get video up in there, I didn’t go up to your property, I know where you live, to the East of your house that’s where the “river” started.

Kevin Damm: Yes, it started at my house.

Commissioner Dan Saylor: So, I guess that’s my concern with this is that why is that amount of water getting there? I know that, that was the corridor where that cloud or that storm dropped the rain, nothing in this plan addresses anything to the North/East of this. That is the concern of mine. In his house, its not actually shown on this map, you have a pretty large field or grassy area to your East and so his house is actually to the North of this a bit and probably elevated, its probably higher than the intersection of Pleasant Ridge and Fuquay wouldn’t you say? That’s just the amount of water that is coming through this corridor, so that’s why, how can that much water get there that quick?

Nicholas Will: Well, if the ground is already saturated, which is has been quite a bit here lately, and I know there is a pond or a lake upstream of that if that is full, there is no place for the water to sit anymore its going to find a channel and get there quicker than it normally does that’s for sure. With that volume of water that comes in that short of time frame its just not common to design for that type of storm event.

Steve Sherwood: You have an accurate depiction of the watershed, it is surprising how much water gets to Fuquay Road from that size watershed then that short amount of time.

Nicholas Will: Right.

Commissioner Dan Saylor: That’s one thing I learned when we met at Lochmueller’s that how much water this area takes. How many acres did you say?

Nicholas Will: Almost 114 acres.

Commissioner Dan Saylor: 114 acres, that’s a lot.

Nicholas Will: The 48-inch that’s south of there is almost 75 acres, so by the time you get to the end of our drainage study its about 254 acres that’s draining to Tanglewood Ditch so, there’s a lot of water coming there for sure.

Steve Sherwood: Can we open it up for..

President Bob Johnson: Do we have anybody from the audience that wants to come up and speak please.

Commissioner Dan Saylor: Just state your name and address for the record please.

William Miller: My name is William Miller and I live at 7399 Pleasant Ridge Drive, one of the things that I think is going on with this is there’s really no good drainage off of Brent Drive, just the other end of Brent Drive is probably the highest elevation in the subdivision. When it comes down Brent Drive it cuts between my house, and the Helfert house and to look at it, its not that big of a ditch but when it rains it fills quick. I’ve seen it 12-15-feet wide back there and I’ve had some discussions with you folks already on trying to resolve that situation and that is probably totally separate from this…its not included at all?

Steve Sherwood: It is, and you’re correct we just haven’t had any luck getting anyone else adjoining it to participate as you have been wiling to.

William Miller: Well, then my question here for the Commission is, you see all these existing pipes on this ditch, this small ditch that runs behind all the properties on Pleasant Ridge drive there…

Commissioner Dan Saylor: Behind your house?

William Miller: Correct, behind mine, Karen Freeman just left she had another appointment to go to. How can we get that taken care of as far as drainage back here? Because, all of that ties into Tanglewood further to the East, and I believe that’s why this ditch backs up so fast, you’re really dealing with two ditches. I mean, can we put our own pipe in?

Steve Sherwood: As you and I have discussed the County was trying to attempt to mitigate the Brent Drive and bring that drainage down between your property and the Helfert’s

William Miller: I loved your idea.

Steve Sherwood: It’s still on the Board, I’m just trying to make it happen. This still, it drains to this area and this is the majority of the drainage that has to take it away which the area you are describing has to drain too.

William Miller: Do you see the 30-inch pipe behind the Harmon house here, once all this water comes down Brent Drive, it comes back here it backs up at that 30-inch pipe. You got everything coming from Brent Drive, everything coming from behind the Hartz household with the 15-inch pipe, everything behind Helfert’s and once it all comes down Brent Drive it cuts in between the properties and makes that corner, it hits that 30-inch pipes and starts to back it up.

Commissioner Dan Saylor: So, Bill, what happens on the other side of that pipe? Have you been down there?

William Miller: I have not been down there, it has to be backing up there with everything off of Brenda. I understand this is a 100-year event, but even during say we get a 2-inch rain its still bad back there. The ditch itself when I moved in 8 years ago, it was straight as a string, so now its washing out the corner back there and it’s meandering, so really there is more than one issue here. If anyone wants to see a really good 100-year rain I have about 8 or 9 really good videos of what was going on back there.

Steve Sherwood: I appreciate your patience, we’re still trying…

William Miller: Well, so there really isn’t any kind of resolution back there now?

Steve Sherwood: Still trying to work with those owners.

William Miller: I don’t think you’re gonna…so if that’s the case if you cant get easements, is there anything I can do back here? Can myself and the Freeman’s put in a 30-inch pipe with a “T” to run out to Brent Drive?

Steve Sherwood: The 30-inch pipe may not solve the problem without looking at the big picture.

William Miller: Then when you meet the road what do you do, you know?

Morrie Doll: Are there no drains on Pleasant Ridge?

Steve Sherwood: Basically, all of Bosma is..

Commissioner Dan Saylor: It’s a concrete swale that comes out here and there’s a ditch that runs between both their houses.

Steve Sherwood: Most of it is an overland flow system.

Commissioner Dan Saylor: This is a drain that goes all the way up the street, its acres of water that goes down that whole Brent Drive.

Morrie Doll: Is the right a way wet enough for a drain?

Commissioner Dan Saylor: There is a drain that runs by Brent, but Steve is trying to fix it but cant get the easements to fix it.

Morrie Doll: So, its not wide enough to fix it with an existing right a way?

Steve Sherwood: Well, its getting from the right a way to the rear ditch around Mr. Miller’s yard.

William Miller: What I had originally brought forward, you know when they built the subdivision why didn’t they run that drainage straight back to Tanglewood rather than making a 90 back there and running it parallel to Tanglewood.

Steve Sherwood: See, all of the subdivision you’re referring to I believe was platted in the 70s.

William Miller: Right. I spoke with Brent about it before I don’t know where he stands now, I cant speak for him, but in my discussions with it, the culvert that they have back there with the existing 60-inch CMP, he had told me one time that if that culvert is going to be replaced, which he is concerned about keeping it there, his concern was if he could and get it moved to the East.

Steve Sherwood: Yes, I have had discussions with Mr. Hartz about that structure. We proposed resolutions with that if we were allowed to drain to the ditch from Brent Drive, but I’ve not been able to get anywhere at this point.

William Miller: Okay. Thank you.

President Bob Johnson: Thank you, anyone else want to speak?

Steve Sherwood: Please, come up and address.

President Bob Johnson: Come up and state your name please.

Arthur Dasis: Good Afternoon guys, my name is Arthur Dasis and I live at 7311 Pleasant Ridge Drive, thank you all for taking the time out to come and study this problem. One thing I saw on your general notes, to help minimize permitting issues, I allow for the future maintenance of Tanglewood Ditch, the unnamed drainage portion here, how long or what steps do we have to do to turn that into a legal drain so we can keep maintenance on it? And when you were also presenting digging that portion of the ditch out, you said you would have some problems of the berm of it grading and that is sort of concerning because as it stands right now, there is about half a dozen small like little ponds, and that’s concerning because that’s where mosquitos and everything breed and breed behind all the houses on Fuquay, its right in their backyard so their kids and grandkids you know are gonna get bit. So, really if we could make sure we have a plan to make that unnamed ditch legal, that would be a really big help and also, as far as the 90 degree turn that comes there, a couple years ago they came up and dug it out to put in the rip rap, well right there at the curve about 95% of the rip rap has been washed into the ditch now which raises it. So, I don’t know whether maybe some other alternative instead of just rip rap up on that corner maybe something else, because all it does is rip rap falls into the ditch, goes in there, blocks it up, backflows and everything so that’s all I wanted to mention. Once again, thank you for your time.

President Bob Johnson: Thank you. Anyone else? State your name please.

Brian Hartz: My name is Brian Hartz, address is 7388 Telephone Road, my back yard is actually the culvert that you guys were talking about replacing there. Just for my general knowledge, as far as access, is that the only thing you are planning on doing back there on that ditch from Tanglewood to Fuquay is just replace that one culvert there?

Nicholas Will: Tanglewood to?

Brian Hartz: Just the culvert here, not the rest of this?

Nicholas Will: No, that’s where we were discussing a potential of turning that into a legal drain and being able to clean that out.

Brian Hartz: Okay, and my brother which you guys were talking Brent, down on the back side there, that’s pretty well our only access back to that property back there so we would need to have some kind of culvert or something back there.

Steve Sherwood: When I spoke to your brother Brent on site, I mentioned that we would upgrade that structure as part of trying to bring Brent Drive drainage due South that crosses the property, and enter into the ditch upstream to the ditch you’re talking about we proposed to put in a larger one at no expense to him.

Brian Hartz: You guys are kind of land locked there as far as getting down there.

Steve Sherwood: Correct.

Brain Hartz: I don’t have a problem with letting you use, I have a driveway that goes all the way down there if you need to access that I don’t have a problem with that.

Steve Sherwood: Newburgh’s sewer has a 25-foot easement North/South just East of there, we’d like to be between it and the existing field entrance with that culvert you are speaking of with another easement about 10-foot wide or so.

Brian Hartz: I think there, does that water line run behind the subdivision there about where this other ditch is?

Steve Sherwood: Yes, we’d be able to get under it though we believe at this point.

Brian Hartz: Yeah, I just that’s really the only question I had, but the did have some good points about that water coming off of Brent Drive it’s always been like that since I’ve lived there.

Steve Sherwood: If we were to do this, this would address some of the back yard issues along there that Mr. Miller just spoke of, and we take that water into the system and bring it due South so it didn’t have to travel West then enter by Tanglewood Subdivision.

Brian Hartz: Right, and it mostly effects them houses right there from Brent Drive like you were saying out to Fuquay. To me, I am on top of the hill its just my backyard there so its not a big deal.

Steve Sherwood: Mr. Miller will tell you I’ve been working on this for a couple years trying to get that leg done so we could effect that as a separate project.

Brian Hartz: Okay, so this is all just a proposal and you guys will come up with something.

Steve Sherwood: We are here to present it to the people who were notified so they could have some public input, and I know we are running out of time, there is a public comment sheet at the back of the package please take your time and add any other comments that you may not have time to address today and send them in within the 2 week period I believe you (Nicholas) stated.

Nicholas Will: Yeah, June 24th.

Steve Sherwood: Thank you for coming forward Mr. Hartz.

Brian Hartz: Thanks guys, listen if you need anything let me know.

Commissioner Dan Saylor: Thanks Brian, we appreciate it.

Steve Sherwood: Anybody else from the public would like to have a comment on record, again, feel free to take your time you can send the sheet in with any pros or cons comments we’d like to have your opinion one way or another.

Nicholas Will: If you feel like there is something we missed or overlooked here, part of getting people actually there out there that knows what’s going on.

Steve Sherwood: These comments will come back to the design engineer and if you need to be contacted further he’d be more than happy to talk to you. Any other comments from the public? We appreciate everyone’s time and effort to be here today regarding this issue, no decision has been made to move forward yet, but we would like to have your comments to so we can reassess and move forward from here. Thank you all for attending.

President Bob Johnson: Thank you Mr. Will.

**CLAIMS:**

President Bob Johnson: Next up we have claims, we have two attached claims here.

Commissioner Dan Saylor: I make a motion to pay the claims.

Commissioner Terry Phillippe: I will second the motion.

President Bob Johnson: All in favor. 3-0

**OTHER BUSINESS**

President Bob Johnson: Any other business? Jason?

Jason Baxter: No sir.

President Bob Johnson: Steve?

Steve Sherwood: No, sir.

President Bob Johnson: Council?

Morrie Doll: No, sir.

**STORMWATER DEPARTMENT**

Steve Sherwood: On Stormwater I just want to remind the Board we are still preparing for the pending IDM audit for the MS4 MCM#6 Good House Keeping Audit, here its still going to happen. Our department has reached out to all the other facilities under the County jurisdiction regarding Stormwater and preparing them with check lists and other information for the pending audit. If Joe is still here, I don’t see him, so I don’t know if Joe has any comments but that is all I have for the Board today. Thank you.

President Bob Johnson: Anything else?

**MOTION TO ADJOURN:**

Commissioner Terry Phillippe: I make a motion to adjourn.

Commissioner Dan Saylor: Second.

President Bob Johnson: All in favor 3-0 (Phil Baxter was not present for the meeting)